

**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 2019 is summarised below:

<p><u>Governance</u></p> <ul style="list-style-type: none"> • Convicted cases of corruption reported to the Audit & Risk Committee (cases) • Breaches of Code of Conduct reported to the Audit & Risk Committee (cases) <p><u>Safety</u></p> <p>Fatalities (number)</p> <ul style="list-style-type: none"> • Fatalities - employees only • Fatalities - contractors only <p>Fatality Rate (number per 200,000 manhour)</p> <ul style="list-style-type: none"> • Fatality Rate - employees only • Fatality Rate - contractors only <p>Lost Time Injury (number)</p> <ul style="list-style-type: none"> • Lost Time Injury - employees only • Lost Time Injury - contractors only <p>Lost Time Injury Rate (number per 200,000 manhour)</p> <ul style="list-style-type: none"> • Lost Time Injury Rate - employees only • Lost Time Injury Rate - contractors only <p>Days Lost (number)</p> <ul style="list-style-type: none"> • Days Lost - employees only <p><u>Environment</u></p> <p>Resource Use & Emissions</p> <ul style="list-style-type: none"> • Nitrogen oxides emissions (NO_x) (kt) • Sulphur dioxide emissions (SO₂) (kt) • Particulates emissions (kt) <p>Non-hazardous liquid waste (kl)</p> <ul style="list-style-type: none"> • Produced • Recycled <p>Non-hazardous solid waste (t)</p> <ul style="list-style-type: none"> • Produced • Recycled <p>Hazardous liquid waste (kl)</p> <ul style="list-style-type: none"> • Produced • Recycled <p>Hazardous solid waste (t)</p> <ul style="list-style-type: none"> • Produced • Recycled <p>Total water withdrawal (Mm³)</p> <p>Total water discharge (Mm³)</p> <p>Environmental Compliance</p> <ul style="list-style-type: none"> • Environmental regulatory non-compliances resulting in fines or prosecutions (number) • Environmental licence limit exceedances & other non-compliances (number) 	<p><u>GHG Emissions & Climate Vision 2050</u></p> <p>GHG Emissions</p> <p>GHG emissions - on an equity basis (kt)</p> <ul style="list-style-type: none"> • Scope 1 CO₂e • Scope 2 CO₂e <p><i>Scope 3 CO₂e by category</i></p> <ul style="list-style-type: none"> • Category 1a: Purchased goods and services (products) • Category 3: Fuel- and energy-related activities • Category 11: Use of sold products <p>GHG emissions - on an operational control basis (kt)</p> <ul style="list-style-type: none"> • Scope 1 & 2 CO₂e (from power generation) • Scope 1 & 2 CO₂ (from power generation) <p>Climate Vision 2050</p> <p>Performance against targets - on an equity basis</p> <ul style="list-style-type: none"> • Carbon dioxide emissions intensity of CLP Group’s generation portfolio (kg CO₂/ kWh) • Total renewable energy generation capacity (% (MW)) • Non-carbon emitting generation capacity (% (MW)) <p>Performance against targets - on an equity plus long-term capacity and energy purchase basis</p> <ul style="list-style-type: none"> • Carbon dioxide emissions intensity of CLP Group’s generation portfolio (kg CO₂/ kWh) • Total renewable energy generation capacity (% (MW)) • Non-carbon emitting generation capacity (% (MW)) <p><u>CLP Power Hong Kong - carbon emissions intensity of electricity sold</u></p> <ul style="list-style-type: none"> • CO₂e emissions intensity of electricity sold by CLP Power Hong Kong (kg CO₂e/ kWh) • CO₂ emissions intensity of electricity sold by CLP Power Hong Kong (kg CO₂/ kWh) <p><u>Operations</u></p> <p>Generation capacity by asset type (%(MW))</p> <p>Total generation capacity - based on an equity basis</p> <ul style="list-style-type: none"> • Coal • Gas • Nuclear • Renewables • Others <p>Total generation capacity - based on an equity plus long-term capacity and energy purchase basis</p> <ul style="list-style-type: none"> • Coal • Gas • Nuclear • Renewables • Others
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<p><u>Operations (Continued)</u> Energy sent out by asset type (%(GWh)) Total energy sent out - based on an equity basis</p> <ul style="list-style-type: none"> • Coal • Gas • Nuclear • Renewables • Others <p>Total energy sent out - based on an equity plus long-term capacity and energy purchase basis</p> <ul style="list-style-type: none"> • Coal • Gas • Nuclear • Renewables • Others <p>Fuel Use</p> <ul style="list-style-type: none"> • Coal consumed (for power generation) (TJ) • Gas consumed (for power generation) (TJ) • Oil consumed (for power generation) (TJ) 	<p><u>People</u> Total employees (number) Total employees eligible to retire within the next five years (%) Voluntary staff turnover rate (%)</p> <ul style="list-style-type: none"> • Hong Kong • Mainland China • India • Australia
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Our assurance was with respect to the year ended 31 December 2019 information only and we have not performed any procedures with respect to earlier periods or any other elements included in the 2019 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 2019 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, 24 February 2020

Appendix I

Key performance metrics

CLP continually improves by managing, monitoring and reporting its performance. These tables present a quantitative overview of our 2019 financial and non-financial performance. The disclosures are selected from the GRI Standards, Hong Kong Stock Exchange ESG Reporting Guide and TCFD Electric Utilities Preparer Forum, as well as other key performance data.

2019 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 assurance statement](#)



Key performance metrics

Governance	2019	2018	2017	2016	2015	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)	31	20	28	21	6	

Financial information	2019	2018	2017	2016	2015	GRI/ HKEEx/ TCFD
Total capital investments incurred by asset type (% (HK\$M))^{1,2}	100 (12,028)	100 (12,851)	N/A	N/A	N/A	TCFD
Transmission & distribution/ retail	44 (5,252)	39 (4,953)	N/A	N/A	N/A	
Coal	20 (2,450)	24 (3,040)	N/A	N/A	N/A	
Gas	26 (3,113)	32 (4,098)	N/A	N/A	N/A	
Nuclear	3 (352)	0 (0)	N/A	N/A	N/A	
Renewables	5 (615)	5 (714)	N/A	N/A	N/A	
Others	2 (246)	0 (46)	N/A	N/A	N/A	
Total operating earnings by asset type (% (HK\$M))³	100 (12,389)	100 (15,145)	100 (14,189)	100 (13,173)	N/A	TCFD
Transmission & distribution/ retail	42 (5,257)	49 (7,427)	59 (8,392)	59 (7,798)	N/A	
Coal ⁴	21 (2,557)	22 (3,370)	28 (3,994)	30 (3,905)	N/A	
Gas ⁴	11 (1,402)	10 (1,533)				
Nuclear	14 (1,688)	11 (1,720)	7 (913)	7 (863)	N/A	
Renewables	10 (1,260)	7 (924)	4 (629)	3 (455)	N/A	
Others	2 (225)	1 (171)	2 (261)	1 (152)	N/A	
Economic value generated, distributed and retained (HK\$M)						
Economic value generated						
Revenue	85,689	91,425	92,073	79,434	80,700	GRI 201-1

Financial information	2019	2018	2017	2016	2015	GRI/ HKEx/ TCFD
Share of profits of non-wholly owned entities ⁵	1,828	1,509	609	791	10,299	GRI 201-1
Economic value distributed						
Fuel costs	16,712	17,187	15,473	12,785	15,446	GRI 201-1
Other operating costs ⁶	48,654	43,604	46,325	38,689	41,705	GRI 201-1
Staff expenses ⁷	4,535	4,449	4,195	3,892	3,649	GRI 201-1
Finance costs ⁸	2,033	2,107	2,278	2,371	4,183	GRI 201-1
Dividends	7,782	7,630	7,352	7,074	6,822	GRI 201-1
Taxes ⁹	2,189	3,565	2,094	2,032	1,818	GRI 201-1
Donations	21	18	14	13	15	GRI 201-1
Economic value retained¹⁰	5,591	14,374	14,951	13,369	17,361	GRI 201-1

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 business.

2 On an accrual basis.

3 Before unallocated expenses.

4 Starting in 2018, operating earnings of coal and gas are reported separately.

5 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.

6 Includes impairment provision and reversal.

7 Another HK\$1,365 million (2018: HK\$1,338 million) of staff costs incurred were capitalised.

8 Finance costs are netted with finance income and include payments made to perpetual capital securities holders. In addition, finance costs of HK\$323 million (2018:HK\$278 million) were capitalised.

9 Represents current income tax but excluding deferred tax for the year.

10 Represents earnings attributable to shareholders (before depreciation, amortisation and deferred tax) for the year retained.

Safety	2019	2018	2017	2016	2015	GRI/ HKEEx/ TCFD
Fatalities (number)^{1,2}						
Fatalities - employees only	0	1	0	0	0	GRI 403-2 / HKEEx B2.1
Fatalities - contractors only	1	1	4	3	0	GRI 403-2 / HKEEx B2.1
Fatality Rate (number per 200,000 manhour)^{1,2,3}						
Fatality Rate - employees only	0.00	0.01	0.00	0.00	0.00	GRI 403-2 / HKEEx B2.1
Fatality Rate - contractors only	0.01	0.01	0.03	0.02	0.00	GRI 403-2 / HKEEx B2.1
Lost Time Injury (number)^{1,4}						
Lost Time Injury - employees only	7 ⁵	11	11	3	8	GRI 403-2
Lost Time Injury - contractors only	19	11	16	10	8	GRI 403-2
Lost Time Injury Rate (number per 200,000 manhour)^{1,3,4}						
Lost Time Injury Rate - employees only	0.07	0.13	0.13	0.04	0.10	GRI 403-2
Lost Time Injury Rate - contractors only	0.14	0.09	0.14	0.07	0.06	GRI 403-2
Total Recordable Injury Rate (number per 200,000 manhour)^{1,3,6}						
Total Recordable Injury Rate - employees only	0.19	0.19	0.21	0.11	0.18	GRI 403-2
Total Recordable Injury Rate - contractors only	0.52	0.29	0.36	0.19	0.28	GRI 403-2
Days Lost (number)^{1,4,7}						
Days Lost - employees only	464 ⁸	249 ⁹	252	9	199	GRI 102-48, 403-2 / HKEEx B2.2

1 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.

2 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.

3 All rates are normalised to 200,000 worked hours, which approximately equals to the number of hours worked by 100 people in one year.

4 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.

5 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.

8 158 out of 464 days were carried forward from three incidents in the past.

9 Restated from 253 to 249 per update in Australia.

Environment	2019	2018	2017	2016	2015	GRI/ HKEEx/ TCFD
Resource Use & Emissions^{1,2}						
Nitrogen oxides emissions (NO _x) (kt)	47.0	60.9	59.3	58.1	56.3	GRI 305-7 / HKEEx A1.1
Sulphur dioxide emissions (SO ₂) (kt)	44.7	76.1	81.6	71.2	63.4	GRI 305-7 / HKEEx A1.1
Particulates emissions (kt)	7.7	8.5	8.3	8.5	9.8	GRI 305-7 / HKEEx A1.1
Non-hazardous liquid waste (kl) ³						
Produced	59	52	103	84	199	GRI 306-2 / HKEEx A1.4
Recycled	57	52	103	84	199	GRI 306-2
Non-hazardous solid waste (t) ³						
Produced	13,344	11,471	20,334	8,317	11,455	GRI 306-2 / HKEEx A1.4
Recycled	4,986	3,990	3,790	2,963	4,414	GRI 306-2
Hazardous liquid waste (kl) ³						
Produced	1,578	1,685	1,420	1,251	2,832	GRI 306-2 / HKEEx A1.3
Recycled	1,536	1,648	1,384	1,149	1,176	GRI 306-2
Hazardous solid waste (t) ³						
Produced	862	1,435	857	1,302	641	GRI 306-2 / HKEEx A1.3
Recycled	201	631	469	260	203	GRI 306-2
Total water withdrawal (Mm³)^{4,5,6}	5,377.4	5,153.6	4,480.6	4,256.9	4,503.0	GRI 303-3 / HKEEx A2.2
For cooling purpose						
Water withdrawal from marine water resources	5,319.3	5,087.3	4,421.7	4,202.3	4,447.6	
Water withdrawal from freshwater resources	45.7	53.3	47.6	43.8	45.1	
For non-cooling purposes						
Water withdrawal from freshwater resources	5.8	6.0	4.9	4.2	3.8	
Water withdrawal from municipal sources	6.7	7.0	6.4	6.6	6.5	
Total water discharge (Mm³)^{5,7,8}	5,337.1	5,103.2	4,437.7	4,219.3	4,463.1	GRI 303-4
From cooling process						
Water discharge to marine water bodies	5,319.3	5,087.3	4,421.7	4,202.3	4,447.6	
Treated wastewater to freshwater bodies	0	0	0	0	0	

Environment	2019	2018	2017	2016	2015	GRI/ HKEEx/ TCFD
Wastewater to other destinations	0	0.02	0.05	0.06	0.03	
From non-cooling processes						
Treated wastewater to marine water bodies	1.7	1.6	1.6	1.5	1.1	
Treated wastewater to freshwater bodies	14.4	12.3	12.3	13.7	12.6	
Wastewater to other destinations	1.7	1.9	2.0	1.7	1.7	
Wastewater to sewerage	0.03	0.03	0.02	0.01	0.02	
Environmental compliance¹						
Environmental regulatory non compliances resulting in fines or prosecutions (number)	0	0	0	0	1	GRI 307-1
Environmental licence limit exceedances & other non compliances (number)	10	2	13	2	13	GRI 307-1

1 Numbers include operating assets where CLP has operational control during the calendar year. Paguthan power station, the power purchase agreements of which expired in December 2018, was not included in the 2019 numbers.

2 Since 2019, numbers at the asset level are aggregated and then rounded.

3 Waste categorised in accordance with local regulations.

4 Starting in 2019, the breakdown of water withdrawal is recategorised into withdrawal for cooling and non-cooling purposes. Numbers of the years 2015-18 are not directly comparable with the previously reported numbers because of the recategorisation, except for marine water resources.

5 Numbers at the asset level are aggregated and then rounded for all years shown herein. They may be adjusted from the numbers reported previously, where they were rounded and then aggregated.

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

7 Starting in 2019, the breakdown of water discharge is recategorised into discharge for cooling and non-cooling purposes. Numbers of the years 2015-18 are not directly comparable with the previously reported figures because of the recategorisation, except for marine water bodies.

8 Starting in 2019, Yallourn's "water discharged to third-parties", which was previously reported under "wastewater to sewerage", is reported under "water discharged to other destinations".

GHG Emissions & Climate Vision 2050	2019	2018	2017	2016	2015	GRI/ HKEEx/ TCFD
GHG Emissions¹						
Total GHG emissions - on an equity basis (kt)²	71,720	N/A	N/A	N/A	N/A	HKEEx A1.2
Scope 1 CO ₂ e	50,047	N/A	N/A	N/A	N/A	GRI 305-1 / TCFD
Scope 2 CO ₂ e	250	N/A	N/A	N/A	N/A	GRI 305-2 / TCFD
Scope 3 CO ₂ e	21,424	N/A	N/A	N/A	N/A	GRI 305-3 / TCFD
Scope 3 CO ₂ e by category						
Category 1a: Purchased goods and services (products)	554	N/A	N/A	N/A	N/A	
Category 1b: Purchased goods and services (non-products)	539	N/A	N/A	N/A	N/A	
Category 2: Capital goods	1,347	N/A	N/A	N/A	N/A	
Category 3: Fuel- and energy-related activities	16,671	N/A	N/A	N/A	N/A	
Category 5: Waste generated in operations	101	N/A	N/A	N/A	N/A	
Category 6: Business travel	8	N/A	N/A	N/A	N/A	
Category 7: Employee commuting	4	N/A	N/A	N/A	N/A	
Category 11: Use of sold products	2,200	N/A	N/A	N/A	N/A	
Total GHG emissions - on an operational control basis (kt)³						
Scope 1 & 2 CO ₂ e (from power generation)	50,676	52,306 ⁴	48,082	46,681	46,723	GRI 102-48, 305-1, 305-2 / HKEEx A1.2
Scope 1 & 2 CO ₂ (from power generation)	50,412	52,052 ⁴	47,921	46,518	46,553	GRI 102-48, 305-1, 305-2 / HKEEx A1.2
Climate Vision 2050¹						
Performance against targets - on an equity basis²						
Carbon dioxide emissions intensity of CLP Group's generation portfolio (kg CO ₂ / kWh)	0.70	0.74	0.80	0.82	0.81	GRI 305-4 / HKEEx A1.2 / TCFD
Total renewable energy generation capacity (% (MW))	12.8 (2,469)	12.5 (2,387)	14.2 (2,751)	16.6 (3,090)	16.8 (3,051)	TCFD
Non-carbon emitting generation capacity (% (MW))	21.1 (4,069)	20.9 (3,987)	22.4 (4,350)	19.2 (3,582)	19.5 (3,543)	
Performance against targets - on an equity plus long-term capacity and energy purchase basis^{2,5}						

GHG Emissions & Climate Vision 2050	2019	2018	2017	2016	2015	GRI/ HKEEx/ TCFD
Carbon dioxide emissions intensity of CLP Group's generation portfolio (kg CO ₂ / kWh)	0.62	0.66	0.69	0.72	N/A	GRI 305-4 / HKEEx A1.2 / TCFD
Total renewable energy generation capacity (% (MW))	13.7 (3,294)	12.8 (3,039)	13.1 (3,211)	14.9 (3,551)	N/A	TCFD
Non-carbon emitting generation capacity (% (MW))	24.9 (5,979)	24.1 (5,724)	23.2 (5,699)	20.7 (4,931)	N/A	

1 CO₂ emissions of Yallourn and Hallett power stations were used in 2018. Prior to 2018, CO₂e emissions data of these assets were used.

2 Numbers include majority and minority share assets in the CLP Group portfolio.

3 Numbers include operating assets where CLP has operational control during the calendar year. Paguthan power station, the power purchase agreements of which expired in December 2018, was not included in the 2019 numbers.

4 Restated as per updated data for Hallett power station in Australia.

5 Starting in 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.

CLP Power Hong Kong - carbon emissions intensity of electricity sold	2019	2018	2017	2016	2015	GRI/ HKEEx/ TCFD
CO ₂ e emissions intensity of electricity sold by CLP Power Hong Kong (kg CO ₂ e/ kWh) ¹	0.50	0.51	0.51	0.54	0.54	
CO ₂ emissions intensity of electricity sold by CLP Power Hong Kong (kg CO ₂ / kWh) ¹	0.49	0.51	0.50	0.54	0.54	

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

Operations	2019	2018	2017	2016	2015	GRI/ HKEEx/ TCFD
Generation capacity by asset type (% (MW))¹						
Total generation capacity - based on an equity basis²	100 (19,238)	100 (19,108)	100 (19,395)	100 (18,622)	100 (18,180)	TCFD
Coal	56.0 (10,765)	56.3 (10,765)	58.8 (11,401)	61.2 (11,396)	62.7 (11,396)	
Gas	21.8 (4,194)	21.7 (4,147)	17.7 (3,434)	18.4 (3,434)	16.7 (3,031)	
Nuclear	8.3 (1,600)	8.4 (1,600)	8.2 (1,600)	2.6 (492)	2.7 (492)	
Renewables	12.8 (2,469)	12.5 (2,386)	14.2 (2,751)	16.6 (3,090)	16.8 (3,051)	
Others	1.1 (210)	1.1 (210)	1.1 (210)	1.1 (210)	1.2 (210)	
Total generation capacity - based on an equity plus long-term capacity and energy purchase basis^{2,3}	100 (24,015)	100 (23,705)	100 (24,554)	100 (23,781)	100 (22,706)	TCFD
Coal	50.0 (11,997)	50.6 (11,997)	51.4 (12,633)	53.1 (12,628)	55.6 (12,628)	
Gas	21.4 (5,139)	21.4 (5,084)	21.7 (5,322)	22.4 (5,322)	20.9 (4,747)	
Nuclear	11.2 (2,685)	11.3 (2,685)	10.1 (2,488)	5.8 (1,380)	6.1 (1,380)	
Renewables	13.7 (3,294)	12.8 (3,039)	13.1 (3,211)	14.9 (3,551)	13.4 (3,051)	
Others	3.7 (900)	3.8 (900)	3.7 (900)	3.8 (900)	4.0 (900)	
Energy sent out by asset type (% (GWh))¹						
Total energy sent out - based on an equity basis²	100 (70,949)	N/A	N/A	N/A	N/A	TCFD
Coal	62.9 (44,596)	N/A	N/A	N/A	N/A	
Gas	14.1 (9,979)	N/A	N/A	N/A	N/A	
Nuclear	15.3 (10,888)	N/A	N/A	N/A	N/A	
Renewables	7.7 (5,487)	N/A	N/A	N/A	N/A	
Others	0 (0)	N/A	N/A	N/A	N/A	
Total energy sent out - based on an equity plus long-term capacity and energy purchase basis^{2,3,4}	100 (88,573)	100	100	100	100	TCFD
Coal	54.8 (48,512)	60	61	63	63	
Gas	14.8 (13,073)	12	15	14	16	
Nuclear	21.9 (19,400)	20	15	14	15	
Renewables	8.7 (7,699)	8	9	9	6	
Others	-0.1 (-109)	0	0	0	0	
Fuel use⁵						
Coal consumed (for power generation) (TJ)	485,453	521,568	471,976	453,904	450,937	GRI 302-1 / HKEEx A2.1
Gas consumed (for power generation) (TJ)	107,183	83,364 ⁶	91,426	86,787	95,591	GRI 102-48, 302-1 / HKEEx A2.1

Operations	2019	2018	2017	2016	2015	GRI/ HKEEx/ TCFD
Oil consumed (for power generation) (TJ)	2,620	3,807 ⁶	5,069	4,162	2,892	GRI 102-48, 302-1 / HKEEx A2.1

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

2 Numbers include majority and minority share assets in the CLP Group portfolio.

3 Starting in 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 Only percentages are available for the years 2015-18.

5 Numbers include operating assets where CLP has operational control during the calendar year. Paguthan power station, the power purchase agreements of which expired in December 2018, was not included in the 2019 numbers.

6 Restated as per updated data for Hallett power station in Australia.

People	2019 ¹	2018	2017	2016	2015	GRI/ HKEEx/ TCFD
Total employees by region (number)	7,960	7,634	7,542	7,428	7,360	GRI 102-7 / HKEEx B1.1
Hong Kong	4,604	4,538	4,504	4,450	4,438	
Mainland China	607	596	577	560	527	
India	469	458	463	435	397	
Australia	2,280	2,042	1,998	1,983	1,998	
Total employees eligible to retire within the next five years (%)²	13.9	16.4	15.1	14.1	13.3	GRI EU15
Hong Kong	19.5	20.0	18.6	17.3	16.2	
Mainland China	14.5	13.2	10.6	12.1	11.9	
India	4.8	4.0	2.4	0.9	0.8	
Australia ³	5.4	12.8	12.2	11.4	10.9	
Voluntary staff turnover rate (%)^{4,5}						GRI 401-1 / HKEEx B1.2
Hong Kong	2.4	2.3	1.9	2.3	2.8	
Mainland China	2.0	4.7	3.0	3.4	2.6	
India	6.6	5.6	3.5	8.4	9.8	
Australia	12.9	13.6	13.8	12.6	13.7	
Average training hours per employee (hours)	40.1	46.1	46.9	49.2	57.2	GRI 404-1 / HKEEx B3.2

1 2019 numbers include full-time and part-time employees. Numbers in the previous years include 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. Retirement age assumption was adjusted in 2019 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: 2015 - Australia: 3.8% / Group total: 11.1%; 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 refers to both permanent and fixed-term contract employees due to its specific employment legislation.

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 2019. It is published at the same time as the Integrated Annual Report. The previous report was published in March 2019.

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 2019, the reporting scopes of the following data points have been adjusted:

- **Employees:** part-time employees are covered in employee metrics reflecting the expectation of increasingly flexible working arrangements in the future.
- **Health and Safety, Environmental (HSE):** any assets that have been operating during the year are included in the reporting scope. In 2019, additions to the reporting scope include the Laizhou II wind farm and Meizhou solar farm in China; Newport and Jeeralang power stations in Australia; Indian wind farms (Andhra Lake, Bhakrani, Chandgarh, Harapanahalli, Jath, Khandke, Mahidad, Samana I & II, Saundatti, Sipla, Tejuva and Theni I & II) and solar farms (Gale, Tornado and Veltoor).

The HSE data of Satpura Transco Private Limited (STPL) transmission network, acquired by CLP India in November

2019, were not included in the 2019 data points, but will be included in the 2020 reporting cycle. Environmental data of Paguthan power station, the power purchase agreements (PPA) of which expired in December 2018, were not included.

- **Climate Vision 2050:** while CLP continues to report on carbon intensity based on equity, the Company tracks its performance based on equity plus long-term capacity and energy purchase to reflect more holistically on the developments of generation capacity from other sources.

See CLP's portfolio changes for the year 2019



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 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**.

Below is the definition of the Company boundary for each of the main categories of data included in this report. Please refer to the CLP 2019 Annual Report for more details on the entities included in the consolidated financial statements.

Governance	Includes people employed by CLP entities and their subsidiaries. It does not include non-CLP employees of 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 229-230 of the 2019 Annual Report.
People	Includes people employed by CLP entities and their subsidiaries. It does not include non-CLP employees of joint ventures, joint operations or associates.
Safety	Includes power generation assets, transmission and distribution infrastructure, coal mines, fuel storage facilities and offices: <ul style="list-style-type: none"> • That are majority owned by CLP or under CLP's operational control, defined as full authority to implement CLP's operating policies; and • That are under construction or in operation during the reporting year. <p>100% of the performance data for in-scope assets is reported without adjustment based on CLP's equity share, unless otherwise stated.</p>

Environment – Resource use, air emissions, fuel use and environmental compliance

Includes power generation assets, transmission and distribution infrastructure, coal mines and 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; and
- That are in operation during the reporting year; and
- That pose 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.

GHG emissions (on an equity basis)

1. **Scope 1 CO₂e**

Includes power generation assets, 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
- That are in operation during the reporting year.

2. **Scope 2 CO₂e**

Includes power generation assets, 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
- That are in operation during the reporting year.

3. **Scope 3 CO₂e - Category 1a: Purchased goods and services (products)**

Includes the upstream emissions of EnergyAustralia's natural gas retail business, covering the emissions from upstream gas production and transmission, and distribution leakage in the state pipeline systems.

4. **Scope 3 CO₂e - Category 3: Fuel- and energy-related activities**

Includes the upstream emissions of purchased fuels and electricity for CLP's power generation. In addition, it includes the direct emissions and upstream emissions from generation of purchased electricity that is sold to CLP's customers.

The upstream emissions of purchased fuels and electricity for CLP's power generation include assets:

- 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).

The direct emissions and upstream emissions from generation of purchased electricity that is sold to CLP's customers include:

- Generation assets whose capacity and energy are purchased by CLP to meet customer demand, where the purchase agreement duration is at least 5 years and where the capacity or energy purchased is no less than 10MW; and
- The net electricity purchased by EnergyAustralia from the Australian Energy Market Operator (AEMO) in Australia.

5. **Scope 3 CO₂e - Category 11: Use of sold products**

Includes the downstream emissions of EnergyAustralia's natural gas retail business, covering the emissions from combustion of natural gas supplied to the customers.

**GHG emissions
(on an operational
control basis)**

Includes power generation assets, 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; and
- That are in operation during the reporting year; and
- That pose 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 capacity,
energy sent out**

Data are consolidated on an equity basis with two variations:

1. Equity basis

Includes power generation assets:

- 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
- That are under construction (for generation capacity only) or in operation during the reporting year.

2. Equity plus long-term capacity and energy purchase basis

In addition to (1) above, this scope includes the power generation assets whose capacity and energy are purchased by CLP to meet customer demand where:

- Purchase agreement duration is at least 5 years; and
- Capacity or energy purchased 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, and:

- The CO₂ and CO₂e emissions are from generation assets in Hong Kong only (as power generation from the nuclear assets does not result in significant carbon emissions); and
- The kWh is from the total electricity sales for CLP Power Hong Kong.

Independent assurance statement

