

# Introduction

The CLP Group's vision is to be a leading responsible energy provider, from one generation to the next. Decarbonisation is CLP's top priority and the Group remains committed to the targets set out in its Climate Vision 2050, which has guided its business strategy since 2007. It has also pledged to review the targets at least every three years. The last update was released in 2024 when CLP strengthened its commitment to reduce the greenhouse gas (GHG) emissions intensity of electricity sold to 0.26kg CO<sub>2</sub>e/kWh by 2030, compared with a previous target of 0.3kg CO<sub>2</sub>e/kWh. The goals of reducing the GHG emissions intensity of electricity sold to 0.1kg CO<sub>2</sub>e/kWh by 2040 and achieving net zero by 2050 remain unchanged. CLP is also committed to phasing out coal-fired generation before 2040. With the aim to achieve these targets, the Group stepped up investments in low-carbon energy while striving to maintain a reliable and affordable supply of electricity.

The transition towards sustainable energy solutions has prompted CLP to adopt alternative financing options that support environmental stewardship. Sustainable finance has emerged as a pivotal tool in this landscape, enabling access to funding that supports climate actions contributing to a net-zero transition. To respond to the increasing investor awareness of the climate change imperative, CLP established the Climate Action Finance Framework (CAFF) in 2017 and updated it in 2020. It sets out how CLP may raise Climate Action Bonds and Loans to invest in projects that deliver significant environmental benefits and are supported by the host governments.

The establishment of CAFF enabled Castle Peak Power Company Limited (CAPCO) and CLP Power Hong Kong Limited (CLP Power) to arrange in total HK\$19 billion of Climate Action Finance Transactions since 2017, including New Energy Bonds to fund the West New Territories Landfill gas energy generation project and to support the continued rollout of smart meters in Hong Kong, as well as Energy Transition Bonds and Loans to fund the construction of two combined-cycle gas turbine (CCGT) units at Black Point Power Station and an offshore liquefied natural gas (LNG) terminal in Hong Kong waters and its associated subsea pipeline and gas receiving station.

The Climate Action Finance Transactions arranged under CAFF were well supported by global investors and lenders amidst the evolving sustainable finance landscape. The underlying projects funded under CAFF represent significant investments to support Hong Kong's energy transition.

- The West New Territories Landfill gas project completed in 2020 allows CAPCO to use landfill gas as energy source, offsetting emissions from some of its coal-fired power generation units.

- With two CCGT units at Black Point Power Station commissioned in 2020 and 2024 respectively, CLP Power's proportion of gas-fired generation has increased to around 50%. It has helped reduce its GHG emissions intensity of electricity sold while maintaining its power supply reliability following the gradual retirement of generation units at the coal-fired Castle Peak A Power Station.
- The launch of the offshore LNG terminal in 2023 made available a critical new source of natural gas, giving Hong Kong access to competitively priced, reliable LNG from diverse sources in the global market and enhancing the territory's gas supply security.
- The continued rollout of smart meters enables CLP Power customers access to power consumption data, allowing them to easily manage energy use, hence promoting energy efficiency and supporting Hong Kong's transformation into a smart city.

These investments play a key role in facilitating the decarbonisation of Hong Kong's power supply and support Hong Kong's Climate Action Plan 2050. As the coal-fired units gradually retire, the use of natural gas in generation is expected to continue to take up the largest portion of the fuel mix in the interim as transition fuel while CLP continues its efforts to promote the development of local renewable energy and explore ways to enhance regional cooperation on zero-carbon energy.

Capitalising on its established foundation and reputation as a green and sustainable finance hub, Hong Kong is well-positioned to further its development in transition finance. In May 2024, the Hong Kong Monetary Authority (HKMA) published the Hong Kong Taxonomy for Sustainable Finance, which provides clear definitions for green activities. To further support the transition of the region, HKMA is working on phase 2 of the Hong Kong Taxonomy to also include transition activities. This strategic initiative recognises the importance of transition finance in facilitating the shift towards a low-carbon economy, particularly in hard-to-abate sectors. Subject to the outcome of the phase 2 of the Hong Kong Taxonomy, CLP will review and update CAFF as appropriate for alignment with the standardised framework in consideration of market expectations for the environmental, social and governance (ESG) requirements for sustainable financing.

In addition to the sustainable financing the CLP group has achieved under CAFF, since 2021 CLP Power and CAPCO have started incorporating sustainability elements in bank facilities that support general business operation. These facilities in part link to the annual aggregate emissions of sulphur dioxide, nitrogen oxides and respirable suspended particulates from their power stations in Hong Kong. As of 31 December 2024, CLP Power and CAPCO had a total of HK\$14.1 billion emission reduction-linked facilities outstanding. This represents 80% of the total outstanding general purposes bank facilities arranged as of the end of 2024.

In Hong Kong, over 70% of financing arranged in 2024 for CLP's Scheme of Control business was met by sustainable sources of funding (including use of proceeds funding under CAFF and emission reduction-linked facilities), higher than the previous year of 62%.

This report aims to provide a comprehensive overview of the Climate Action Finance Transactions arranged by the CLP Group under CAFF and its use of proceeds towards climate actions, highlighting our commitment to sustainability and the role of sustainable financing in advancing our strategic objectives to meet net zero. In this document, we will outline the key projects funded under CAFF, the estimated environmental benefits, and the underlying methodologies adopted to measure and report on the outcomes.

As we navigate the challenges and opportunities presented by climate change, this report serves as a testament to our ongoing efforts to integrate sustainability into our core operations, ensuring both economic and environmental viability for generations to come.

# CLP Climate Action Finance Framework

The objective of CAFF is to support the transition to a low-carbon economy by attracting socially responsible, sustainable financing, to support CLP’s investments that reduce the carbon content of energy generated and increase the efficiency of energy usage.

CLP monitors and reviews the latest developments in ESG taxonomies across different geographic regions, and seeks to adapt CAFF for the relevant taxonomies in consideration of its stakeholders’ expectations where applicable. Last updated in 2020, CAFF remains relevant to CLP’s businesses as governed under its robust sustainability governance to align with the evolving ESG landscape, and will be further updated whenever necessary.

CAFF formalises and governs the project evaluation, monitoring and reporting of the use of proceeds for Climate Action Finance Transactions (including bonds, loans and other forms of finance). There are two types of Climate Action Finance Transactions under CAFF: New Energy Finance Transactions and Energy Transition Finance Transactions.

The Green Bond Principles (GBP), updated as of June 2021, and Green Loan Principles (GLP), updated as of February 2023, are voluntary process guidelines that recommend transparency and disclosure and promote integrity in the development of the Green Bond and Loan markets by clarifying the approach for issuance of a Green Bond or Loan.

There are four core components of a Green Bond or Loan - Use of Proceeds, Process for Project Evaluation and Selection, Management of Proceeds, and Reporting.

The table below summarises how CLP Climate Action Finance Transactions align with GBP and GLP.

It is noted that the use of proceeds of the Energy Transition Finance Transactions is not included in the indicative list of Green Project categories under the use of proceeds section in GBP and GLP, otherwise CLP Climate Action Finance Transactions issued under CAFF align with both GBP and GLP. Nevertheless, the use of proceeds of the Energy Transition Finance Transactions will be allocated towards climate actions that are supported by the host government and will deliver significant environmental benefits.

| Components  | Energy Transition Finance Transactions  | New Energy Finance Transactions  |
|---|---|--|
| <b>Use of Proceeds</b>                              | <ul style="list-style-type: none"> <li>Develop gas-fired power plants and associated enabling infrastructure to support the transition from coal-fired generation in markets with limited renewable energy resources</li> <li>The conversion of coal-fired power plants and the facilities or modifications associated with such conversion, which, in both cases, will result in carbon emissions no more than 450g CO<sub>2</sub>/kWh at baseload</li> </ul>  | <ul style="list-style-type: none"> <li>Renewable energy</li> <li>Energy efficiency</li> <li>Low carbon transport infrastructure</li> </ul> |
| <b>Process for Project Evaluation and Selection</b> | <ul style="list-style-type: none"> <li>Business units propose projects for eligible use of proceeds and Climate Action Finance Transaction</li> <li>Climate Action Finance Committee (Committee) reviews and approves the eligibility of proposed use of proceeds and Climate Action Finance Transaction</li> </ul>   |  |
| <b>Management of Proceeds</b>                       | <ul style="list-style-type: none"> <li>Proceeds of each Climate Action Finance Transaction are credited to dedicated bank accounts/deposits pending allocation to eligible projects</li> <li>Use of proceeds tracked through business units’ internal information system with individual register established for each Climate Action Finance Transaction</li> </ul>  |  |
| <b>Reporting</b>                                    | <ul style="list-style-type: none"> <li>Climate Action Finance Report issued on an annual basis disclosing the below information of Climate Action Finance Transactions not yet fully repaid:                             <ul style="list-style-type: none"> <li>Identity of issuing business unit</li> <li>Type of Climate Action Finance Transactions entered into</li> <li>Aggregate amounts of proceeds allocated</li> <li>Remaining balance of unallocated proceeds</li> <li>Estimation of beneficial impact of the use of proceeds</li> <li>Information on projects with allocation of proceeds</li> </ul> </li> <li>The Climate Action Finance Report will be reviewed by the Committee and published within CLP’s Sustainability Report</li> </ul> |  |

## Governance of the CAFF

All eligible projects of CAFF undergo a rigorous review and approval process within a robust, transparent framework and clear guidelines. CLP has established the Committee at the ultimate parent holding company level with the responsibility for governing CAFF, including approval of Climate Action Finance Transactions and determination of the eligibility of proposed use of proceeds. The Committee consists of senior management from different functions including sustainability, treasury and legal departments. CLP Group Treasury & Project Finance acts as the secretariat of the Committee to provide the necessary support.

## Second party opinion

DNV, an independent consultant and a leading provider of sustainable finance independent assessment, has provided a second party opinion on CAFF. It is DNV's opinion that there are clear environmental benefits for the investments to be funded under CAFF.



### Conclusion of DNV Second Party Opinion (2020)

DNV notes that the Use of Proceeds of the New Energy Finance Transactions are included in the indicative list of sectors included in the section 1 of Green Bond Principles and Green Loan Principles whilst the Use of Proceeds of Energy Transition Finance Transactions are not. DNV concludes that the project selection, funds-tracking and reporting procedures set out in CAFF meet the criteria established in the Protocol and are aligned with sections 2, 3 and 4 of the Green Bond Principles 2018 and Green Loan Principles 2020.

Based on the information provided by CLP and the work undertaken, it is DNV's opinion that CAFF meets the criteria established in the Protocol and there are clear environmental benefits for the investments to be funded under CAFF.



See CLP Climate Action Finance Framework



See DNV Second Party Opinion Report

## Climate Action Finance Transaction Portfolio

Since 2017, CLP has arranged in total HK\$19 billion Climate Action Finance Transactions to support investments in qualified projects which help reduce carbon emissions and increase energy efficiency. During 2024, CAPCO arranged in total HK\$4.8 billion of Energy Transition Finance Transactions to refinance the maturing Energy Transition Loan facilities. These transactions carry the energy transition label under

CAFF as the underlying projects including CCGT D1, Offshore LNG Terminal and CCGT D2 support the government's decarbonisation strategy and CLP's plan to phase out its coal-fired generation in Hong Kong by 2035.

The below table summarises all Climate Action Finance Transactions under CAFF as of 31 December 2024:

| Summary of Climate Action Bonds           |  |                   |              |                |                         |                    |                                 |                   |
|---|--|-------------------|--------------|----------------|-------------------------|--------------------|---------------------------------|-------------------|
| Issuer                                    | Project                                  | Type              | Issue Date   | Tenor (years)  | Nominal Issued Amount   | Coupon (per annum) | Listing                         | ISIN/ Common Code |
| Castle Peak Power Finance Company Limited | CCGT D1                                  | Energy Transition | 25 July 2017 | 10             | US\$500 million         | 3.25%              | The Stock Exchange of Hong Kong | XS1648263926      |
|   |  |                   | 10 May 2023  | 2              | Offshore RMB300 million | 2.98%              | Not Listed                      | HK0000924818      |
|   | Landfill Gas Renewable Energy Generation | New Energy        | 9 July 2019  | 25             | HK\$170 million         | 2.80%              | Not Listed                      | 202355293         |
|   | Offshore LNG Terminal                    | Energy Transition | 22 June 2020 | 10             | US\$350 million         | 2.20%              | The Stock Exchange of Hong Kong | XS2190958301      |
|   | CCGT D2                                  | Energy Transition | 3 March 2021 | 10             | US\$300 million         | 2.125%             | The Stock Exchange of Hong Kong | XS2307742267      |
| 8 May 2024                                |  |                   | 3            | US\$70 million | 5.197%                  | Not Listed         | HK0001015061                    |                   |
| CLP Power Hong Kong Financing Limited     | Smart Metering                           | New Energy        | 21 July 2021 | 10             | US\$100 million         | 2.25%              | The Stock Exchange of Hong Kong | XS2366836133      |

| Summary of Climate Action Loans            |                          |                      |                   |                      |                         |                |
|--|--------------------------|----------------------|-------------------|----------------------|-------------------------|----------------|
| Borrower                                   | Project                  | Type                 | Agreement Date    | Tenor (years)        | Facility Amount (HK\$M) | Reference Code |
| Castle Peak<br>Power<br>Company<br>Limited | Offshore LNG<br>Terminal | Energy<br>Transition | 14 September 2020 | 15                   | 1,795                   | ETL02          |
|  |                          |                      | 24 May 2023       | 2                    | 296                     | ETL07          |
|  |                          |                      | 2 June 2023       | 2                    | 243                     | ETL09          |
|  |                          |                      | 24 June 2024      | 1                    | 243                     | ETL16          |
|  |                          |                      | 21 June 2024      | 1                    | 300                     | ETL17          |
|  |                          |                      | 24 June 2024      | 1                    | 243                     | ETL18          |
|  | CCGT D2                  | Energy<br>Transition | 30 June 2021      | 15                   | 1,474                   | ETL04          |
|  |                          |                      | 26 February 2024  | 2                    | 950                     | ETL12          |
|  |                          |                      | 1 March 2024      | 1                    | 402                     | ETL13          |
|  |                          |                      | 29 February 2024  | 2                    | 920                     | ETL14          |
|  |                          |                      | 26 February 2024  | 1                    | 850                     | ETL15          |
|  |                          |                      | CCGT D1           | Energy<br>Transition | 19 February 2024        | 2              |

# Use of Proceeds Reporting

Bond proceeds were applied at the outset of the bond tenor to replace bank debt bridge facilities designated to specific projects and the remaining balance was credited to dedicated bank account/deposits pending settlement of future project related payments.

Bank facilities were drawn at the outset of the loan tenor to replace bank debt bridge facilities designated to specific projects and the undrawn portion would be utilised upon settlement of project-related payment.

Utilisation of bank facilities underwent review and reallocation based on new financing and refinancing endeavours to attain an optimal financing structure.

As at the reporting date of 31 December 2024, the use of the bond and loan proceeds are illustrated in the table below:

| Project                                     | Type                 | ISIN/ Common/<br>Reference Code | In HK\$M               |                 |                 |               |                                   |
|---|----------------------|---------------------------------|------------------------|-----------------|-----------------|---------------|-----------------------------------|
|   |                      |                                 | Allocated <sup>1</sup> |                 |                 | Unallocated   | Issued Amount/<br>Facility Amount |
|   |                      |                                 | Finance                | Refinance       | Total           |               |                                   |
| CCGT D1                                     | Energy<br>Transition | XS1648263926                    | 3,453<br>(88%)         | 449<br>(12%)    | 3,902<br>(100%) | -             | 3,902<br>(100%)                   |
|   |                      | HK0000924818                    | -                      | 339<br>(100%)   | 339<br>(100%)   | -             | 339<br>(100%)                     |
|   |                      | ETL11                           | -                      | 300<br>(100%)   | 300<br>(100%)   | -             | 300<br>(100%)                     |
| Landfill Gas Renewable<br>Energy Generation | New Energy           | 202355293                       | 120<br>(71%)           | 50<br>(29%)     | 170<br>(100%)   | -             | 170<br>(100%)                     |
| Offshore LNG Terminal                       | Energy<br>Transition | XS2190958301                    | 1,546<br>(57%)         | 1,167<br>(43%)  | 2,713<br>(100%) | -             | 2,713<br>(100%)                   |
|   |                      | ETL02                           | -                      | 1,514<br>(100%) | 1,514<br>(100%) | -             | 1,514<br>(100%)                   |
|   |                      | ETL07                           | 85<br>(29%)            | 124<br>(42%)    | 209<br>(71%)    | 87<br>(29%)   | 296<br>(100%)                     |
|   |                      | ETL09                           | -                      | -               | -               | 243<br>(100%) | 243<br>(100%)                     |
|   |                      | ETL16                           | -                      | 243<br>(100%)   | 243<br>(100%)   | -             | 243<br>(100%)                     |
|   |                      | ETL17                           | -                      | 300<br>(100%)   | 300<br>(100%)   | -             | 300<br>(100%)                     |
|   |                      | ETL18                           | -                      | 243<br>(100%)   | 243<br>(100%)   | -             | 243<br>(100%)                     |

<sup>1</sup> Information has been subject to independent limited assurance by PricewaterhouseCoopers (PwC).

|                |                      |                                 | In HK\$M               |                        |                         |                          |                                   |
|----------------|----------------------|---------------------------------|------------------------|------------------------|-------------------------|--------------------------|-----------------------------------|
| Project        | Type                 | ISIN/ Common/<br>Reference Code | Allocated <sup>1</sup> |                        |                         | Unallocated <sup>1</sup> | Issued Amount/<br>Facility Amount |
|                |                      |                                 | Finance                | Refinance              | Total                   |                          |                                   |
| CCGT D2        | Energy<br>Transition | XS2307742267                    | 2,011<br>(86%)         | 315<br>(14%)           | 2,326<br>(100%)         | -                        | 2,326<br>(100%)                   |
|                |                      | HK0001015061                    | -                      | 548<br>(100%)          | 548<br>(100%)           | -                        | 548<br>(100%)                     |
|                |                      | ETL04                           | -                      | 1,413<br>(100%)        | 1,413<br>(100%)         | -                        | 1,413<br>(100%)                   |
|                |                      | ETL12                           | 950<br>(100%)          | -                      | 950<br>(100%)           | -                        | 950<br>(100%)                     |
|                |                      | ETL13                           | -                      | -                      | -                       | 402<br>(100%)            | 402<br>(100%)                     |
|                |                      | ETL14                           | 439<br>(48%)           | 481<br>(52%)           | 920<br>(100%)           | -                        | 920<br>(100%)                     |
|                |                      | ETL15                           | 304<br>(36%)           | -                      | 304<br>(36%)            | 546<br>(64%)             | 850<br>(100%)                     |
| Smart Metering | New Energy           | XS2366836133                    | -                      | 777<br>(100%)          | 777<br>(100%)           | -                        | 777<br>(100%)                     |
| <b>Total</b>   |                      |                                 | <b>8,908<br/>(48%)</b> | <b>8,263<br/>(45%)</b> | <b>17,171<br/>(93%)</b> | <b>1,278<br/>(7%)</b>    | <b>18,449<br/>(100%)</b>          |

<sup>1</sup> Information has been subject to independent limited assurance by PwC.



## Reporting Criteria

Following section 6 of CAFF – “Reporting on Use of Proceeds”, for each CLP Climate Action Finance Transaction, the following is disclosed:

- identity of the CLP Group Business Unit that has entered into a CLP Climate Action Finance Transaction;
- type of CLP Climate Action Finance Transaction entered into (i.e. Energy Transition Finance Transaction or New Energy Finance Transaction);
- aggregate amounts of proceeds allocated;
- estimation of beneficial impact of the use of proceeds;
- the remaining balance of unallocated proceeds at the reporting period end;
- a Climate Action Finance Transaction is added to this report when the transaction was entered into during the reporting period; and
- a Climate Action Finance Transaction is removed from this report when the bond or loan has been fully repaid.

## Assurance of Climate Action Finance Report

CLP has engaged PwC as an independent assurance provider to provide assurance that selected information in this report has been prepared in line with the CLP Climate Action Finance Framework.



See PwC Assurance Report

# Project Updates

## CCGT D1 Generation Unit



### CAPCO's Combined-Cycle Gas Turbine (CCGT) Generation Unit (D1)

|                                 |   |
|---------------------------------|---|
| Location                        | Black Point Power Station (BPPS), Hong Kong   |
| Plant Performance Information   | Adopting the latest advanced H-Class CCGT technology, the CCGT D1 unit has an installed capacity of 550MW and is more efficient than the existing eight older BPPS CCGT units adopting F-Class CCGT technology      |
| Beneficial Environmental Impact | <ul style="list-style-type: none"> <li>CO<sub>2</sub> emissions intensity of 340g CO<sub>2</sub>/kWh in 2024<sup>1,2,3</sup></li> <li>Estimated CO<sub>2</sub> avoidance of 433 kT in 2024<sup>1,4</sup></li> </ul> |

1 The reporting of carbon emissions intensity and estimation of carbon emissions avoidance was for the period from 1st January 2024 to 31st December 2024.

2 Information has been subject to independent limited assurance by PwC.

3 CO<sub>2</sub> emissions intensity is the actual CO<sub>2</sub> emissions from D1 divided by the electricity sent out from D1.

4 Methodology and assumptions used in estimating CO<sub>2</sub> emissions avoidance:

The CO<sub>2</sub> avoidance is the difference in CO<sub>2</sub> emissions by Black Point Power Station (BPPS) and Castle Peak Power Station (CPPS) with D1 and without D1. For the scenario of "with D1" in CLP's electricity generation system, the CO<sub>2</sub> emissions by BPPS and CPPS were based on the actual figures recorded, using gross generation values. For the scenario of "without D1", the CO<sub>2</sub> emissions by BPPS and CPPS were estimated on a monthly basis based on their respective estimated hourly electricity generation multiplied by their respective actual carbon emissions intensity (g CO<sub>2</sub>/kWh) in that month. The electricity generation by BPPS and CPPS was estimated hourly based on the actual electricity demand and plant dispatch requirements to meet the customers' load demand environmentally, reliably and economically in the hour.

### Project Status

The project was completed and commenced operation since October 2020.

## Landfill Gas Energy Generation



### CAPCO's Landfill Gas Renewable Energy Generation at West New Territories (WENT) Landfill (WE Station)

|                                 |   |
|---------------------------------|---|
| Location                        | WENT Landfill, Tuen Mun, Hong Kong  |
| Installed Capacity              | 10MW  |
| Plant Performance Information   | Installation of 5x2MW landfill gas (LFG) generator sets at WE Station to utilise the excess LFG of around 4,500m <sup>3</sup> /hour for electricity generation in support of local renewable energy (RE) development. |
| Beneficial Environmental Impact | <ul style="list-style-type: none"> <li>RE generation of 42 GWh in 2024<sup>1,2,3</sup></li> <li>Estimated CO<sub>2</sub> avoidance achieved in 2024: 21 kT<sup>1,2,4</sup></li> </ul>                                 |

1 The reporting of RE generation and the estimation of carbon emissions avoidance was for the period from 1st January 2024 to 31st December 2024.  
 2 Information has been subject to independent limited assurance by PwC.  
 3 The annual renewable energy generated was based on the actual electricity generation from LFG generation units as recorded by CLP.  
 4 Methodology and assumptions used in estimating CO<sub>2</sub> emissions avoidance:

Since the RE generation from WE Station had displaced the electricity generation that would have been required from the existing fossil fuel plants at CPPS and BPPS if the LFG generation units at WE Station were not commissioned, the avoidance of the associated CO<sub>2</sub> emissions was estimated on a monthly basis from the displaced electricity generation multiplied by the average actual carbon emissions intensity of BPPS and CPPS in that month.

### Project Status

The project was completed and commenced operation since March 2020.

## Offshore LNG Terminal



### CAPCO's Hong Kong Offshore LNG Terminal (HKOLNGT)

|                                 |   |
|---------------------------------|---|
| Location                        | Offshore waters to the east of the Soko Islands, Hong Kong  |
| Plant Performance Information   | <p>The terminal is built to provide reliable and secure supply of natural gas at competitive prices for CAPCO's gas-fired generation units, and to support Government's energy policies for reducing carbon intensity. Major facilities of the project include:</p> <ul style="list-style-type: none"> <li>• A double berth jetty with LNG unloading equipment</li> <li>• A Floating Storage and Regasification Unit (FSRU) with LNG storage tanks and regasification equipment</li> <li>• A subsea pipeline connecting the jetty and a gas receiving station at Black Point Power Station</li> </ul> |
| Beneficial Environmental Impact | Estimated CO <sub>2</sub> avoidance of 567 kT in 2024 <sup>1,2,3</sup>  |

1 The reporting of carbon emissions intensity and estimation of carbon emissions avoidance was for the period from 1st January 2024 to 31st December 2024.  
 2 Information has been subject to independent limited assurance by PwC.  
 3 Methodology and assumptions used in estimating CO<sub>2</sub> emissions avoidance:

The CO<sub>2</sub> avoidance is the difference in CO<sub>2</sub> emissions by Black Point Power Station (BPPS) and Castle Peak Power Station (CPPS) with HKOLNGT and without HKOLNGT. For the scenario of "with HKOLNGT", the electricity generated by BPPS and CPPS units were the actual figures recorded including gas supply from HKOLNGT to meet the electricity demand. For the scenario of "without HKOLNGT", the electricity generated by BPPS units were constrained by the maximum contract quantities of other gas sources available. CPPS units were required to generate to make up the balance of energy demand. The CO<sub>2</sub> emissions is estimated based on BPPS and CPPS's respective replacement generation multiplied by their respective actual carbon emissions intensity (g CO<sub>2</sub>/kWh) in that month, with consideration of a host of other factors such as load demand and operating regime of generating units.

### Project Status

The terminal went into service and received its first long-term contracted LNG cargo in July 2023.



## CCGT D2 Generation Unit



### CAPCO's Second New Combined-Cycle Gas Turbine (CCGT) Generation Unit (D2)

|                                 |  |
|---------------------------------|--|
| Location                        | Black Point Power Station (BPPS), Hong Kong  |
| Plant Performance Information   | Adopting the latest advanced H-Class CCGT technology with a modified and enhanced version of D1 unit, the second new CCGT unit (D2) has an installed capacity of around 600MW and is more efficient than the existing eight older BPPS CCGT units adopting F-Class CCGT technology |
| Beneficial Environmental Impact | <ul style="list-style-type: none"> <li>CO<sub>2</sub> emissions intensity of 340g CO<sub>2</sub>/kWh in 2024<sup>23</sup></li> <li>Estimated CO<sub>2</sub> avoidance of 618 kT in 2024<sup>24</sup></li> </ul>  |

1 The reporting of carbon emissions intensity and estimation of carbon emissions avoidance was for the period from 19th April 2024 to 31st December 2024.  
 2 Information has been subject to independent limited assurance by PwC.  
 3 CO<sub>2</sub> emissions intensity is the actual CO<sub>2</sub> emissions from D2 divided by the electricity sent out from D2.  
 4 Methodology and assumptions used in estimating CO<sub>2</sub> emissions avoidance:

The CO<sub>2</sub> avoidance is the difference in CO<sub>2</sub> emissions by Black Point Power Station (BPPS) and Castle Peak Power Station (CPPS) with D2 and without D2. For the scenario of "with D2" in CLP's electricity generation system, the CO<sub>2</sub> emissions by BPPS and CPPS were based on the actual figures recorded, using gross generation values. For the scenario of "without D2", the CO<sub>2</sub> emissions by BPPS and CPPS were estimated on a monthly basis based on their respective estimated hourly electricity generation multiplied by their respective actual carbon emissions intensity (g CO<sub>2</sub>/kWh) in that month. The electricity generation by BPPS and CPPS was estimated hourly based on the actual electricity demand and plant dispatch requirements to meet the customers' load demand environmentally, reliably and economically in the hour.

### Project Status

The project was completed and commenced operation in April 2024.

## Smart Meters



### CLP Power's Smart Meter Project

|                                 |  |
|---------------------------------|--|
| Location                        | Hong Kong  |
| Project Performance Information | The project aligns with the strategy of the Hong Kong Government and CLP to promote energy efficiency through demand-side management solutions, and to support Hong Kong's transformation into a smart city. The project scope mainly involves replacement of the electro-mechanical meters used by residential and Small & Medium Enterprise (SME) customers with smart meters. With the enhancement of the existing smart metering platform, it is expected to cover installation of over 2.8 million smart meters. The provision of timely and meaningful consumption information facilitated by smart meters via web portals or mobile devices helps arouse customers' awareness and equip them with the right tools to better manage energy consumption. CLP Power's customers with smart meters can benefit from energy conservation during times of peak power demand in the hot summer months through the Summer Saver Rebate programme. Customers participating in the scheme receive notifications to alert them to save energy during specified times, and will be able to earn reward points by achieving reduction targets for those periods. |
| Beneficial Environmental Impact | <ul style="list-style-type: none"> <li>• Estimated annual energy savings of 35,069 MWh in 2024<sup>1</sup></li> <li>• Estimated CO<sub>2</sub> avoidance achieved in 2024: 13 kT<sup>2</sup></li> </ul>  |

1 The reporting of estimated annual energy savings and the estimation of carbon emissions avoidance was for the period of 1st January 2024 to 31st December 2024.  
2 Methodology and assumptions used in estimating annual energy savings and CO<sub>2</sub> emissions avoidance:

Along with the rollout of smart meters, CLP has introduced the Energy-Saving Missions by inviting residential customers with smart meters to participate in reducing energy consumption for a reward to their energy saving effort, which is envisioned to eventually engage all residential customers connected with smart meters. This programme associated with smart meters is one of the key drivers in changing customers' energy consumption behaviour. For estimation of energy savings in 2024, CLP targeted a focused group of close to 1,056,000 residential customers with smart meters who have participated in the Energy-Saving Missions in 2024 and adopted a saving factor of 0.8% in energy consumption, which is based on a study performed on smart meters customer behaviour. This saving factor is then applied towards the average annual energy consumption of the residential customers (based on sales per residential customer in Hong Kong of 4,117 kWh) to derive the estimated annual energy savings. Avoidance of CO<sub>2</sub> emissions is then calculated by multiplying the energy savings with the actual emissions intensity of CLP Power in 2024 (0.37 kg CO<sub>2</sub>/kWh).

### Progress in 2024

- As of December 2024, over 2.68 million smart meters were connected in Hong Kong, covering different districts in CLP Power's supply area, accounting for about 93% of its customers.
- The rollout is scheduled based on factors including meter age, cost efficient replacement works and supply reliability and is targeted to be completed by 2025.