

**Independent practitioner’s limited assurance report**  
**To the board of directors of CLP Holdings Limited**

We have undertaken a limited assurance engagement in respect of the selected sustainability information of CLP Holdings Limited (the “Company”) listed below and identified as the numbers shaded in orange in the Key performance metrics (Appendix I) appended to this report (the “Identified Sustainability Information”).

**Identified Sustainability Information**

The Identified Sustainability Information for the year ended 31 December 2020 is summarised below:

<p><b><u>Governance</u></b></p> <ul style="list-style-type: none"> <li>• Convicted cases of corruption reported to the Audit &amp; Risk Committee (cases)</li> <li>• Breaches of Code of Conduct reported to the Audit &amp; Risk Committee (cases)</li> </ul> <p><b><u>Safety</u></b></p> <p><b><i>Fatalities (number)</i></b></p> <ul style="list-style-type: none"> <li>• Fatalities - employees only</li> <li>• Fatalities - contractors only</li> </ul> <p><b><i>Fatality Rate (number per 200,000 manhour)</i></b></p> <ul style="list-style-type: none"> <li>• Fatality Rate - employees only</li> <li>• Fatality Rate - contractors only</li> </ul> <p><b><i>Lost Time Injury (number)</i></b></p> <ul style="list-style-type: none"> <li>• Lost Time Injury - employees only</li> <li>• Lost Time Injury - contractors only</li> </ul> <p><b><i>Lost Time Injury Rate (number per 200,000 manhour)</i></b></p> <ul style="list-style-type: none"> <li>• Lost Time Injury Rate - employees only</li> <li>• Lost Time Injury Rate - contractors only</li> </ul> <p><b><i>Days Lost (number)</i></b></p> <ul style="list-style-type: none"> <li>• Days Lost - employees only</li> </ul> <p><b><u>People</u></b></p> <p><b><i>Total employees (number)</i></b></p> <p><b><i>Total employees eligible to retire within the next five years (%)</i></b></p> <p><b><i>Voluntary staff turnover rate (%) - by region</i></b></p> <ul style="list-style-type: none"> <li>• Hong Kong</li> <li>• Mainland China</li> <li>• India</li> <li>• Australia</li> </ul>	<p><b><u>GHG emissions</u></b></p> <p><b>CLP Group</b></p> <p><b><i>Total CO<sub>2</sub>e emissions – on an equity basis (kt)</i></b></p> <ul style="list-style-type: none"> <li>• CO<sub>2</sub>e - Scope 1 (kt)</li> <li>• CO<sub>2</sub>e - Scope 2 (kt)</li> <li>• CO<sub>2</sub>e - Scope 3 (kt)</li> </ul> <p><b><i>CLP Group’s generation and energy storage portfolio</i></b></p> <ul style="list-style-type: none"> <li>• CO<sub>2</sub> – on an equity basis (kt)</li> <li>• CO<sub>2</sub> – on an equity plus long-term capacity and energy purchase basis (kt)</li> <li>• CO<sub>2</sub> – on an operational control basis (kt)</li> <li>• CO<sub>2</sub>e – on an operational control basis (kt)</li> </ul> <p><b>Climate Vision 2050</b></p> <p><b><i>Performance against targets - on an equity basis</i></b></p> <ul style="list-style-type: none"> <li>• Carbon dioxide emissions intensity of CLP Group’s generation and energy storage portfolio (kg CO<sub>2</sub>/ kWh)</li> <li>• Renewable energy generation capacity (% (MW))</li> <li>• Non-carbon emitting generation capacity (% (MW))</li> </ul> <p><b><i>Performance against targets - on an equity plus long-term capacity and energy purchase basis</i></b></p> <ul style="list-style-type: none"> <li>• Carbon dioxide emissions intensity of CLP Group’s generation and energy storage portfolio (kg CO<sub>2</sub>/ kWh)</li> <li>• Renewable energy generation capacity (% (MW))</li> <li>• Non-carbon emitting generation capacity (% (MW))</li> </ul> <p><b><i>CLP Power Hong Kong - carbon emissions intensity of electricity sold</i></b></p> <ul style="list-style-type: none"> <li>• CO<sub>2</sub>e emissions intensity of electricity sold by CLP Power Hong Kong (kg CO<sub>2</sub>e/ kWh)</li> <li>• CO<sub>2</sub> emissions intensity of electricity sold by CLP Power Hong Kong (kg CO<sub>2</sub>/ kWh)</li> </ul>
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<p><b>Environment</b></p> <p><b>Resource Use &amp; Emissions</b></p> <ul style="list-style-type: none"> <li>• Nitrogen oxides emissions (NO<sub>x</sub>) (kt)</li> <li>• Sulphur dioxide emissions (SO<sub>2</sub>) (kt)</li> <li>• Particulates emissions (kt)</li> <li>• Sulphur hexafluoride (SF<sub>6</sub>) (kt)</li> </ul> <p><i>Non-hazardous liquid waste (kl)</i></p> <ul style="list-style-type: none"> <li>• Produced</li> <li>• Recycled</li> </ul> <p><i>Non-hazardous solid waste (t)</i></p> <ul style="list-style-type: none"> <li>• Produced</li> <li>• Recycled</li> </ul> <p><i>Hazardous liquid waste (kl)</i></p> <ul style="list-style-type: none"> <li>• Produced</li> <li>• Recycled</li> </ul> <p><i>Hazardous solid waste (t)</i></p> <ul style="list-style-type: none"> <li>• Produced</li> <li>• Recycled</li> </ul> <p><i>Ash (kt)</i></p> <ul style="list-style-type: none"> <li>• Produced</li> <li>• Recycled and sold</li> </ul> <p>Gypsum (kt)</p> <ul style="list-style-type: none"> <li>• Produced</li> <li>• Recycled and sold</li> </ul> <p><b>Total water withdrawal (Mm<sup>3</sup>)</b></p> <p><b>Total water discharge (Mm<sup>3</sup>)</b></p> <p><b>Environmental compliance</b></p> <ul style="list-style-type: none"> <li>• Environmental regulatory non-compliances resulting in fines or prosecutions (number)</li> <li>• Environmental licence limit exceedances &amp; other non-compliances (number)</li> </ul>	<p><b>Operations</b></p> <p><b>Generation and energy storage capacity by asset type (%(MW))</b></p> <p><b>Total generation and energy storage capacity - on an equity basis</b></p> <ul style="list-style-type: none"> <li>• Coal</li> <li>• Gas</li> <li>• Nuclear</li> <li>• Renewables</li> <li>• Energy Storage</li> <li>• Others</li> </ul> <p><b>Total generation and energy storage capacity - on an equity plus long-term capacity and energy purchase basis</b></p> <ul style="list-style-type: none"> <li>• Coal</li> <li>• Gas</li> <li>• Nuclear</li> <li>• Renewables</li> <li>• Energy Storage</li> <li>• Others</li> </ul> <p><b>Energy sent out by asset type %(GWh))</b></p> <p><b>Total energy sent out – on an equity basis</b></p> <ul style="list-style-type: none"> <li>• Coal</li> <li>• Gas</li> <li>• Nuclear</li> <li>• Renewables</li> <li>• Energy Storage</li> <li>• Others</li> </ul> <p><b>Total energy sent out - on an equity plus long-term capacity and energy purchase basis</b></p> <ul style="list-style-type: none"> <li>• Coal</li> <li>• Gas</li> <li>• Nuclear</li> <li>• Renewables</li> <li>• Energy Storage</li> <li>• Others</li> </ul> <p><b>Total energy sent out (GWh) – on an operational control basis</b></p> <p><b>Fuel use</b></p> <ul style="list-style-type: none"> <li>• Coal consumed (for power generation) (TJ)</li> <li>• Gas consumed (for power generation) (TJ)</li> <li>• Oil consumed (for power generation) (TJ)</li> </ul>
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Our assurance was with respect to the year ended 31 December 2020 information only and we have not performed any procedures with respect to earlier periods or any other elements included in the 2020 Sustainability Report and, therefore, do not express any conclusion thereon.

**Criteria**

The criteria used by the Company to prepare the Identified Sustainability Information is set out in the Reporting scope and data verification (the “Criteria”) (Appendix II) appended to this report.

**The Company’s Responsibility for the Identified Sustainability Information**

The Company is responsible for the preparation of the Identified Sustainability Information in accordance with the Criteria. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation of Identified Sustainability Information that is free from material misstatement, whether due to fraud or error.

**Inherent limitations**

The absence of a significant body of established practice on which to draw to evaluate and measure non-financial information allows for different, but acceptable, measures and measurement techniques and can affect comparability between entities. In addition, greenhouse gas (“GHG”) quantification is subject to inherent uncertainty because of incomplete scientific knowledge used to determine emissions factors and the values needed to combine emissions of different gases.

**Our Independence and Quality Control**

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

Our firm applies International Standard on Quality Control 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

**Our Responsibility**

Our responsibility is to express a limited assurance conclusion on the Identified Sustainability Information based on the procedures we have performed and the evidence we have obtained. We conducted our limited assurance engagement in accordance with International Standard on Assurance Engagements 3000 (Revised), *Assurance Engagements other than Audits or Reviews of Historical Financial Information*, and, in respect of greenhouse gas emissions, International Standard on Assurance Engagements 3410, *Assurance Engagements on Greenhouse Gas Statements*, issued by the International Auditing and Assurance Standards Board. These standards require that we plan and perform this engagement to obtain limited assurance about whether the Identified Sustainability Information is free from material misstatement.

A limited assurance engagement involves assessing the suitability in the circumstances of the Company’s use of the Criteria as the basis for the preparation of the Identified Sustainability Information, assessing the risks of material misstatement of the Identified Sustainability Information whether due to fraud or error, responding to the assessed risks as necessary in the circumstances, and evaluating the overall presentation of the Identified Sustainability Information. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks.

The procedures we performed were based on our professional judgment and included inquiries, observation of processes performed, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies, and agreeing or reconciling with underlying records.

Given the circumstances of the engagement, in performing the procedures listed above we:

- made inquiries of the persons responsible for the Identified Sustainability Information;
- understood the process for collecting and reporting the Identified Sustainability Information;
- performed limited substantive testing on a selective basis of the Identified Sustainability Information; and
- considered the disclosure and presentation of the Identified Sustainability Information.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement. Accordingly, we do not express a reasonable assurance opinion about whether the Company's Identified Sustainability Information has been prepared, in all material respects, in accordance with the Criteria.

**Limited Assurance Conclusion**

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the Company's Identified Sustainability Information for the year ended 31 December 2020 is not prepared, in all material respects, in accordance with the Criteria.

Our report has been prepared for and only for the board of directors of CLP Holdings Limited and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the content of this report.



**PricewaterhouseCoopers**  
Certified Public Accountants  
Hong Kong, 22 February 2021

# Appendix I: Key performance metrics

CLP continually improves by managing, monitoring and reporting its performance. These tables present a quantitative overview of the Group's 2020 financial and non-financial performance. The disclosures are selected from the GRI Standards, The Stock Exchange of Hong Kong's ESG Reporting Guide and TCFD Electric Utilities Preparer Forum, as well as other key performance data.

The 2020 data shaded in orange have been independently verified by PricewaterhouseCoopers. The assurance scope of past years' data can be found in [previous Sustainability Reports](#).

[Read the reporting scope](#) >

[Download the independent assurance statement](#) ↓

Governance	2020	2019	2018	2017	2016	GRI/ HKEEx/ TCFD
Convicted cases of corruption reported to the Audit & Risk Committee (cases)	0	0	0	0	0	GRI 205-3 / HKEEx B7.1
Breaches of Code of Conduct reported to the Audit & Risk Committee (cases)	25	31	20	28	21	

Financial information	2020	2019	2018	2017	2016	GRI/ HKEEx/ TCFD
<b>Total capital investments incurred by asset type (%(HK\$M))<sup>1,2</sup></b>	<b>100 (13,022)</b>	100 (12,028)	100 (12,851)	N/A	N/A	TCFD
Transmission, distribution and retail	37 (4,810)	43 (5,229) <sup>3</sup>	39 (4,953)	N/A	N/A	
Coal	28 (3,638)	21 (2,473) <sup>3</sup>	24 (3,040)	N/A	N/A	
Gas	26 (3,445)	26 (3,146) <sup>3</sup>	32 (4,098)	N/A	N/A	
Nuclear	0 (0)	3 (352)	0 (0)	N/A	N/A	
Renewables	4 (462) <sup>4</sup>	5 (580) <sup>3,5</sup>	5 (714)	N/A	N/A	
Others	5 (667)	2 (248) <sup>3</sup>	0 (46)	N/A	N/A	
<b>Total operating earnings by asset type (%(HK\$M))<sup>6</sup></b>	<b>100 (12,374)</b>	100 (12,138) <sup>3</sup>	100 (15,145)	100 (14,189)	100 (13,173)	TCFD
Transmission, distribution and retail	46 (5,751)	42 (5,131) <sup>3</sup>	49 (7,427)	59 (8,392)	59 (7,798)	
Coal <sup>7</sup>	23 (2,871)	21 (2,503) <sup>3</sup>	22 (3,370)	28 (3,994)	30 (3,905)	
Gas <sup>7</sup>	12 (1,510)	14 (1,735) <sup>3</sup>	10 (1,533)			
Nuclear	13 (1,594)	14 (1,688)	11 (1,720)	7 (913)	7 (863)	
Renewables	5 (575) <sup>8</sup>	8 (1,016) <sup>3,9</sup>	7 (924)	4 (629)	3 (455)	
Others	1 (73)	1 (65) <sup>3</sup>	1 (171)	2 (261)	1 (152)	
<b>Economic value generated, distributed and retained (HK\$M)</b>						
<b>Economic value generated</b>						
Revenue	79,590	85,689	91,425	92,073	79,434	GRI 201-1
Share of profits of non-wholly owned entities <sup>10</sup>	1,608	1,828	1,509	609	791	GRI 201-1
<b>Economic value distributed</b>						
Fuel costs	15,753	16,712	17,187	15,473	12,785	GRI 201-1
Other operating costs <sup>11</sup>	35,774	48,654	43,604	46,325	38,689	GRI 201-1
Staff expenses <sup>12</sup>	4,844	4,535	4,449	4,195	3,892	GRI 201-1
Finance costs <sup>13</sup>	1,875	2,033	2,107	2,278	2,371	GRI 201-1
Dividends	7,832	7,782	7,630	7,352	7,074	GRI 201-1
Taxes <sup>14</sup>	2,529	2,189	3,565	2,094	2,032	GRI 201-1

Financial information	2020	2019	2018	2017	2016	GRI/ HKEEx/ TCFD
Donations	27	21	18	14	13	GRI 201-1
<b>Economic value retained<sup>15</sup></b>	<b>12,564</b>	5,591	14,374	14,951	13,369	GRI 201-1

- Capital investments include additions to fixed assets, right-of-use assets and intangible assets, investments in and advances to joint ventures and associates, and acquisition of businesses.
- On an accrual basis.
- Restated to conform with enhanced 2020 allocation model and methodology.
- Includes HK\$7 million from waste-to-energy, which is not considered as non-carbon emitting energy.
- Includes HK\$123 million from waste-to-energy, which is not considered as non-carbon emitting energy.
- Before unallocated expenses.
- Starting from 2018, operating earnings of coal and gas are reported separately.
- Includes HK\$8 million from waste-to-energy, which is not considered as non-carbon emitting energy.
- Includes HK\$5 million from waste-to-energy, which is not considered as non-carbon emitting energy.
- Includes share of results (net of income tax) from joint ventures and associates netted with earnings attributable to other non-controlling interests, which represented CLP's share of economic value created together with its business partners.
- Includes impairment provision and reversal. In particular, for 2019, amount included impairment of retail goodwill in Australia of HK\$6,381 million.
- Another HK\$1,386 million (2019: HK\$1,365 million) of staff costs incurred were capitalised.
- Finance costs are netted with finance income and include payments made to perpetual capital securities holders. In addition, finance costs of HK\$306 million (2019: HK\$323 million) were capitalised.
- Represents current income tax but excludes deferred tax for the year.
- Represents earnings attributable to shareholders (before depreciation, amortisation and deferred tax) for the year retained.

Safety	2020	2019	2018	2017	2016	GRI/ HKEEx/ TCFD
<b>Fatalities (number)<sup>1,2</sup></b>						
Fatalities - employees only	0	0	1	0	0	GRI 403-2 / HKEEx B2.1
Fatalities - contractors only	0	1	1	4	3	GRI 403-2 / HKEEx B2.1
<b>Fatality Rate (number per 200,000 manhour)<sup>1,2,3</sup></b>						
Fatality Rate - employees only	0.00	0.00	0.01	0.00	0.00	GRI 403-2 / HKEEx B2.1
Fatality Rate - contractors only	0.00	0.01	0.01	0.03	0.02	GRI 403-2 / HKEEx B2.1
<b>Lost Time Injury (number)<sup>1,4</sup></b>						
Lost Time Injury - employees only	12	7 <sup>5</sup>	11	11	3	GRI 403-2
Lost Time Injury - contractors only	10	19	11	16	10	GRI 403-2
<b>Lost Time Injury Rate (number per 200,000 manhour)<sup>1,3,4</sup></b>						
Lost Time Injury Rate - employees only	0.13	0.07	0.13	0.13	0.04	GRI 403-2
Lost Time Injury Rate - contractors only	0.09	0.14	0.09	0.14	0.07	GRI 403-2
<b>Total Recordable Injury Rate (number per 200,000 manhour)<sup>1,3,6</sup></b>						
Total Recordable Injury Rate - employees only	0.25	0.19	0.19	0.21	0.11	GRI 403-2
Total Recordable Injury Rate - contractors only	0.37	0.52	0.29	0.36	0.19	GRI 403-2
<b>Days Lost (number)<sup>1,4,7</sup></b>						
Days Lost - employees only	443 <sup>8</sup>	464 <sup>9</sup>	249	252	9	GRI 102-48, 403-2 / HKEEx B2.2

- The system of rules applied in recording and reporting accident statistics complies with the International Labour Organization (ILO) Code of Practice on Recording and Notification of Occupational Accidents and Diseases. Each year's safety data cover the incidents that happened in that calendar year and are based on the latest information available at the time of publication.
- A fatality is the death of an employee or contractor personnel as a result of an occupational illness/ injury/ disease incident in the course of employment.
- All rates are normalised to 200,000 worked hours, which approximately equals to the number of hours worked by 100 people in one year.
- Refers to an occupational illness/ injury/ disease sustained by an employee or contractor personnel causing him/ her to miss one scheduled workday/ shift or more after the day of the injury (including fatalities). A lost time injury does not include the day the injury incident occurred or any days that the injured person was not scheduled to work and it does not include restricted work injuries.
- The health-related lost-time-injury in Australia was reported as lost time injury. It can also be categorised as occupational disease in Australia.

6 Total recordable injuries count all occupational injury incidents and illness other than first aid cases. They include fatalities, lost time injuries, restricted work injuries, and medical treatment.

7 Refers to the number of working days lost when workers are unable to perform their usual work because of an occupational accident or disease. A return to limited duty or alternative work for the same organisation does not count as lost days.

8 188 out of 443 days were carried forward from one incident in the past.

9 158 out of 464 days were carried forward from three incidents in the past.

Environment	2020	2019	2018	2017	2016	GRI/ HKEx/ TCFD
<b>Resource Use &amp; Emissions<sup>1,2,3</sup></b>						
Nitrogen oxides emissions (NO <sub>x</sub> ) (kt)	43.2	47.0	60.9	59.3	58.1	GRI 305-7 / HKEx A1.1
Sulphur dioxide emissions (SO <sub>2</sub> ) (kt)	48.0	44.7	76.1	81.6	71.2	GRI 305-7 / HKEx A1.1
Particulates emissions (kt)	6.9	7.7	8.5	8.3	8.5	GRI 305-7 / HKEx A1.1
Sulphur hexafluoride (SF <sub>6</sub> ) (kt)	0.003	N/A	N/A	N/A	N/A	GRI 305-7 / HKEx A1.1
Non-hazardous liquid waste (kl) <sup>4</sup>						
Produced	3	59	52	103	84	GRI 306-2 / HKEx A1.4
Recycled	3	57	52	103	84	GRI 306-2
Non-hazardous solid waste (t) <sup>4</sup>						
Produced	17,901	13,344	11,471	20,334	8,317	GRI 306-2 / HKEx A1.4
Recycled	4,458	4,986	3,990	3,790	2,963	GRI 306-2
Hazardous liquid waste (kl) <sup>4</sup>						
Produced	1,091	1,578	1,685	1,420	1,251	GRI 306-2 / HKEx A1.3
Recycled	1,069	1,536	1,648	1,384	1,149	GRI 306-2
Hazardous solid waste (t) <sup>4</sup>						
Produced	1,503	862	1,435	857	1,302	GRI 306-2 / HKEx A1.3
Recycled	523	201	631	469	260	GRI 306-2
Ash (kt)						
Produced	2,624	3,032	3,419	3,005	2,121	
Recycled and sold	1,793	3,667	2,263	1,745	1,111	
Gypsum (kt)						
Produced	334	441	253	156	136	
Recycled and sold	335	438	250	161	134	
<b>Total water withdrawal (Mm<sup>3</sup>)<sup>5</sup></b>	<b>5,229.2</b>	5,377.4	5,153.6	4,480.6	4,256.9	GRI 303-3 / HKEx A2.2
For cooling purpose						
Water withdrawal from marine water resources	5,183.5	5,319.3	5,087.3	4,421.7	4,202.3	
Water withdrawal from freshwater resources	35.1	45.7	53.3	47.6	43.8	
For non-cooling purposes						
Water withdrawal from freshwater resources	5.7	5.8	6.0	4.9	4.2	
Water withdrawal from municipal sources	4.9	6.7	7.0	6.4	6.6	
<b>Total water discharge (Mm<sup>3</sup>)<sup>5,6</sup></b>	<b>5,200.3</b>	5,337.1	5,103.2	4,437.7	4,219.3	GRI 303-4
From cooling process						
Water discharge to marine water bodies	5,183.5	5,319.3	5,087.3	4,421.7	4,202.3	

Environment	2020	2019	2018	2017	2016	GRI/ HKEEx/ TCFD
Treated wastewater to freshwater bodies	0	0	0	0	0	
Wastewater to other destinations	0	0	0.02	0.05	0.06	
From non-cooling processes						
Treated wastewater to marine water bodies	1.5	1.7	1.6	1.6	1.5	
Treated wastewater to freshwater bodies	13.7	14.4	12.3	12.3	13.7	
Wastewater to other destinations	1.6	1.7	1.9	2.0	1.7	
Wastewater to sewerage	0.03	0.03	0.03	0.02	0.01	
<b>Environmental compliance<sup>1</sup></b>						
Environmental regulatory non-compliances resulting in fines or prosecutions (number)	0	0	0	0	0	GRI 307-1
Environmental licence limit exceedances & other non-compliances (number)	4	10	2	13	2	GRI 307-1

1 Numbers include operating assets where CLP has operational control during the calendar year.

2 Paguthan Power Station, the power purchase agreements of which expired in December 2018, was not included in the 2019 and 2020 numbers.

3 Since 2019, numbers at the asset level have been aggregated and then rounded.

4 Waste categorised in accordance with local regulations.

5 Numbers have been subject to rounding. Any discrepancies between the total shown and the sum of the amounts listed are due to rounding.

6 Starting from 2019, Yallourn's "water discharged to third-parties", which was previously reported under "wastewater to sewerage", has been reported under "wastewater to other destinations".

GHG emissions	2020	2019	2018	2017	2016	GRI/ HKEEx/ TCFD
<b>CLP Group<sup>1</sup></b>						
<b>Total CO<sub>2</sub>e emissions – on an equity basis (kt)<sup>2,3</sup></b>	<b>62,138</b>	71,720	N/A	N/A	N/A	HKEEx A1.2
CO <sub>2</sub> e - Scope 1 (kt) <sup>4</sup>	45,105	50,047	N/A	N/A	N/A	GRI 305-1 / TCFD
CO <sub>2</sub> e - Scope 2 (kt)	244	250	N/A	N/A	N/A	GRI 305-2 / TCFD
CO <sub>2</sub> e - Scope 3 (kt)	16,790	21,424	N/A	N/A	N/A	GRI 305-3 / TCFD
Category 1: Purchased goods and services	1,210	1,093	N/A	N/A	N/A	
Category 2: Capital goods	685	1,347	N/A	N/A	N/A	
Category 3: Fuel- and energy-related activities	12,690	16,671	N/A	N/A	N/A	
Category 5: Waste generated in operations	63	101	N/A	N/A	N/A	
Category 6: Business travel	1	8	N/A	N/A	N/A	
Category 7: Employee commuting	2	4	N/A	N/A	N/A	
Category 11: Use of sold products	2,138	2,200	N/A	N/A	N/A	
<b>CLP Group's generation and energy storage portfolio<sup>3,4,5,6</sup></b>						
CO <sub>2</sub> – on an equity basis (kt)	44,987	N/A	N/A	N/A	N/A	GRI 102-48, 305-1, 305-2 / HKEEx A1.2
CO <sub>2</sub> – on an equity plus long-term capacity and energy purchase basis (kt) <sup>7</sup>	48,621	N/A	N/A	N/A	N/A	GRI 102-48, 305-1, 305-2 / HKEEx A1.2
CO <sub>2</sub> – on an operational control basis (kt)	43,808	50,412	52,052	47,921	46,518	GRI 102-48, 305-1, 305-2 / HKEEx A1.2



GHG emissions	2020	2019	2018	2017	2016	GRI/ HKEEx/ TCFD
CO <sub>2</sub> e – on an operational control basis (kt)	44,023	50,676	52,306	48,082	46,681	GRI 102-48, 305-1, 305-2 / HKEEx A1.2
<b>Climate Vision 2050<sup>3,4,5,6</sup></b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>GRI/ HKEEx/ TCFD</b>
<b>Performance against targets - on an equity basis</b>						
Carbon dioxide emissions intensity of CLP Group's generation and energy storage portfolio (kg CO <sub>2</sub> / kWh)	0.65	0.70	0.74	0.80	0.82	GRI 305-4 / HKEEx A1.2 / TCFD
Renewable energy generation capacity (% (MW))	12.8 (2,517)	12.8 (2,469)	12.5 (2,387)	14.2 (2,751)	16.6 (3,090)	TCFD
Non-carbon emitting generation capacity (% (MW))	20.9 (4,110)	21.1 (4,069)	20.9 (3,987)	22.4 (4,350)	19.2 (3,582)	
<b>Performance against targets - on an equity plus long-term capacity and energy purchase basis<sup>7</sup></b>						
Carbon dioxide emissions intensity of CLP Group's generation and energy storage portfolio (kg CO <sub>2</sub> / kWh)	0.57	0.62	0.66	0.69	0.72	GRI 305-4 / HKEEx A1.2 / TCFD
Renewable energy generation capacity (% (MW))	13.5 (3,342)	13.7 (3,294)	12.8 (3,039)	13.1 (3,211)	14.9 (3,551)	TCFD
Non-carbon emitting generation capacity (% (MW))	24.4 (6,017)	24.9 (5,979)	24.1 (5,724)	23.2 (5,699)	20.7 (4,931)	
<b>CLP Power Hong Kong - carbon emissions intensity of electricity sold</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>GRI/ HKEEx/ TCFD</b>
CO <sub>2</sub> e emissions intensity of electricity sold by CLP Power Hong Kong (kg CO <sub>2</sub> e/ kWh) <sup>4,8</sup>	0.37	0.50	0.51	0.51	0.54	
CO <sub>2</sub> emissions intensity of electricity sold by CLP Power Hong Kong (kg CO <sub>2</sub> / kWh) <sup>4,8</sup>	0.37	0.49	0.51	0.50	0.54	

1 Refers to a range of businesses, including generation and energy storage portfolio, transmission and distribution, retail and others.

2 Numbers have been subject to rounding. Any discrepancies between the total shown and the sum of the amounts listed are due to rounding.

3 Paguthan Power Station, the power purchase agreements of which expired in December 2018, was not included in the 2019 and 2020 numbers.

4 In accordance with the Greenhouse Gas Protocol, WE Station, which makes use of landfill gas from waste for power generation, is not included in CLP's Scope 1 CO<sub>2</sub> emissions and reported separately in the Asset Performance Statistics. Its non-CO<sub>2</sub> GHG emissions (i.e. CH<sub>4</sub> and N<sub>2</sub>O) is included in CLP's Scope 1 CO<sub>2</sub>e emissions.

5 Starting from 2020, the portfolio includes energy storage assets and generation assets. Energy storage assets include pumped storage and battery storage. In previous years, the portfolio included generation assets only.

6 CO<sub>2</sub> emissions of Yallourn and Hallett Power Stations have been used since 2018. Prior to 2018, CO<sub>2</sub>e emissions data of these assets were used.

7 Numbers include assets with majority and minority share, and those under "long-term capacity and energy purchase" arrangements with CLP. Starting from 2018, "long-term capacity and energy purchase" has been defined as a purchase agreement with duration of at least five years, and capacity or energy purchased being no less than 10MW.

8 "Electricity sold" is the total electricity sold to CLP Power Hong Kong's customers before adjustment of Renewable Energy Certificates.

Operations	2020	2019	2018	2017	2016	GRI/ HKEEx/ TCFD
<b>Generation and energy storage capacity by asset type (% (MW))<sup>1,2</sup></b>						
<b>Total generation and energy storage capacity - on an equity basis</b>	<b>100 (19,691)</b>	100 (19,238)	100 (19,108)	100 (19,395)	100 (18,622)	TCFD
Coal	54.7 (10,765)	56.0 (10,765)	56.3 (10,765)	58.8 (11,401)	61.2 (11,396)	
Gas	23.4 (4,600)	21.8 (4,194)	21.7 (4,147)	17.7 (3,434)	18.4 (3,434)	
Nuclear	8.1 (1,600)	8.3 (1,600)	8.4 (1,600)	8.2 (1,600)	2.6 (492)	
Renewables	12.8 (2,517)	12.8 (2,469)	12.5 (2,386)	14.2 (2,751)	16.6 (3,090)	
Energy Storage	0.0 (0)	N/A	N/A	N/A	N/A	
Others	1.1 (210)	1.1 (210)	1.1 (210)	1.1 (210)	1.1 (210)	

Operations	2020	2019	2018	2017	2016	GRI/ HKEEx/ TCFD
<b>Total generation and energy storage capacity - on an equity plus long-term capacity and energy purchase basis<sup>3</sup></b>	<b>100 (24,696)</b>	100 (24,015)	100 (23,705)	100 (24,554)	100 (23,781)	TCFD
Coal	<b>48.6 (11,997)</b>	50.0 (11,997)	50.6 (11,997)	51.4 (12,633)	53.1 (12,628)	
Gas	<b>23.2 (5,717)</b>	21.4 (5,139)	21.4 (5,084)	21.7 (5,322)	22.4 (5,322)	
Nuclear	<b>10.9 (2,685)</b>	11.2 (2,685)	11.3 (2,685)	10.1 (2,488)	5.8 (1,380)	
Renewables	<b>13.5 (3,342)</b>	13.7 (3,294)	12.8 (3,039)	13.1 (3,211)	14.9 (3,551)	
Energy Storage	<b>2.7 (655)</b>	N/A	N/A	N/A	N/A	
Others	<b>1.2 (300)</b>	3.7 (900)	3.8 (900)	3.7 (900)	3.8 (900)	
<b>Energy sent out by asset type (% (GWh))<sup>1,2,4</sup></b>						
<b>Total energy sent out - on an equity basis</b>	<b>100 (68,699)</b>	100 (70,949)	N/A	N/A	N/A	TCFD
Coal	<b>57.4 (39,438)</b>	62.9 (44,596)	N/A	N/A	N/A	
Gas	<b>18.0 (12,390)</b>	14.1 (9,979)	N/A	N/A	N/A	
Nuclear	<b>16.3 (11,192)</b>	15.3 (10,888)	N/A	N/A	N/A	
Renewables	<b>8.3 (5,678)</b>	7.7 (5,487)	N/A	N/A	N/A	
Energy Storage	<b>0.0 (0)</b>	N/A	N/A	N/A	N/A	
Others	<b>0.0 (1)</b>	0 (0)	N/A	N/A	N/A	
<b>Total energy sent out - on an equity plus long-term capacity and energy purchase basis<sup>3,5</sup></b>	<b>100 (85,937)</b>	100 (88,573)	100	100	100	TCFD
Coal	<b>47.8 (41,118)</b>	54.8 (48,512)	60	61	63	
Gas	<b>20.0 (17,157)</b>	14.8 (13,073)	12	15	14	
Nuclear	<b>23.2 (19,923)</b>	21.9 (19,400)	20	15	14	
Renewables	<b>9.1 (7,855)</b>	8.7 (7,699)	8	9	9	
Energy Storage	<b>-0.1 (-118)</b>	N/A	N/A	N/A	N/A	
Others	<b>0.0 (1)</b>	-0.1 (-109)	0	0	0	
<b>Total energy sent out (GWh) - on an operational control basis</b>	<b>58,918</b>	N/A	N/A	N/A	N/A	TCFD
<b>Fuel use<sup>4,6</sup></b>						
Coal consumed (for power generation) (TJ)	<b>403,379</b>	485,453	521,568	471,976	453,904	GRI 302-1 / HKEEx A2.1
Gas consumed (for power generation) (TJ)	<b>134,776</b>	107,183	83,364	91,426	86,787	GRI 102-48, 302-1 / HKEEx A2.1
Oil consumed (for power generation) (TJ)	<b>2,243</b>	2,620	3,807	5,069	4,162	GRI 102-48, 302-1 / HKEEx A2.1

1 Numbers have been subject to rounding. Any discrepancies between the total shown and the sum of the amounts listed are due to rounding.

2 Starting from 2020, a new "Energy Storage" asset category is added, under which pumped storage and battery storage are included. In previous years, assets under the "Others" category included oil-fired generation assets and pumped storage.

3 Numbers include assets with majority and minority share, and those under "long-term capacity and energy purchase" arrangements with CLP. Starting from 2018, "long-term capacity and energy purchase" is defined as a purchase agreement with duration of at least five years, and capacity or energy purchased being no less than 10MW.

4 Paguthan Power Station, the power purchase agreements of which expired in December 2018, was not included in the 2019 and 2020 numbers.

5 Only percentages are available for the years 2016-18.

6 Numbers include operating assets where CLP has operational control during the calendar year.

People	2020	2019 <sup>1</sup>	2018	2017	2016	GRI/ HKEEx/ TCFD
<b>Total employees by region (number)</b>	<b>8,060</b>	7,960	7,634	7,542	7,428	GRI 102-7 / HKEEx B1.1
Hong Kong	<b>4,689</b>	4,604	4,538	4,504	4,450	
Mainland China	<b>609</b>	607	596	577	560	

People	2020	2019 <sup>1</sup>	2018	2017	2016	GRI/ HKEEx/ TCFD
India	442	469	458	463	435	
Australia	2,320	2,280	2,042	1,998	1,983	
<b>Total employees eligible to retire within the next five years (%)<sup>2</sup></b>	<b>14.5</b>	13.9	16.4	15.1	14.1	GRI EU15
Hong Kong	20.4	19.5	20.0	18.6	17.3	
Mainland China	13.4	14.5	13.2	10.6	12.1	
India	5.1	4.8	4.0	2.4	0.9	
Australia <sup>3</sup>	5.7	5.4	12.8	12.2	11.4	
<b>Voluntary staff turnover rate (%)<sup>4,5</sup></b>						GRI 401-1 / HKEEx B1.2
Hong Kong	3.1	2.4	2.3	1.9	2.3	
Mainland China	1.3	2.0	4.7	3.0	3.4	
India	4.7	6.6	5.6	3.5	8.4	
Australia	7.7	12.9	13.6	13.8	12.6	
<b>Average training hours per employee (hours)</b>	<b>42.5</b>	40.1	46.1	46.9	49.2	GRI 404-1 / HKEEx B3.2

1 Starting from 2019, numbers have included full-time and part-time employees. Numbers in the previous years included full-time employees only.

2 The percentages given refer to permanent employees within each region, who are eligible to retire within the next five years.

3 There is no mandatory retirement age in Australia. Since 2019, retirement age assumption has been adjusted from 60 to 65 to reflect local norms, which led to a significantly lower percentage compared to previous years. Numbers in previous years adopting the adjusted retirement age for Australia are as follows: 2016 - Australia: 4.6% / Group total: 12.0%; 2017 - Australia: 4.8% / Group total: 12.9%; 2018 - Australia: 4.6% / Group total: 14.0%.

4 Voluntary turnover is employees leaving the organisation voluntarily and does not include dismissal, retirement, company-initiated termination or end of contract.

5 Includes permanent employees only except for Mainland China, which includes both permanent and fixed-term contract employees due to local employment legislation.

*The 2020 data shaded in orange have been independently verified by PricewaterhouseCoopers. The assurance scope of past years' data can be found in previous Sustainability Reports.*

# Appendix II: Reporting scope and data verification

GRI reference 102-50, 102-51, 102-52

This report covers the CLP Group's sustainability performance for the calendar year ending 31 December 2020. It is published at the same time as the Annual Report. The previous CLP Sustainability and Annual reports were published in March 2020.

GRI reference 102-45, 102-48, 102-49

CLP reviews its reporting scope regularly to ensure the material impact of the Group's overall portfolio is covered. In 2020, the reporting scopes of the following data points have been adjusted:

- **Health and Safety, Environmental (HSE):** Any assets that have been operating during the year are included in the reporting scope. In 2020, additions to the reporting scope include: the new combined-cycle gas turbine (CCGT) generation unit (Unit D1) at Black Point Power Station and WE Station in Hong Kong, Laiwu III in Mainland China, Clean Solar Renewable Energy (CREPL) and Divine Solar Renewable Energy (DSPL) in India.

Satpura Transco Private Limited (STPL) transmission network, acquired by CLP India in November 2019, was not included in the 2019 data points but has been included in the 2020 reporting cycle. Environmental data of the Paguthan power station, the power purchase agreements (PPA) of which expired in December 2018, were not included in the 2020 data points. Echo Group, a solar and LED lighting company, has been added to the safety scope since EnergyAustralia took full ownership of the business.

- **Operations:** To reflect CLP's growing investments in energy storage, an energy storage category was added to the Group's total generation capacity and total energy sent out breakdown by asset type. It encompasses pumped storage and battery storage. The 2020 data points for energy storage includes Guangzhou Pumped Storage Power

Station, Ballarat battery storage and Gannawarra battery storage in Australia.

- **Climate Vision 2050:** While CLP continues to report on carbon intensity based on equity, the Group tracks its performance based on equity plus long-term capacity and energy purchase. This approach reflects more holistically on the developments of generation capacity from other sources. Starting from 2020, CLP also reports the total carbon dioxide emissions of the Group's generation and energy storage portfolio to provide more transparency to the calculation of the Group's carbon intensity.

[See CLP's portfolio changes for the year 2020](#)

GRI reference 102-56

Limited assurance is provided by PricewaterhouseCoopers (PwC) on a selected set of environmental, social and governance-related [Key Performance Metrics](#) for this report, in accordance with:

- The *International Standard on Assurance Engagements 3000 (Revised)*, *Assurance Engagements other than Audits or Reviews of Historical Financial Information*, and
- In respect of greenhouse gas emissions the *International Standard on Assurance Engagements 3410, Assurance Engagements on Greenhouse Gas Statements*.

[Download the independent assurance report](#)

Below is the definition of the Group's boundary for each of the main categories of data included in this report. Please refer to the *CLP 2020 Annual Report* for more details on the entities included in the consolidated financial statements.

## Governance

Includes people employed by CLP entities and their subsidiaries. This also includes CLP employees who are assigned to work in joint ventures, joint operations or associates.

## Finance

Selected financial figures are extracted from the Annual Report and the consolidated financial statements of CLP Holdings Limited and its subsidiaries (the Group) which is in accordance with Hong Kong Financial Reporting Standards (HKFRS) issued by the Hong Kong Institute of Certified Public Accountants (HKICPA). For a detailed description of the financial reporting scope, please refer to the *Significant Accounting Policies – Consolidation and Equity Accounting* on pages 234-235 of the *2020 Annual Report*.

<b>People</b>	<p>Includes people employed by CLP entities and their subsidiaries. This also includes CLP employees who are assigned to work in joint ventures, joint operations or associates.</p>
<b>Safety</b>	<p>Includes the Group's generation and energy storage portfolio, transmission and distribution infrastructure, coal mines, fuel storage facilities and offices that are:</p> <ul style="list-style-type: none"> <li>· Majority owned by CLP or under CLP's operational control, defined as having full authority to implement CLP's operating policies; and</li> <li>· Under construction or in operation during the reporting year.</li> </ul> <p>100% of the performance data for in-scope assets is reported without adjustment based on CLP's equity share, unless otherwise stated.</p>
<b>Operations</b> <b>– Energy sent out, Fuel use</b> <b>(on an operational control basis)</b>	<p>Data are consolidated on an operational control basis. It includes the assets in the Group's generation and energy storage portfolio that are:</p> <ul style="list-style-type: none"> <li>· Majority owned by CLP or under CLP's operational control, and where full authority is given to implement CLP's operating policies; and</li> <li>· In operation during the reporting year.</li> </ul> <p>100% of the performance data for in-scope assets is reported without adjustment based on CLP's equity share, unless otherwise stated.</p>
<b>Environment</b> <b>– Resource use, Air emissions and Environmental compliance</b>	<p>Includes the Group's generation and energy storage portfolio, transmission and distribution infrastructure, coal mines and fuel storage facilities that are:</p> <ul style="list-style-type: none"> <li>· Majority owned by CLP or under CLP's operational control, defined as full authority to implement CLP's operating policies;</li> <li>· In operation during the reporting year; and</li> <li>· Posing material impact to the environment.</li> </ul> <p>100% of the performance data for in-scope assets is reported without adjustment based on CLP's equity share, unless otherwise stated.</p>

## GHG emissions

### – CLP Group's total CO<sub>2</sub>e emissions

#### (on an equity basis)

Includes the Group's generation and energy storage portfolio, transmission and distribution, retail and other business activities where relevant, covering GHG emissions from Scope 1, 2 and 3.

#### Scope 1 CO<sub>2</sub>e

Includes the Group's generation and energy storage portfolio, transmission and distribution infrastructure, coal mines and fuel storage facilities that are:

- Owned by CLP, where assets are included on an equity basis (i.e. accounts for the data according to CLP's equity share in the asset); and
- In operation during the reporting year.

#### Scope 2 CO<sub>2</sub>e

Includes the Group's generation and energy storage portfolio, transmission and distribution infrastructure, coal mines, fuel storage facilities and offices that are:

- Owned or rented by CLP, where assets and offices are included on an equity basis (i.e. accounts for the data according to CLP's equity share in the asset); and
- In operation during the reporting year.

#### Scope 3 CO<sub>2</sub>e

Includes indirect emissions (not included in Scope 2) that occur in the value chain of CLP. It includes emissions from the Scope 3 categories relevant to CLP.

## GHG emissions

### – CLP Group's generation and energy storage portfolio

#### (CO<sub>2</sub> on an equity/ an equity plus long-term capacity and energy purchase basis )

Data are consolidated on an equity basis with two variations:

1. **Equity basis** includes the assets in the Group's generation and energy storage portfolio that are:

- Owned by CLP, where assets are included on an equity basis (i.e. accounts for the data according to CLP's equity share in the asset); and
- In operation during the reporting year.

2. **Equity plus long-term capacity and energy purchase basis** adds onto (1) above and includes the assets in the Group's generation and energy storage portfolio whose capacity and energy are purchased by CLP to meet customer demand, and where:

- Purchase agreement duration is at least 5 years; and
- Capacity or energy purchase is no less than 10MW.

## GHG emissions

### – CLP Group's generation and energy storage portfolio

#### (CO<sub>2</sub>/CO<sub>2</sub>e on an operational control basis )

Includes the Group's generation and energy storage portfolio, coal mines or fuel storage facilities that are:

- Majority owned by CLP or under CLP's operational control, defined as full authority to implement CLP's operating policies;
- In operation during the reporting year; and
- Posing material impact to the environment.

100% of the performance data for in-scope assets is reported without adjustment based on CLP's equity share, unless otherwise stated.

## Climate Vision 2050

### Operations – Generation and energy storage capacity, energy sent out

Data are consolidated on an equity basis with two variations:

1. **Equity basis** includes the assets in the Group's generation and energy storage portfolio that are:

- Owned by CLP, where assets are included on an equity basis (i.e. accounts for the data according to CLP's equity share in the asset); and
- In operation during the reporting year.

2. **Equity plus long-term capacity and energy purchase basis** adds onto (1) above and includes the assets in the Group's generation and energy storage portfolio whose capacity and energy are purchased by CLP to meet customer demand, and where:

- Purchase agreement duration is at least 5 years; and
- Capacity or energy purchase is no less than 10MW.

### CLP Power Hong Kong carbon emissions intensity of electricity sold

Includes power generation assets involved with the delivery of electricity to CLP Power Hong Kong customers, where:

- The CO<sub>2</sub> and CO<sub>2</sub>e emissions are from generation assets owned or controlled by CLP Power Hong Kong/ CAPCO in Hong Kong only (as nuclear power generation does not result in significant carbon emissions); and
- The kWh is from the total electricity sales for CLP Power Hong Kong.