



#### 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 unshaded numbers in the Key Performance Indicators table appended to this opinion (the "Identified Sustainability Information").

#### **Identified Sustainability Information**

The Identified Sustainability Information for the year ended 31 December 2017 is summarised below:

#### Resource use and emissions

- Coal consumed (for power generation)
- Gas consumed (for power generation)
- Oil consumed (for power generation)
- CO<sub>2</sub>e emissions from power generation (Scopes 1 and 2)
- CO<sub>2</sub> emissions from power generation (Scopes 1 and 2)
- Nitrogen oxides emissions (NO<sub>x</sub>)
- Sulphur dioxide emissions (SO<sub>2</sub>)
- Total particulates emissions
- Environmental regulatory non-compliances resulting in fines or prosecutions
- Environmental licence limit exceedances and other noncompliances
- Total water discharged (Mm³)
- Total water withdrawal (Mm³)
- Hazardous waste produced (T(solid)/kl(liquid))
- Hazardous waste recycled (T(solid)/kl(liquid))
- Non-hazardous waste produced (T(solid)/kl(liquid))
- Non-hazardous waste recycled (T(solid)/kl(liquid))

#### **Employees**

- Total number of employees
- Total employees eligible to retire within the next five years
- Voluntary staff turnover rate by region

#### Governance

- Convicted cases of corruption
- Breaches of Code of Conduct

#### Safety

- Fatalities (employees only)
- Fatalities (contractors only)
- Fatality Rate (employees only)
- Fatality Rate (contractors only)
- Lost Time Injury (employees only)
- Lost Time Injury (contractors only)
- Lost Time Injury Rate (employees only)Lost Time Injury Rate (contractors only)
- Days lost (employees only)

# Climate vision 2050 target performance (Equity basis)

- Total renewable energy generation capacity
- Non-carbon emitting generation capacity
- Carbon dioxide emissions intensity of CLP Group's generation portfolio

#### **Carbon Intensity in Hong Kong**

- CO<sub>2</sub> emission intensity of total electricity sold for CLP Power Hong Kong
- CO<sub>2</sub>e emission intensity of total electricity sold for CLP Power Hong Kong

Our assurance was with respect to the year ended 31 December 2017 information only and we have not performed any procedures with respect to earlier periods or any other elements included in the 2017 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 (the "Criteria") appended to this opinion.

#### 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, 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 December 31, 2017 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

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Certified Public Accountants Hong Kong, 26 February 2018

# **Appendix I: Key Performance Indicators**

Dividends
Taxes
Donations
Economic value retained (HK\$M)

Governance	NOTE	2017	2016	2015	2014	2013
Governance						
Convicted cases of corruption (cases)	GRI 205-3; HKEx B7:1	0	0	0	0	0
Breaches of Code of Conduct (cases)	30300.00.200.200.000.00	28	21	6	7	12
Financial	NOTE	2017	2016	2015	2014	2013
Financial Information						
Economic value generated (HK\$M)						
Revenue	GRI 201-1	92,073	79,434	80,700	92,259	104,530
Share of profits of non-wholly owned entitles	00	609	791	10,299	3,820	4,022
Economic Value Distributed (HK\$M)				1-1		
Fuel costs		15,473	12,785	15,446	14,736	15,350
Other operating costs	GRI 201-1	46,325	38,689	41,705	53,870	70,408
Staff expenses	GRI 201-1	4,195	3,892	3,649	3,980	3,017
Finance costs	GRI 201-1; (4)	2,278	2,371	4,183	4,201	6,349
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GRI 201-1; (4)
GRI 201-1; (4)
GRI 201-1; (4)

7,074 2,032 13 13,369

7,352

2,094 14 14,951 6,822 1,818

15 17,361 6,619 1,571 12 11,090

6,493

839

Safety	NOTE	2017	2016	2015	2014	2013
Safety	(3)					
Fatailties (employees only) (number)	GRI 403-2; HKEx B21; (4)	0	0	0	0	0
Fatalities (contractors only) (number)	GRI 403-2; HKEx B2.1; (4)	4	3	0	1	- 1
Fatality Rate (employees only) (number per 200,000 manhour)	GRI 403-2; HKEx B2.1; (7)	0.00	0.00	0.00	0.00	0.00
Fatality Rate (contractors only) (number per 200,000 manhour)	GRI 403-2; HKEx B2.1; (1)	0.03	0.02	0.00	0.01	0.01
Lost Time Injury (employees only) (number)	GRI 403-2; <sup>(4)</sup>	11	3	8	4	5
Lost Time Injury (contractors only) (number)	GRI 403-2; <sup>04</sup>	16	10	8	19	28
Lost Time Injury Rate (employees only) (number per 200,000 manhour)	GRI 403-2; (17)(16)	0.13	0.04	0.10	0.05	0.06
Lost Time Injury Rate (contractors only) (number per 200,000 manhour)	GRI 403-2; (7)(8)	0.14	0.07	0.06	0.15	0.22
Total Recordable Injury Rate (employees only) (number per 200,000 manhour)	GRI 403-2; (7)(9)	0.21	0.11	0.18	0.26	0.23
Total Recordable Injury Rate (contractors only) (number per 200,000 manhour)	GRI 102-48; GRI 403-2; 17(9)	0.36	0.19 <sup>(r)</sup>	0.28	0.51	0.50
Days lost (employees only)	GRI 403-2; HKEx B2.2; (10)	252	9	199	105	29

Employees	NOTE	2017	2016	2015	2014	2013
Employees						
Employees based on geographical location (number)	GRI 102-7; HKEX B1.1					
Hong Kong	ADMICONSCIONATION IN THE PROPERTY OF THE PROPE	4,504	4.450	4,438	4,405	4,394
Mainland China		577	560	527	480	469
Australia		1,998	1,983	1,998	2,143	1,745
India		463	435	397	359	360
Total		7,542	7,428	7,360	7,387	6,968
Employees eligible to retire within the next five years (%)	GRI EU15; (u)					
Hong Kong		18.6%	17.3%	16.2%	15.4%	15.2%
Mainland China		10.6%	12.1%	11.9%	11.1%	12.2%
Australia		12.2%	11.4%	10.9%	9.2%	10.9%
India		2.4%	0.9%	0.8%	1,4%	0.8%
Total		15.1%	14.1%	13.3%	12.4%	13.0%
Voluntary staff turnover rate (%)	GRI 401-1; HKEx B1.2; (1919)					
Hong Kong		1.9%	2.3%	2.8%	2.6%	1.9%
Mainland China		3.0%	3.4%	2.6%	2.5%	2.6%
Australia		13.8%	12.6%	13.7%	11.6%	9.4%
India		3.5%	8.4%	9.8%	13.2%	10.1%
Training per employee (average hours)	GRI 404-1: B3.2	46.9	49.2	57.2	43.4(ti)	5.5

Environment(%)	NOTE	2017	2016	2015	2014	2013
Resource Use and Emissions	(11)					
Coal consumed (for power generation) (TJ)	GRI 302-1; HKEx A2.1	471,976	453,904	450,937	541,865	433,763
Gas consumed (for power generation) (TJ)	GRI 302-1; HKEx A2.1	91,426	86,787	95,591	63,268	73,510
Oil consumed (for power generation) (TJ)	GRI 302-1; HKEx A2.1	5,069	4,162	2,892	2,345	1,973
CO <sub>2</sub> e emissions from power generation (Scopes 1 & 2) (kT)	GRI 305-1; GRI 305-2; HKEx A1-2	48,082	46,681	46,723	53,258	44,258
CO <sub>x</sub> emissions from power generation (Scopes 1 & 2) (kT)	GRI 305-1; GRI 305.2; HKEx A1.2 <sup>(1)</sup>	47,921	46,518	46,553	53,044	44,076
Nitrogen oxides emissions (NO <sub>x</sub> ) (kT)	GRI 305-7; HKExA1.1	59.3	58.1	56.3	74.6	50.2
Sulphur dioxide emissions (SO <sub>2</sub> ) (kT)	GRI 305-7; HKExA1.1	81.6	71.2	63.4	93.0	50.5
Total particulates emissions (kT)	GRI 305-7; HKEx A1.1	8.3	8.5	9.8	11.5	5.5
Water withdrawai (Mm <sup>3</sup> )	GRI 303-1; HKEx A2.2					
from marine water resources		4,421.7	4,202.3	4,447.6	4,774.5	4,987.9
from freshwater resources		52.6	48.2	48.8	52.9	37.2 (19
from municipal sources		6.5	6.5	6.6	6.6	6.2 PP
Total		4,480.8	4,257.0	4,503.0	4,834.0	5,031.3
Water discharged (Mm¹)	GRI 306-1					
cooling water to marine water bodies	5007	4,421.7	4,202.3	4,447.6	4,774.5	4,987.9
treated wastewater to marine water bodles		1.6	1.5	1.1	1.3	1.2
treated wastewater to freshwater bodies		12.3	13.6	12.6	14.5	10:1
wastewater to sewerage		1.9	1.6	1.6	1.8	1.5
wastewater to other destinations		0.2	0.2	0.1	0.1	0.1
Total		4,437.7	4,219.2	4,463.0	4,792.2	5,000.8
Hazardous waste produced (T (solid) /kl (liquid))	GRI 306-2; HKEx A1.3; (20)	857 / 1,420	1,302 / 1,251	641 / 2,832	484 / 2,783	337 / 1,228
Hazardous waste recycled (T (solid) /ki (liquid))	GRI 306-2; <sup>[20]</sup>	469 /1,384	260 / 1,149	203 / 1,176	89 / 1,463	34 / 981
Non-hazardous waste produced (T (solid) /kl (liquid))	GRI 306-2; HKEx A1.4; [30]	20,334/103	8,317 / 84	11,455 / 199	21,142 / 78	7,700 /0
Non-hazardous waste recycled (T (solid) /ki (liquid))	GRI 306-2; [20]	3,790 /103	2,963 / 84	4,414 / 199	4,172 / 78	1,853 / 0
Environmental regulatory non-compliances resulting in fines or prosecutions (number)	GRI 307-1	0	0	1	1	0
Environmental licence limit exceedances & other non-compliances (number)	GRI 307-1	13	2	13	3	4

Environment continued(18)	NOTE	2017	2016	2015	2014	2013
Climate Vision 2050 Target Performance (Equity Basis)	(21)					
Total renewable energy generation capacity (% (MW))		14.2 (2,751)	16.6 (3,090)	16.8 (3,051)	14.1 (2,660)	16.3 (2,579)
Non-carbon emitting generation capacity (% (MW))	7000	22.4 (4,350)	19.2 (3,582)	19.5 (3,543)	16.7 (3,152)	19.4 (3,071)
Carbon dioxide emissions intensity of CLP Group's generation portfo- ilo (kg CO、/ kWh)	GRI 305-4; A1.2; (III)	0.80	0.82	0.81	0.84	0.82
Carbon Emissions Intensity of CLP Power Hong Kong Electricity Sold						
CO <sub>2</sub> emissions intensity of electricity sold by CLP Power Hong Kong (kg CO <sub>2</sub> / kWh)		0.50	0.54	0.54	0.63	0.63
CO <sub>p</sub> e emissions intensity of electricity sold by CLP Power Hong Kong (kg CO <sub>p</sub> e / kWh)		0.51	0.54	0.54	0.64	0.63

#### Notes to the KPI tables:

- As on the An Laules.

  Represents share of results (net of income tax) from joint ventures and associates netted with earnings attributable to other non-controlling interests.

  Finance costs are netted with finance income and include payments made to perpetual capital securities holders.

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

- (6) (7) (8)
- Represents current income tax but excluding deferred tax for the year.

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

  The system of rules applied in recording and reporting acident statistics complies with the International Labour Organization (ILO) Code of Practice on Recording and Notification of Occupational Accidents and Diseases. Early early safely data cover the includents that happened in that calendary year and are based on the lastest information available at the time of publication.

  A fatality is the death of an employee or contractor personnel as a result of an occupational illines? 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 to) Do people in one year.

  An occupational illines is Injury / disease sustained by an employee or contractor personnel aussing 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 restricted work injuries.

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

  It 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.

  A first aid case at CLP Power Hong Kong in 2016 was reclassified as a medical treatment case.

  The percentages given refer to thil-time permanent staff within each location, who are eligible to retire within the next five years.

  Voluntary turnover is employees leaving the organisation voluntarity and does not include dismissal, retirement, separation under a separation scheme or end of contract.

  In Maintand China, voluntary staff turnover rates ref

- (17) (18) (19) (20)

- (29) Waste capported in accordance with local regulations.

  (21) "Equity basis" includes all majority and minority share facilities in the CLP Group portfolio.

  (22) CGN Wind not included as per the Greenhouse Gas Protocol due to its accounting categorisation since 2013.

# **Appendix II: Criteria**

## Reporting period and scope

This report covers CLP Group's sustainability performance for the calendar year ending 31 December 2017. It includes discussions on the "material" topics and "most material" topics identified through our materiality assessment for our relevant company boundaries. It is published at the same time as our Integrated Annual Report. Our previous report was published in March 2017.

For 2016 to 2017, there were no material restatements of the quantitative Key Performance Indicators. Changes to our reporting scopes in 2017 are:

- Environmental scope: addition of the Fangchenggang II, Laizhou I and Sandu I Power Stations, as they completed their first full calendar year of
  operation under CLP ownership in 2017. Cathedral Rocks Wind Farm was removed as we transferred the asset management to the asset joint
  owner as of 1 July 2017, and therefore it did not fulfil the "full calendar year of operation" requirement.
- Safety scope: Cathedral Rocks is included in the safety scope until 30 June 2017 when the asset management was transferred to the asset joint owner.

Below is the definition of the company boundary for each of the main categories of data included in this Report. Please refer to our 2017 Annual Report for more details on the entities included in our consolidated financial statements.

CATEGORY	Description
GOVERNANCE	Includes all people employed by CLP entities or their subsidiaries. It does not include non-CLP employees in our Joint Ventures, Joint Operations or Associates.
FINANCE	Selected financial figures are extracted from our Annual Report and include the financial statements of CLP Holdings Limited and its subsidiaries as well as the Group's interests in joint ventures and associates 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

CATEGORY	Description
	refer to the Significant Accounting Policies – Consolidation on pages 201 and 202 of our 2017 Annual Report.
EMPLOYEES	Includes all people employed by CLP entities or their subsidiaries (excluding part time staff unless otherwise specified). It does not include employees of our joint ventures, joint operations, associates or contractors.
HEALTH AND SAFETY	Includes all entities which hold power assets, transmission and distribution infrastructure, fuel storage facilities or regional office areas:  That are wholly owned or majority owned by CLP; or  That are under CLP's operational control, defined as full authority to implement CLP's operating policies; and  That are under construction or in operation.
ENVIRONMENT  O Resource Use O Emissions O Environmental Compliance	Includes all entities which hold power assets, transmission and distribution infrastructure or fuel storage facilities and satisfy all the following criteria:  That pose material impact to the environment; That are under CLP's operational control, defined as full authority to implement CLP's operating policies; and That have been operating for a full calendar year.  100% of the performance data for in scope entities is reported without adjustment of the data to reflect our equity share, unless otherwise stated.

CATEGORY	Description
GROUP GHG EMISSIONS AND CLIMATE VISION 2050	Includes all entities which hold power generation assets.  • Entities are included on an equity ownership basis, meaning the definition of operational control is not considered, only whether CLP holds an equity share; and  • The scope includes all entities that were in operation at some point during the reporting year, meaning assets which were acquired during the reporting year are included despite not having been in operation for a full calendar year under CLP ownership.  Performance data is consolidated on an equity basis – i.e. if CLP holds a fraction of the total entity, performance is consolidated on a pro rata basis in accordance with CLP's equity holding.  Some statistical data derived from our overseas operations may not be strictly comparable because local and / or regulatory definitions may vary.
CLP POWER HONG KONG CARBON EMISSIONS INTENSITY OF ELECTRICITY SOLD	Includes all power generation assets involved with the delivery of electricity to CLP Power Hong Kong customers, and:  o The total annual CO <sub>2</sub> and CO <sub>2</sub> e emissions are from CAPCO assets in Hong Kong only (as nuclear power does not result in significant carbon emissions); and  o The GWh is from our Total Electricity Sales for CLPP HK and includes generation from Daya Bay Nuclear Power Station.