# Financials



We aim to provide our stakeholders with a comprehensive, clear and concise view of our financial position and performance.

# Contents

# Approaching Our Financial Statements

The objective of financial statements is to communicate the Group's financial information to our stakeholders, especially shareholders, investors and lenders, for making economic decisions. To achieve this objective, it is always our aim to present the financial information of CLP as clearly and concisely as possible. This overview helps you understand how information is organised and presented in our financial statements. Hopefully, this will bring you a more insightful reading experience.

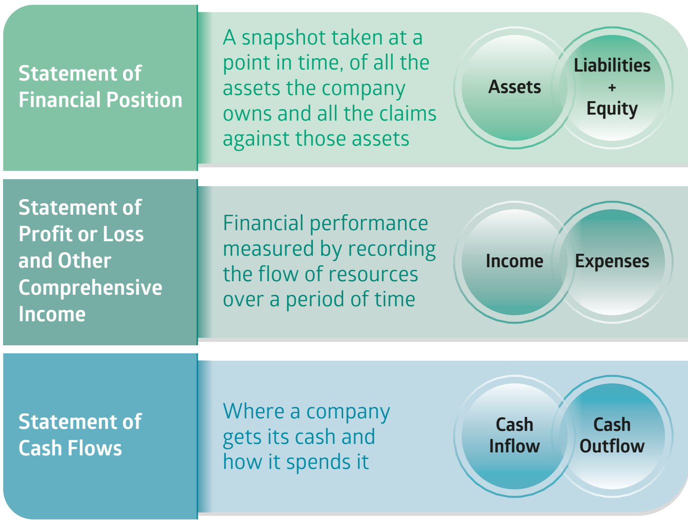
## 1 Accounting Mini-series

We believe that understanding financial statements is a right, not a privilege. To help those unfamiliar with accounting terms read our financial statements, we have developed an Accounting Mini-series to **explain topical and difficult accounting concepts in a way that is easier to understand**. A number of topics have been discussed since 2007, the content of which can be found in our website.

Read our accounting mini-series

## 2 Essential Financial Statements

Financial statements start with summaries of the financial position, performance and changes in resources of the Group. **These summaries are presented in three essential financial statements with different objectives as shown in the diagram**. The relationships between these statements and the interactions with the Group's stakeholders are set out in our website.




## 3 Significant Accounting Policies

Financial statements are prepared in accordance with Hong Kong Financial Reporting Standards (HKFRS). You do not need to be familiar with all the requirements of HKFRS because **the accounting policies which are significant and relevant to the Group are disclosed in the financial statements**. The disclosures include specific principles and procedures selected and applied by management in preparing the financial statements, as well as the methods, measurement basis and procedures to account for the transactions.

Look for green gradient boxes

## 4 Critical Accounting Estimates and Judgements

Management makes judgements and estimates in preparing the financial statements, some of which will have a significant effect on the reported results and financial position. HKAS 1 specifies that an entity shall disclose (1) the key judgements that have the most significant effect on amounts recognised; and (2) the assumptions and other sources of estimation uncertainty at period end that have a significant risk of material adjustment to the carrying amounts of assets or liabilities within the next financial year. You should pay attention to **our disclosures under "critical accounting estimates and judgements" which help you assess CLP's financial position and performance and understand the sensitivities to changes in assumptions**.

Look for green boxes

## 5 Tips & Hints

Tips & Hints are our initiatives to **facilitate you to understand the content of a particular disclosure or complicated accounting concepts or terms**.

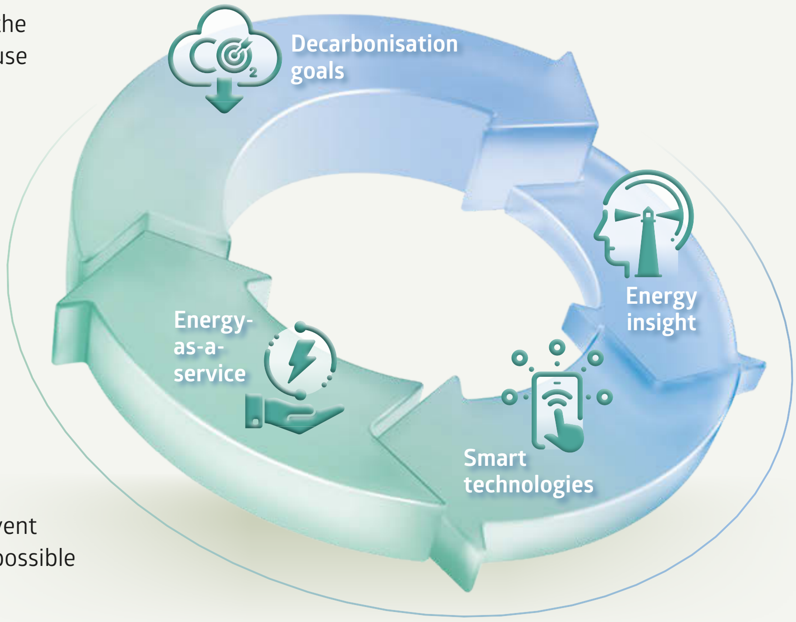
Look for magnifier

# Energy-as-a-Service and its Accounting Implications

## Overview

CLP's Climate Vision 2050 sets out the blueprint of the Group's transition to net-zero greenhouse gas emissions leading up to mid-century.

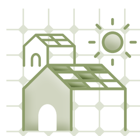
Decarbonisation is CLP's main priorities for our transition to a Utility of the Future. As the pace of change in the energy industry continues to accelerate, we recognise that the once linear and traditional electricity sector value chain has morphed into an interconnected and multidirectional mesh of opportunities with which we need to evolve. Energy efficiency programmes that use smart technologies provide a significant opportunity for achieving decarbonisation goals. However, the market barriers—high upfront technology costs, capital constraints for consumers, information barriers, and uncertainty about a technology's performance prevent widespread adoption of low-carbon technologies. One possible solution is the energy-as-a-service business model.




### Energy-as-a-Service

Energy-as-a-Service (EaaS) business model is a one-solution model which combines hardware, software and services. The model combines demand management and energy efficiency services, facilitates the adoption of renewable energy and also optimises the balance between demand and supply.

EaaS business model usually takes the form of a subscription for electrical devices owned by a service company or management of energy usage to deliver the desired energy service. The model provides service providers with steady revenue streams while benefiting customers by enjoying the simplification of an increasingly multifaceted service without purchasing it outright or directly managing its use. Customers pay for an energy service without having to make any upfront capital investment, they also benefit from avoiding direct electricity payments, expensive upgrades for electrical equipment or software, and device management. It helps promote advanced technology and the potential for expanding the deployment of low-carbon technologies. Two typical EaaS models are introduced on the right, which are also part of the new business models CLP is adopting as we transition to a Utility of the Future.



**Solar-as-a-Service (SaaS)** is the service model for residential and community solar systems. SaaS has been used to overcome barriers to the use of low-carbon technologies while providing two advantages that many homeowners pursue—electricity cost savings and environmental benefits—without requiring them to purchase or maintain the system. A solar services company installs and maintains a solar system on a homeowner's roof, at no upfront cost to the homeowner, supplying the household with electricity for the duration of the contract. The solar services provider retains ownership of the system and charges the customer for the service. The solar services provider receives monthly revenue and may also benefit from policy incentives and renewable energy credits for the system's electricity generation.

**Cooling-as-a-Service (CaaS)** is an innovative business model that enables customers to benefit from high end and energy-efficient cooling technologies without the need of an upfront investment. CaaS involves customers paying for the cooling they receive, rather than the physical product or infrastructure that delivers the cooling. The technology provider installs and maintains the cooling equipment, recovering the costs through periodic payments made by the customer.

## Accounting challenges

There are different types of EaaS models, but they all have a common feature - the service provider is responsible for the hardware, software as well as the operation and management service. This one-solution service contract brings out the question of what accounting model better reflects the hardware and software invested, and the services delivered by the service providers.

### A lease arrangement?

The most fundamental accounting challenge on evaluating a EaaS model is whether the service contract contains a lease arrangement. One of the characteristics of EaaS model is to benefit the customers by not requiring them to make an upfront investment on the infrastructure but enabling them to enjoy the output over the term of the contract. This means the service provider provides the underlying assets while delivering the service over the contract term. As the customers enjoy substantially all of the economic benefits from the use of the assets, this comes to the question of whether a EaaS contract contains a lease arrangement.

The accounting standard defines a lease as a contract that conveys the right to use an asset for a period of time in exchange for consideration. In order for such a contract to exist, the customer of the asset needs to have **the right to obtain substantially all of the economic benefits from the use of the asset** and **the right to direct the use of the asset.** A customer has the right to direct the use of the asset if the customer has the following decision rights to direct **'how and for what purpose'** the asset will be used:

**Rights to decide**

| The type of output to be produced by the asset | When the output is produced | Where the output is produced | Whether the output is produced and the quantity thereof |
|---|---|---|---|

In cases that the 'how and for what purpose' decisions are predetermined, the customer controls the asset if the customer has the right to operate the asset throughout the period of use or if the customer designs the asset in a way that predetermines how and for what purpose the asset will be used throughout the period of use.

The objective of a EaaS contract is to achieve an energy saving solution, therefore, the service provider usually designs, builds and operates the asset under the desired purpose and outcome. The contract usually specifies the technical design, construction, and installation of the asset. The service provider is also responsible for the operation and maintenance of the asset for the desired output. Under this setting, the contract pre-determines how and for what purpose the asset will be used and customer neither operates nor designs the asset. **EaaS contracts therefore usually do not contain a lease arrangement.**

### A bundled service – a single performance obligation?

Once it is identified that the EaaS contract does not contain a lease arrangement, the next accounting challenge is on revenue recognition. EaaS contracts usually include the provision of infrastructure and services to customers. In the context of revenue recognition, the accounting standard requires the service provider to identify the underlying performance obligations within a contract. This determination shall be based on the overall substance of the arrangement, rather than the legal form.

When there are several components in a contract, whether the components are bundled together into one performance obligation or not is particularly important, as the timing of revenue recognition for each performance obligation is considered separately. In identifying the performance obligations, it is key to look at the relationship between contract components to determine whether they are **'distinct in the context of the contract'**. A number of factors to consider, including:

- **Can the customer benefit from the good or service either on its own or together with other resources that are readily available to them?**
- **Are these goods or services regularly sold separately?**
- **Is the supplier providing a significant service to integrate two or more of the goods or services promised?**
- **Are the promised goods or services highly dependent on (or highly interrelated with) one another?**

If individual components are not considered distinct, they are bundled together in order to form a single distinct performance obligation. In a EaaS contract, the service provider is responsible for the overall design, build and management of the project. The identified goods and services to be provided are usually tailored to the customers' energy needs, which include engineering, site preparation, procurement, construction, installation, as well as continuous energy management and operation such as system monitoring, remote control, and load optimisation.

The objective of the EaaS model is to promote and optimise energy saving. The service provider is providing a significant integration service combining all of the infrastructure and services in the contract into a one solution service that it has contracted with the customer. The energy saving objective can only be ascertained if the overall design and operation are tailored and integrated. Therefore, the individual activities under a EaaS contract are usually considered as not distinct and not separate performance obligations. **The bundle of goods and services contracted with the customer in a EaaS contract is usually considered as a single performance obligation.**

## Performance obligation satisfied over time

An entity recognises revenue when or as it satisfies a performance obligation by transferring a good or service to a customer, either at a point in time (when) or over time (as). A good or service is 'transferred' when or as the customer obtains control of it. **Applying the transfer of control concept to a EaaS model, the service provider recognises revenue over time simultaneous to when the customer consumes and receives the energy service.**

> **There are no fixed rules to account for a EaaS contract. Knowing the purpose of design and the commercial objective of the contract is key to identify the most appropriate accounting treatment.**

## EaaS in CLP

One key approach to strive for our Climate Vision 2050 is to assist customers in using energy more efficiently and to support renewable energy development. CLP continues to harness the latest technologies to offer businesses and consumers sustainable energy solutions, helping them become more energy efficient and reduce their carbon footprints. Through its increasing technological capabilities, the Group has stepped up efforts to develop EaaS business models and deploy customer-facing energy solutions.

<table>
<tr><th>Type</th><th>Project details</th><th>Accounting models</th></tr>
<tr><td rowspan="2">Solar-as-a-Service</td><td>Solar Energy System at Wellcome Fresh Food Centre<br>CLP co-developed a solar panel system with Dairy Farm International Holdings on the rooftop of the Wellcome Fresh Food Centre in Hong Kong. CLP offers one-stop solar services from system design to construction, and operations and maintenance. This is the largest solar energy system in Hong Kong's retail sector under CLP Power's Feed-in Tariff scheme.</td><td rowspan="4">=<br><br>Balance Sheet<br>Fixed assets model<br><br>+<br><br>Profit or loss<br>Recognises revenue over time as a bundled service</td></tr>
<tr><td>Solar Energy Project for Link Asset Management Limited<br>CLP is developing solar energy systems at 12 properties of Link Asset Management Limited in Hong Kong, with combined capacity of about 800kW. The contract will provide renewable energy under a SaaS model, whereby the customer can enjoy the energy it uses without having to make upfront capital investments.</td></tr>
<tr><td rowspan="2">Cooling-as-a-Service</td><td>Centralised Cooling Project at Po Park Shopping Plaza<br>CLP helped retrofitted and upgraded the centralised cooling system at Po Park Shopping Plaza in Guangzhou. Alongside the modification of the cooling system, equipment and design, CLP has also taken up the operation of the cooling system to provide cooling services to the shopping center until 2036. It was CLP's first centralised cooling project in the Greater Bay Area.</td></tr>
<tr><td>Cooling Project at Nina Tower<br>CLP has entered into a 20-year contract with Chinachem Group for the cooling system at the multi-purpose Nina Tower complex in Hong Kong. Under a Build-Own-Operate-Transfer model, CLP will carry out chiller plant replacement works and provide operation and maintenance services for Nina Tower. It will be the first zero-carbon chiller system in Hong Kong.</td></tr>
</table>

# Independent Auditor's Report

## To the Members of CLP Holdings Limited

(incorporated in Hong Kong with limited liability)

## Opinion

*What we have audited*

The consolidated financial statements of CLP Holdings Limited (the "Company") and its subsidiaries (the "Group") ("the Group Financial Statements"), which are set out on pages 232 to 304, comprise:

- the Consolidated Statement of Financial Position as at 31 December 2022;
- the Consolidated Statement of Profit or Loss for the year then ended;
- the Consolidated Statement of Profit or Loss and Other Comprehensive Income for the year then ended;
- the Consolidated Statement of Changes in Equity for the year then ended;
- the Consolidated Statement of Cash Flows for the year then ended; and
- the Significant Accounting Policies, Notes to the Financial Statements and Financial Risk Management.

*Our opinion*

In our opinion, the Group Financial Statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2022, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with Hong Kong Financial Reporting Standards ("HKFRSs") issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA") and have been properly prepared in compliance with the Hong Kong Companies Ordinance.

## Basis for Opinion

We conducted our audit in accordance with Hong Kong Standards on Auditing ("HKSAs") issued by the HKICPA. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Group Financial Statements section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

*Independence*

We are independent of the Group in accordance with the HKICPA's Code of Ethics for Professional Accountants ("the Code"), and we have fulfilled our other ethical responsibilities in accordance with the Code.

## Key Audit Matters

Key Audit Matters are those matters that, in our professional judgement, were of most significance in our audit of the Group Financial Statements of the current period. These matters were addressed in the context of our audit of the Group Financial Statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matters identified in our audit are summarised as follows:

- Unbilled retail revenue;
- The carrying values of EnergyAustralia's energy retail business and generation assets;
- Fixed asset accounting and the calculation of the Scheme of Control permitted return;
- Recoverability of trade receivables; and
- Asset retirement obligations (AROs).

| *Key Audit Matter* | *How our audit addressed the Key Audit Matter* |
|---|---|
| **Unbilled retail revenue**<br><br>Refer to note 2 to the Group Financial Statements<br><br>Retail electricity and gas revenues are recognised when electricity and gas are supplied to and consumed by the customers. Revenues are measured on the basis of periodic cycle meter readings and include an estimated accrual for the value of electricity and gas consumed from the meter reading date to the end of the reporting period. Unbilled retail revenue of the Group totalled HK$3,470 million as at 31 December 2022.<br><br>CLP Power Hong Kong Limited (CLP Power) calculates unbilled revenue using estimates including: consumption quantity based on the electricity sent-out adjusted by loss factors, the pattern of residential and non-residential consumption, weather and certain other factors.<br><br>EnergyAustralia Holdings Limited (EnergyAustralia) calculates unbilled retail revenue based on the electricity purchased and the applicable tariffs for the mass market customer segment, as well as the actual meter readings and the contracted rates for commercial and industrial customers. The amount is adjusted for physical energy loss and other measurable factors.<br><br>This is a Key Audit Matter because the calculation of unbilled retail revenue involves a high degree of estimation. | Our procedures in relation to unbilled revenue included:<br><br>> Understanding of and testing the key controls in place to determine the estimate of unbilled revenue for both CLP Power and EnergyAustralia;<br>> Testing the volume of electricity sent-out by CLP Power to supporting information;<br>> Assessing the reasonableness of estimates by comparing them against historical trends;<br>> Testing the volume of electricity purchased by EnergyAustralia from the wholesale electricity market to the underlying Australian Energy Market Operator invoices on a sample basis and reconciling the total purchase volumes to revenue volumes; and<br>> Understanding the estimates made relating to loss factors and tariffs used in determining the level of unbilled revenue for both CLP Power and EnergyAustralia and assessing their reasonableness by comparing them against historical trends and against the weighted average tariff for prices.<br><br>Based on the work performed, we found that the Group's unbilled revenue amount is supported by the available evidence. |

| *Key Audit Matter* | *How our audit addressed the Key Audit Matter* |
| --- | --- |
| **The carrying values of EnergyAustralia's energy retail business and generation assets**<br><br>Refer to notes 10 and 13 to the Group Financial Statements | |
| *The carrying value of EnergyAustralia's energy retail business*<br><br>EnergyAustralia has goodwill of HK$8,271 million relating to the energy retail business in Australia.<br><br>The recoverable amount of EnergyAustralia's energy retail business is determined based on a value in use calculation. Cash flow projections are derived from EnergyAustralia's approved business plan which includes cost saving initiatives and an appropriate reflection of future cash flows from potential legislative, regulatory and structural changes in the industry.<br><br>The key assumptions used in the value in use calculation include retail tariffs, electricity and gas volumes, network distribution costs, the customer account growth rate and the discount rate.<br><br>The results of the value in use calculation of EnergyAustralia's energy retail business indicates that minimal headroom remains. Any adverse shift in a key assumption is likely to result in a potential impairment.<br><br>This is a Key Audit Matter, because inputs to the value in use model require significant management judgements and a high degree of estimation. Changes in these key assumptions would have a direct impact on the valuation. | Our procedures in relation to management's assessment of the carrying value of EnergyAustralia's energy retail business included:<br><br>> Assessing the appropriateness of the valuation methodologies used in the assessment of the recoverable amount;<br>> Reconciling input data to supporting evidence, such as the approved business plan and where possible to publicly available market data;<br>> Challenging the reasonableness of the key assumptions based on our knowledge of the business and industry;<br>> Assessing the discount rate used in the assessment which has included the involvement of in-house valuation experts where appropriate;<br>> Verifying the integrity of formulae and mathematical accuracy of management's valuation model;<br>> Assessing the potential impact of reasonably possible changes in key assumptions including possible future regulatory policy changes with respect to retail sales of electricity in Australia; and<br>> Reviewing the appropriateness of the Group's disclosures with respect to the impairment assessment.<br><br>Based on the work performed we found that the carrying value of EnergyAustralia's energy retail business is supported by the available evidence and the key assumptions have been appropriately disclosed in note 13 to the Group Financial Statements. |

| *Key Audit Matter* | *How our audit addressed the Key Audit Matter* |
|---|---|
| **The carrying values of EnergyAustralia's energy retail business and generation assets (continued)** | |
| *The carrying value of EnergyAustralia's generation assets*<br><br>The Group has substantial investments in fixed assets of HK$12.9 billion relating to EnergyAustralia's generation business. These are tested for impairment whenever events or changes in circumstances indicate that the carrying value may not be recoverable.<br><br>The carrying value of EnergyAustralia's generation assets are supported by scenarios which are produced to reflect a range of economic conditions that may exist over the life of the assets. The key assumptions included within the scenarios include an estimation of forward electricity pool prices (the forward curve), generation volumes, retail volumes, gas prices, long term assumptions around market movements, potential regulatory changes and the useful lives of the EnergyAustralia's generation assets.<br><br>Management has performed an assessment and confirmed that no impairment was required for EnergyAustralia's generation assets at 31 December 2022.<br><br>This is a Key Audit Matter because critical judgements exist in estimating forward electricity pool prices, volumes, gas prices and long term market assumptions. | Our procedures in relation to management's assessment of the carrying value of EnergyAustralia's generation assets included:<br><br>> Discussing EnergyAustralia's generation assets scenarios with management and understanding the key assumptions included within them;<br>> Assessing the appropriateness of the assumptions used in the scenarios including the consideration of movements in the forward electricity pool prices and the gas prices, and the movements in the market inputs to available observable market data, where possible;<br>> Comparing the historical forecasted generation and retail volumes with the actual volumes;<br>> Assessing the useful lives of EnergyAustralia's assets to the committed asset closure of the assets;<br>> Reconciling the generation asset scenarios to the approved business plan;<br>> Assessing the potential impact of possible future regulatory policy changes in Australia; and<br>> Reviewing the appropriateness of the Group's disclosures on generation assets.<br><br>Based on the work performed, we found that management's scenarios were supported by the available evidence. |

| *Key Audit Matter* | *How our audit addressed the Key Audit Matter* |
|---|---|
| **Fixed asset accounting and the calculation of the Scheme of Control permitted return**<br><br>Refer to notes 10 and 11 to the Group Financial Statements<br><br>Consolidated fixed assets and right-of-use assets were HK$154.8 billion at 31 December 2022. This includes fixed assets and leasehold land relating to CLP Power and Castle Peak Power Company Limited (CAPCO) (together the SoC Companies) (SoC fixed assets) which are the base used in the calculation of the permitted return under the Scheme of Control (SoC) Agreement.<br><br>The annual permitted return is 8% of the SoC Companies' average net fixed assets. If the gross tariff revenue in a period is less than or exceeds the total of the SoC operating costs, the permitted return and the taxation charges, such deficiency shall be deducted from, or such excess shall be added to, the Tariff Stabilisation Fund (TSF). In any period, the amount of deduction from or addition to the TSF is recognised as a revenue adjustment to the extent that the return and charges under the SoC are recognised in profit or loss.<br><br>This is a Key Audit Matter because of the significance of the balance and its importance to the SoC Companies. The accuracy of SoC fixed asset additions, disposals and depreciation charges is important to ensure the SoC fixed asset balance is appropriate and the permitted return is calculated correctly. | Our procedures in relation to the Group's SoC fixed assets and the calculation of the SoC permitted return included:<br><br>> Assessing the control environment and testing controls over SoC fixed assets additions, disposals and depreciation charges;<br>> Testing the SoC fixed asset additions in the year to supporting evidence on a sample basis and assessing whether the items have been appropriately capitalised;<br>> Assessing the appropriateness of SoC capital accruals made by management for large projects by agreeing assumptions to audit evidence from the vendors;<br>> Assessing the estimated useful lives of the SoC fixed assets for compliance with the SoC;<br>> Testing depreciation charges by performing depreciation reasonableness tests;<br>> Obtaining management's reconciliation of SoC fixed assets from the opening balance at the beginning of the year to the closing balance at the end of the year and reconciling this to the general ledger and supporting records;<br>> Recalculating the SoC permitted return for the year; and<br>> Recalculating the SoC adjustment to revenue for the year.<br><br>Based on the work performed, we found that the Group's SoC fixed asset accounting and the SoC permitted return calculation are supported by the available evidence. |

| *Key Audit Matter* | *How our audit addressed the Key Audit Matter* |
| --- | --- |
| **Recoverability of trade receivables**<br><br>Refer to note 19 to the Group Financial Statements<br><br>CLP Power and EnergyAustralia have significant retail businesses with many individual customers. The offtakers for the Group's other generation businesses are mainly a small number of state grid operators. The Group measures the loss allowance for its trade receivables at an amount equal to the lifetime expected credit losses.<br><br>Expected credit losses in CLP Power are close to zero as the trade receivables are mostly secured by cash deposits or bank guarantees from customers and have no recent history of default.<br><br>EnergyAustralia has trade receivables of HK$6,036 million at 31 December 2022 against which provisions for expected credit losses of HK$792 million are held. Management estimated the level of expected losses, by assessing future cash flows for each group of trade receivables including a probability weighted amount determined by evaluating a range of possible outcomes based on twelve month rolling historical credit loss experience by customer segment, geographical region, tenure and type of customer and applying that weighting to the receivables held at year end. The impact of economic factors, both current and future, is considered in assessing the likelihood of recovery from customers.<br><br>As at 31 December 2022, the Group had total receivables of HK$2,111 million relating to unpaid Renewable National Subsidies in its Mainland China business. The expected credit loss is close to zero as continuous settlements have been noted with no history of default and the subsidy is funded by the Renewable Energy Development Fund set up and administered by the Ministry of Finance.<br><br>This is a Key Audit Matter because of the magnitude of the trade receivables balance and the significant judgement applied in assessing the allowance for expected credit losses. | Our procedures in relation to trade receivables included:<br><br>> Testing controls over the billing and collection cycles in CLP Power and EnergyAustralia;<br>> Testing the system calculated trade receivables ageing analysis used to assess the recoverability of receivables in CLP Power and EnergyAustralia;<br>> Assessing the appropriateness of the credit loss provisioning methodologies used by the Group;<br>> Assessing the estimates used to determine the expected credit losses by considering cash collection performance against historical trends and assessing the reasonableness of forward-looking factors included in the expected credit loss model;<br>> Reviewing the allocation of deposits to customer balances as a part of CLP Power's expected credit loss assessment;<br>> Reviewing the accuracy of management's judgements by comparing historical provisions against actual write-offs;<br>> Reviewing minutes of the boards of directors' meetings relating to the recoverability of trade receivables; and<br>> Discussion with management to understand the nature and the judgement involved in their determination that the expected credit loss on unpaid Renewable National Subsidies is close to zero, assessing the regulatory eligibility for the Group's projects and considering subsidies collected to-date.<br><br>Based on the work performed, we found that management's assessments of the recoverability of trade receivables are supported by the available evidence. |

| *Key Audit Matter* | *How our audit addressed the Key Audit Matter* |
|---|---|
| **Asset retirement obligations (AROs)**<br><br>Refer to note 26 to the Group Financial Statements<br><br>Provisions are held for estimated remediation costs, discounted to present value, where the Group has a legal or constructive obligation for remediation and the likelihood of an economic outflow is probable. Estimating the amount and timing of the obligation requires significant judgement. Management has assessed the Group's obligations for each asset based on the local regulatory environment and expected closure dates.<br><br>Management's key ARO judgements are as follows:<br><br>The Group's ARO provision of HK$2,982 million mainly relates to land remediation and decommissioning of generation assets in Australia. The provisions are based on estimates by external and internal experts that are discounted using internally determined end of plant lives. Other significant judgements also include the timing of the asset removal and costs to remove infrastructure, remediate soil and groundwater, water usage and technological developments.<br><br>CLP Power expects that its transmission and distribution network will continue to be used for the distribution of electricity supply to its customers and considers it remote that the network will be removed from the existing land sites. Therefore, AROs have not been recognised for transmission and distribution assets.<br><br>CAPCO will retire the coal-fired generation units at Castle Peak "A" Station (CPA) between now to 2025. Management considers that the dismantling obligation for the CPA units is covered by the asset decommissioning liability accrued under the SoC as at 31 December 2022.<br><br>No provision for AROs has been recognised for the other generation units of CAPCO as the removal of CAPCO's other fossil-fuel generation units is possible and it is expected that should such obligation be incurred, it will be met by the liability accrued and the cost recovery mechanism under the SoC.<br><br>This is a Key Audit Matter because significant judgement is required in determining whether an ARO exists and estimating the amount and timing of the obligation. | Our procedures in relation to AROs included:<br><br>> Assessing the appropriateness of the Group's accounting policy;<br>> Evaluating management's judgement that it is remote that the Hong Kong transmission and distribution network would be removed from the existing land sites; it is probable that the CPA units will be removed; and it is possible but not probable that CAPCO's other fossil-fuel generation units may be removed at some point in time in the future;<br>> Assessing management's judgements as to whether a contractual or constructive obligation exists based on the respective power purchase agreements, lease agreements, local laws and regulations and past practice;<br>> Assessing the independence, objectivity and competence of management's external experts involved in respect of the future cost estimates for those assets where a provision has been recognised; and<br>> Testing the appropriateness of management's estimates of future costs, the timing of payments and the discount rates where management has concluded that a legal or constructive obligation exists.<br><br>Based on the work performed, we found that the ARO provisions are supported by the available evidence. |

## Other Information

The directors of the Company are responsible for the other information. The other information comprises all of the information included in the annual report other than the Group Financial Statements and our auditor's report thereon.

Our opinion on the Group Financial Statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the Group Financial Statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the Group Financial Statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

## Responsibilities of Directors and the Audit & Risk Committee for the Group Financial Statements

The directors of the Company are responsible for the preparation of the Group Financial Statements that give a true and fair view in accordance with HKFRSs issued by the HKICPA and the Hong Kong Companies Ordinance, and for such internal control as the directors determine is necessary to enable the preparation of Group Financial Statements that are free from material misstatement, whether due to fraud or error.

In preparing the Group Financial Statements, the directors are responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

The Audit & Risk Committee is responsible for overseeing the Group's financial reporting process on behalf of the Board of Directors.

## Auditor's Responsibilities for the Audit of the Group Financial Statements

Our objectives are to obtain reasonable assurance about whether the Group Financial Statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. We report our opinion solely to you, as a body, in accordance with Section 405 of the Hong Kong Companies Ordinance and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with HKSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these Group Financial Statements.

As part of an audit in accordance with HKSAs, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the Group Financial Statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.

- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the Group Financial Statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the Group Financial Statements, including the disclosures, and whether the Group Financial Statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the Group Financial Statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Audit & Risk Committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Audit & Risk Committee with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.

From the matters communicated with the Audit & Risk Committee, we determine those matters that were of most significance in the audit of the Group Financial Statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partner on the audit resulting in this independent auditor's report is Yee Shia Yuen.

**PricewaterhouseCoopers**
Certified Public Accountants

Hong Kong, 27 February 2023

# Consolidated Statement of Profit or Loss

for the year ended 31 December 2022

| | Note | 2022 HK$M | 2021 HK$M |
|---|---|---|---|
| **Revenue** | 2 | **100,662** | 83,959 |
| Expenses | | | |
| Purchases and distributions of electricity and gas | | **(40,710)** | (28,752) |
| Staff expenses | | **(4,668)** | (5,107) |
| Fuel and other operating expenses | | **(41,096)** | (28,581) |
| Depreciation and amortisation | | **(8,904)** | (9,308) |
| | | **(95,378)** | (71,748) |
| Other charges | 4 | **(4,312)** | (1,110) |
| Operating profit | 5 | **972** | 11,101 |
| Finance costs | 6 | **(2,085)** | (1,744) |
| Finance income | 6 | **243** | 108 |
| Share of results, net of income tax | | | |
| Joint ventures | 14 | **325** | (97) |
| Associates | 15 | **2,135** | 2,071 |
| Profit before income tax | | **1,590** | 11,439 |
| Income tax expense | 7 | **(103)** | (1,965) |
| Profit for the year | | **1,487** | 9,474 |
| **Earnings attributable to:** | | | |
| **Shareholders** | | **924** | 8,491 |
| Perpetual capital securities holders | | **139** | 138 |
| Other non-controlling interests | | **424** | 845 |
| | | **1,487** | 9,474 |
| **Earnings per share, basic and diluted** | 9 | **HK$0.37** | HK$3.36 |

The notes and disclosures on pages 238 to 304 are an integral part of these consolidated financial statements.

# Consolidated Statement of Profit or Loss and Other Comprehensive Income

for the year ended 31 December 2022

| | *Note* | **2022 HK$M** | 2021 HK$M |
|---|---|---|---|
| **Profit for the year** | | **1,487** | 9,474 |
| Other comprehensive income | | | |
| Items that can be reclassified to profit or loss | | | |
| Exchange differences on translation | | **(4,608)** | (879) |
| Cash flow hedges | | **1,310** | 934 |
| Costs of hedging | | **(171)** | (109) |
| Share of other comprehensive income of joint ventures | | **(1)** | (4) |
| Translation and other reserves reclassified upon sale of subsidiaries | *4(a)* | **2,505** | – |
| Translation reserve reclassified upon sale of a joint venture | *5(e)* | **18** | – |
| | | **(947)** | (58) |
| Items that cannot be reclassified to profit or loss | | | |
| Fair value (losses)/gains on investments | | **(73)** | 100 |
| Remeasurement gains on defined benefit plans | | **10** | 77 |
| | | **(63)** | 177 |
| **Other comprehensive income for the year, net of tax** | | **(1,010)** | 119 |
| Total comprehensive income for the year | | **477** | 9,593 |
| **Total comprehensive income attributable to:** | | | |
| **Shareholders** | | **250** | 8,660 |
| Perpetual capital securities holders | | **139** | 138 |
| Other non-controlling interests | | **88** | 795 |
| | | **477** | 9,593 |

The notes and disclosures on pages 238 to 304 are an integral part of these consolidated financial statements.

# Consolidated Statement of Financial Position

as at 31 December 2022

| | *Note* | **2022 HK$M** | 2021 HK$M |
|---|---|---|---|
| **Non-current assets** | | | |
| Fixed assets | *10* | **147,267** | 154,058 |
| Right-of-use assets | *11* | **7,582** | 7,130 |
| Investment property | *12* | **909** | 966 |
| Goodwill and other intangible assets | *13* | **18,451** | 19,710 |
| Interests in and loans to joint ventures | *14* | **11,748** | 10,602 |
| Interests in associates | *15* | **9,090** | 8,769 |
| Deferred tax assets | *24* | **2,132** | 376 |
| Derivative financial instruments | *16* | **1,943** | 2,007 |
| Other non-current assets | *17* | **2,443** | 2,303 |
| | | **201,565** | 205,921 |
| **Current assets** | | | |
| Inventories – stores and fuel | | **3,696** | 2,941 |
| Renewable energy certificates | | **804** | 1,166 |
| Properties for sale / under development | *18* | **2,711** | 2,980 |
| Trade and other receivables | *19* | **17,314** | 15,404 |
| Income tax recoverable | | **–** | 546 |
| Fuel clause account | *21* | **3,543** | 1,116 |
| Derivative financial instruments | *16* | **2,107** | 1,475 |
| Short-term deposits and restricted cash | *20* | **35** | 61 |
| Cash and cash equivalents | *20* | **4,251** | 8,199 |
| | | **34,461** | 33,888 |
| **Current liabilities** | | | |
| Customers' deposits | *19(a)* | **(6,633)** | (6,254) |
| Trade payables and other liabilities | *22* | **(19,627)** | (18,381) |
| Income tax payable | | **(1,577)** | (1,349) |
| Bank loans and other borrowings | *23* | **(11,314)** | (10,512) |
| Derivative financial instruments | *16* | **(5,310)** | (1,302) |
| | | **(44,461)** | (37,798) |
| Net current liabilities | | **(10,000)** | (3,910) |
| **Total assets less current liabilities** | | **191,565** | 202,011 |

| | Note | 2022 HK$M | 2021 HK$M |
|---|---|---|---|
| **Financed by:** | | | |
| **Equity** | | | |
| Share capital | *27* | **23,243** | 23,243 |
| Reserves | *28* | **82,255** | 89,791 |
| Shareholders' funds | | **105,498** | 113,034 |
| Perpetual capital securities | *29* | **3,887** | 3,887 |
| Other non-controlling interests | *29* | **6,309** | 9,788 |
| | | **115,694** | 126,709 |
| **Non-current liabilities** | | | |
| Bank loans and other borrowings | *23* | **47,903** | 47,703 |
| Deferred tax liabilities | *24* | **16,246** | 15,886 |
| Derivative financial instruments | *16* | **1,405** | 1,364 |
| Scheme of Control (SoC) reserve accounts | *25* | **3,094** | 3,440 |
| Asset decommissioning liabilities and retirement obligations | *26* | **4,375** | 4,346 |
| Other non-current liabilities | | **2,848** | 2,563 |
| | | **75,871** | 75,302 |
| **Equity and non-current liabilities** | | **191,565** | 202,011 |

The Company's statement of financial position is presented in Note 33.

**Andrew Brandler**
Vice Chairman

**Richard Lancaster**
Chief Executive Officer

**Nicolas Tissot**
Chief Financial Officer

Hong Kong, 27 February 2023

The notes and disclosures on pages 238 to 304 are an integral part of these consolidated financial statements.

# Consolidated Statement of Changes in Equity

for the year ended 31 December 2022

| | Attributable to Shareholders | | | Perpetual Capital Securities | Other Non-controlling Interests | Total Equity |
|---|---|---|---|---|---|---|
| | Share Capital HK$M | Reserves HK$M | Total HK$M | HK$M | HK$M | HK$M |
| Balance at 1 January 2021 | 23,243 | 88,957 | 112,200 | 3,887 | 9,885 | 125,972 |
| Profit for the year | – | 8,491 | 8,491 | 138 | 845 | 9,474 |
| Other comprehensive income for the year | – | 169 | 169 | – | (50) | 119 |
| Transfer to fixed assets | – | 6 | 6 | – | 2 | 8 |
| Dividends paid | | | | | | |
| 2020 fourth interim | – | (3,057) | (3,057) | – | – | (3,057) |
| 2021 first to third interim | – | (4,775) | (4,775) | – | – | (4,775) |
| Distributions to perpetual capital securities holders | – | – | – | (138) | – | (138) |
| Dividends paid to other non-controlling interests | – | – | – | – | (894) | (894) |
| Balance at 31 December 2021 | 23,243 | 89,791 | 113,034 | 3,887 | 9,788 | 126,709 |
| Balance at 1 January 2022 | 23,243 | 89,791 | 113,034 | 3,887 | 9,788 | 126,709 |
| Profit for the year | – | 924 | 924 | 139 | 424 | 1,487 |
| Other comprehensive income for the year | – | (674) | (674) | – | (336) | (1,010) |
| Transfer to fixed assets | – | 46 | 46 | – | 19 | 65 |
| Sales of subsidiaries (Note 4(a)) | – | – | – | – | (2,628) | (2,628) |
| Dividends paid | | | | | | |
| 2021 fourth interim | – | (3,057) | (3,057) | – | – | (3,057) |
| 2022 first to third interim | – | (4,775) | (4,775) | – | – | (4,775) |
| Distributions to perpetual capital securities holders | – | – | – | (139) | – | (139) |
| Dividends paid to other non-controlling interests | – | – | – | – | (958) | (958) |
| **Balance at 31 December 2022** | **23,243** | **82,255** | **105,498** | **3,887** | **6,309** | **115,694** |

The notes and disclosures on pages 238 to 304 are an integral part of these consolidated financial statements.

# Consolidated Statement of Cash Flows

for the year ended 31 December 2022

| | Note | 2022 HK$M | 2022 HK$M | 2021 HK$M | 2021 HK$M |
|---|---|---|---|---|---|
| **Operating activities** | | | | | |
| Net cash inflow from operations | *30(A)* | **13,555** | | 20,223 | |
| Interest received | | **153** | | 104 | |
| Income tax paid | | **(974)** | | (2,521) | |
| Net cash inflow from operating activities | | | **12,734** | | 17,806 |
| **Investing activities** | | | | | |
| Capital expenditure | | **(14,553)** | | (12,431) | |
| Capitalised interest and other finance costs paid | | **(409)** | | (298) | |
| Proceeds from disposal of fixed assets | | **49** | | 104 | |
| Additions of other intangible assets | | **(330)** | | (512) | |
| Acquisition of a subsidiary | | **–** | | (663) | |
| Sale of subsidiaries | *4(a)* | **(1,245)** | | 55 | |
| Cash consideration | | **625** | | 55 | |
| Cash and cash equivalents disposed of | | **(1,870)** | | – | |
| Litigation settlement related to disposal of Iona Gas Plant | | **–** | | (1,110) | |
| Prepayment for purchase of a property | | **(338)** | | (338) | |
| Increase in other financial assets | | **(165)** | | (184) | |
| Increase in investments in and loans to joint ventures | | **(788)** | | (512) | |
| Decrease in investments in and loans to joint ventures | | **–** | | 293 | |
| Proceeds from sale of a joint venture | | **–** | | 307 | |
| Dividends received from | | | | | |
| Joint ventures | | **495** | | 835 | |
| Associates | | **1,831** | | 1,721 | |
| Equity investments | | **14** | | 15 | |
| Decrease in bank deposits with maturities of more than three months | | **57** | | 931 | |
| Net cash outflow from investing activities | | | **(15,382)** | | (11,787) |
| Net cash (outflow) / inflow before financing activities | | | **(2,648)** | | 6,019 |
| **Financing activities** | *30(B)* | | | | |
| Proceeds from long-term borrowings | | **20,121** | | 7,796 | |
| Repayment of long-term borrowings | | **(12,782)** | | (5,329) | |
| Increase in short-term borrowings | | **2,957** | | 314 | |
| Payment of principal portion of lease liabilities | | **(261)** | | (271) | |
| Interest and other finance costs paid | | **(1,854)** | | (1,575) | |
| Settlement of derivative financial instruments | | **(267)** | | (366) | |
| Increase / (decrease) in advances from other non-controlling interests | | **28** | | (189) | |
| Distributions paid to perpetual capital securities holders | | **(139)** | | (138) | |
| Dividends paid to shareholders | | **(7,832)** | | (7,832) | |
| Dividends paid to other non-controlling interests | | **(958)** | | (894) | |
| Net cash outflow from financing activities | | | **(987)** | | (8,484) |
| Net decrease in cash and cash equivalents | | | **(3,635)** | | (2,465) |
| Cash and cash equivalents at beginning of year | | | **8,199** | | 10,694 |
| Effect of exchange rate changes | | | **(313)** | | (30) |
| **Cash and cash equivalents at end of year** | *20* | | **4,251** | | 8,199 |

The notes and disclosures on pages 238 to 304 are an integral part of these consolidated financial statements.

# Significant Accounting Policies

Significant accounting policies are included in the corresponding notes to the financial statements or set out below.

## 1. Basis of Preparation

The Company, CLP Holdings Limited, and its subsidiaries are collectively referred to as the Group in the consolidated financial statements.

The consolidated financial statements have been prepared in accordance with Hong Kong Financial Reporting Standards (HKFRS) issued by the Hong Kong Institute of Certified Public Accountants (HKICPA) and requirements of the Hong Kong Companies Ordinance (Cap.622).

The preparation of the consolidated financial statements in conformity with HKFRS requires the use of certain critical accounting estimates. It also requires management to exercise their judgement in the process of applying the Group's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are especially significant to the consolidated financial statements, are disclosed in relevant notes to the financial statements.

## 2. Changes in Significant Accounting Policies

(A) Amendments of standards first time adopted in 2022

There have been a number of amendments to standards effective in 2022. Amendments which are applicable to the Group include:

- Amendments to HKFRS 3 Reference to the Conceptual Framework;
- Amendments to HKFRS 9 Fees in the '10 per cent' Test for Derecognition of Financial Liabilities: clarify that an entity includes in the 10 per cent test only fees paid or received between the entity and the lender, including fees paid or received by either the entity or the lender on the other's behalf;
- Amendments to HKAS 16 Property, Plant and Equipment – Proceeds before Intended Use: the standard is amended that proceeds from selling items before the related property, plant and equipment is available for its intended use should be recognised in profit or loss, together with the costs of producing those items; and
- Amendments to HKAS 37 Onerous Contracts – Cost of Fulfilling a Contract: clarify that the 'costs of fulfilling a contract' comprise both the incremental costs and an allocation of other direct costs.

The Group has applied the above amendments for the first time in 2022. The adoption of these amendments has had no significant impact on the results and financial position of the Group. The Group does not have to change its accounting policies or make retrospective adjustments as a result of adopting these amendments.

The Group also implemented the IFRS Interpretations Committee agenda decision on demand deposits with restriction on use which has resulted in the re-presentation of the comparatives of HK$299 million from restricted cash classification to cash and cash equivalents on the consolidated statement of financial position and the related update of the 2021 consolidated statement of cash flows. Such amount was related to the deposits under the trust accounts of which the restrictions did not preclude the Group to withdraw the balance on demand.

## 2. Changes in Significant Accounting Policies (continued)

(B) Amendments to standards and revised interpretation effective after 2022

The following amendments to standards and revised interpretation, which may be applicable to the Group, have been issued and are effective after 2022. The Group has not elected to early adopt these pronouncements in 2022. These pronouncements are not expected to have a material impact on the results or the financial position of the Group.

- Amendments to HKAS 1 Classification of Liabilities as Current or Non-current
- Amendments to HKAS 1 and HKFRS Practice Statement 2 Disclosure of Accounting Policies
- Amendments to HKAS 8 Definition of Accounting Estimates
- Amendments to HKAS 12 Deferred Tax related to Assets and Liabilities arising from a Single Transaction
- Amendments to HKFRS 10 and HKAS 28 Sale or Contribution of Assets between an Investor and its Associate or Joint Venture
- Amendments to HKFRS 16 Lease liability in a Sale and Leaseback
- HK Interpretation 5 (Revised) Presentation of Financial Statements – Classification by the Borrower of a Term Loan that Contains a Repayment on Demand Clause

## 3. Consolidation and Equity Accounting

(A) Basis of consolidation

The consolidated financial statements of the Group incorporate the financial statements of the Company and its subsidiaries up to 31 December and include the Group's interests in joint ventures and associates on the basis set out in (B) below.

Subsidiaries are all entities over which the Group has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power to direct the activities of the entity.

The financial statements of subsidiaries acquired during the year are included in the consolidated financial statements from the date on which control is transferred to the Group. They are de-consolidated from the date that control ceases.

Intercompany transactions, balances and unrealised gains on transactions between Group entities are eliminated on consolidation. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Where necessary, to ensure consistency with the policies adopted by the Group, adjustments are made to the financial statements of subsidiaries, joint ventures and associates.

(B) Joint ventures and associates

A joint venture is an arrangement in which the Group has joint control, whereby the Group has rights to the net assets of the arrangement, rather than rights to its assets and obligations for its liabilities. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

An associate is an entity over which the Group has significant influence but not control nor joint control over the financial and operating policies, generally accompanying a shareholding of between 20% and 50% of the voting rights.

Investments in joint ventures / associates are accounted for using the equity method. They are initially recognised at cost. Subsequent to initial recognition, the consolidated financial statements include the Group's share of post-acquisition profit or loss and other comprehensive income, until the date on which joint control or significant influence ceases. Distributions received from an investee reduce the carrying amounts of the investments.

## 3. Consolidation and Equity Accounting (continued)

(C) Joint operations

A joint operation is an arrangement in which the Group has joint control (as explained in (B) above), whereby the Group has rights to the assets and obligations for the liabilities, relating to the arrangement. When the Group undertakes its activities under a joint operation, the Group as a joint operator recognises its direct right to, and its share of jointly held assets, liabilities, revenues and expenses of the joint operation. They are incorporated in the financial statements under appropriate headings.

(D) Change in ownership interests

Transactions with non-controlling interests that do not result in a loss of control are treated as transactions with equity owners of the Group. A change in ownership interest results in an adjustment between the carrying amounts of the controlling and non-controlling interests to reflect their relative interests in the subsidiary. Any difference between the amount of the adjustment to non-controlling interests and any consideration paid or received, and the reattribution of other comprehensive income to non-controlling interests are recognised in a separate reserve within equity attributable to owners of the Group.

When the Group ceases to consolidate or equity account for an investment because of a loss of control, joint control or significant influence, any retained interest in the entity is remeasured to its fair value, with the change in carrying amount recognised in profit or loss. This fair value becomes the initial carrying amount for the purpose of subsequent accounting for the retained interest as a joint venture, associate or financial asset. In addition, any amounts previously recognised in other comprehensive income in respect of that entity are reclassified to profit or loss. Gains or losses on disposals are recognised in profit or loss.

If the ownership interest in a joint venture or associate is reduced, it is possible that joint control or significant influence is retained or a joint venture becomes an associate. As the Group continues to apply the equity method under both cases, the retained interest is not remeasured. However, a proportionate share of the amounts previously recognised in other comprehensive income of the investment is reclassified to profit or loss where appropriate.

A quick guide to the classification of equity investments:

Control → Subsidiary
Joint control → Joint venture / joint operation
Significant influence → Associate
Less than significant influence → Equity investment

## 4. Impairment of Non-Financial Assets

Non-financial assets that have indefinite useful lives are not subject to amortisation. They are tested for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable and, in any case, at least annually. Non-financial assets that are subject to amortisation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable.

For the purposes of assessing impairment, assets are grouped at the lowest level for which there are separately identifiable cash flows (cash generating units (CGUs)). Goodwill arising from a business combination is allocated to CGUs that are expected to benefit from the synergies of the combination. An impairment loss is recognised for the amount by which the carrying amount of an asset or a CGU exceeds its recoverable amount. The recoverable amount is the higher of the fair value of an asset or a CGU less costs of disposal and its value in use.

An impairment loss recognised in prior years for an asset other than goodwill shall be reversed if, and only if, there is a favourable change in the estimates used to determine the recoverable amount of an asset. A reversal of the impairment loss is limited to the asset’s carrying amount (net of accumulated amortisation or depreciation) that would have been determined had no impairment loss been recognised in prior years.

## 5. Inventory

Inventory comprises stores and fuel and is stated at the lower of cost and net realisable value. Cost is calculated on a weighted average basis. Net realisable value is determined on the basis of anticipated sales proceeds less estimated selling expenses.

## 6. Renewable Energy Products

Renewable energy and energy efficiency schemes operate through the creation, trade and surrender of energy products. Renewable energy certificates are recognised upon the risks and rewards being transferred to the Group and are measured at the lower of cost or net realisable value. Cost is calculated on a weighted average basis.

## 7. Employee Benefits

(A) Defined contribution plans

The Group operates and / or participates in a number of defined contribution plans. The assets of these plans are held in separate trustee-administered funds. The pension plans are funded by payments from employees and by participating companies of the Group, and provide benefits linked to contributions and investment returns on the plans. The Group has no further legal or constructive payment obligations if the fund does not hold sufficient assets to pay all employees the benefit relating to employee service in the current and prior periods, once the contributions have been paid.

Forfeited contributions (by employers on behalf of employees who leave the scheme prior to vesting fully in such contributions) are not used to offset existing contributions but are credited to a reserve account of that provident fund, and are available for distribution at the discretion of the relevant employers.

Contributions to the defined contribution plans are recognised as expenses in the year to which the contributions relate, except to the extent that they are capitalised as part of the cost of qualifying assets.

(B) Defined benefit plans

The Group, through its subsidiaries, operates funded defined benefit plans for qualifying employees in Australia. Under the plans, the employees are entitled to lump sum benefits on retirement, death, disablement and withdrawal. The level of benefits provided depends on employees' years of service and final average salary. Plan assets held in trusts are governed by local regulations and practice in each country.

The cost of providing benefits under the defined benefit plans is determined using the projected unit credit actuarial valuation method. Past service costs are recognised immediately in profit or loss. Remeasurement gains and losses arising from experience adjustments and changes in actuarial assumptions are recognised directly in other comprehensive income.

The defined benefit asset recognised in the consolidated statement of financial position represents the surplus of the fair value of plan assets over the present value of the defined benefit obligation at the end of the reporting period.

(C) Incentive bonus and employee leave entitlement

Provisions are made for the estimated liability for incentive bonus and employee leave entitlement as a result of services rendered by employees up to the end of the reporting period, where there is a contractual obligation or past practice that has created a constructive obligation.

## 8. Foreign Currency Translation

Items included in the financial statements of each of the Group entities are measured using the currency of the primary economic environment in which the entity operates (the functional currency). The consolidated financial statements are presented in Hong Kong dollar, which is the Group's presentation currency.

Foreign currency transactions are translated into the relevant functional currency using the exchange rates prevailing at the dates of the transactions or valuation where items are remeasured. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies by using the exchange rates at the end of the reporting period are recognised in profit or loss, except when deferred in other comprehensive income as qualifying cash flow hedges or qualifying net investment hedges.

For subsidiaries, joint ventures and associates that have a functional currency different from the Group's presentation currency for the purpose of consolidation, assets and liabilities for each statement of financial position presented are translated using the closing rates at the end of the reporting period, and income and expenses for each statement of profit or loss and other comprehensive income presented are translated at the average exchange rates for the reporting period (unless this average rate is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the date of the transactions). All resulting exchange differences are recognised in other comprehensive income and as a separate component of equity. Reclassifications of gains or losses previously recognised in other comprehensive income to profit or loss are translated by using the exchange rate at the date of reclassification. The remaining reserve balances are translated using the closing rates at the end of the reporting period. Any exchange differences arising from these are taken to retained profits directly.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated using the closing rates at the end of the reporting period.

Upon disposal of a foreign operation (that is, a disposal of the Group's entire interest in a foreign operation, or a disposal involving loss of control over a subsidiary / loss of joint control over a joint venture / loss of significant influence over an associate that includes a foreign operation), all of the exchange differences accumulated in equity in respect of that operation are reclassified to profit or loss.

In the case of a partial disposal that does not result in the Group losing control over a subsidiary that includes a foreign operation, the proportionate share of accumulated exchange differences is re-attributed to non-controlling interests and is not recognised in profit or loss. For all other partial disposals (that is, reductions in the Group's ownership interest in a joint venture or associate that do not result in the Group losing joint control or significant influence) the proportionate share of the accumulated exchange differences is reclassified to profit or loss.

Monetary assets and liabilities are assets to be received and liabilities to be paid in fixed amounts. For example, a trade receivable is a monetary asset (the amount to be received is fixed) but a fixed asset is not a monetary asset because it is uncertain how much you will receive if the fixed asset is sold.

An entity can have both functional currency and presentation currency, however, a consolidation group can only have presentation currency but not functional currency. This is because presentation currency is a matter of choice but functional currency is based on the different primary economic environment in which each group entity operates.

## 9. Leases

The Group assesses at contract inception whether the contract is, or contains, a lease. A contract is, or contains, a lease if it conveys the right to control the use of an identified asset for a period of time in exchange for a consideration. A contract conveys the right to control the use of an identified asset if the customer has both the right to obtain substantially all the economic benefits from the use of the identified asset and the right to direct the use of the identified asset.

For the Group as a lessor, leases in which the Group does not transfer substantially all the risks and rewards incidental to the ownership of an underlying asset to the customer, are classified as operating lease arrangements. The respective lease assets are included in the financial statements according to their nature. Operating lease payments which vary with operation parameters are recognised as revenue in the period in which they are earned.

For the Group as a lessee, the Group applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets which are recognised as expenses on a straight-line basis over the lease terms. The Group recognises lease liabilities representing the obligation to make lease payments and right-of-use assets representing the right to use the underlying assets.

## 10. Contingent liabilities

Contingent liabilities are possible obligations that arise from past events and whose existence will only be confirmed by the occurrence or non-occurrence of one or more future events not wholly within the control of the Group. Where it is not probable that an outflow of economic benefits will be required, or the amount cannot be estimated reliably, the obligation is disclosed as a contingent liability, unless the probability of outflow of economic benefits is remote.

## 11. Disposal group held for sale

Disposal group comprising assets and liabilities is classified as held for sale when its carrying amount is to be recovered principally through sale rather than through continuing use and a sale is considered highly probable. Disposal group is stated at the lower of its carrying amount and fair value less costs to sell.

Any loss on measurement of a disposal group is allocated first to goodwill, and then to the assets in the disposal group on a pro-rata basis, except for deferred tax assets and financial assets that are not within the scope of measurement requirement of HKFRS 5 Non-current Assets Held for Sale and Discontinued Operations. Losses on initial classification as held for sale and subsequent gains and losses on remeasurement are recognised in profit or loss. Once the disposal group is classified as held for sale, its non-current assets are no longer amortised or depreciated.

Our interest in Apraava Energy was accounted for as disposal group held for sale since June 2022 till the completion of the sell down in late December 2022. Please refer to Note 4(a) for the application of HKFRS 5 to CLP.

## 1. General Information

The Company is a limited liability company incorporated in Hong Kong and listed on the Stock Exchange of Hong Kong. The principal activity of the Company is investment holding, and the principal activities of the subsidiaries are generation and supply of electricity in Hong Kong, Mainland China and Australia, and investment holding of power projects in Mainland China, India, Southeast Asia and Taiwan.

The financial operations of the Company's major subsidiaries, CLP Power Hong Kong Limited (CLP Power) and Castle Peak Power Company Limited (CAPCO) (collectively referred to as SoC Companies), are governed by a SoC Agreement entered into with the Hong Kong Government. Our electricity business in Hong Kong is therefore also referred to as the SoC business. The main features of the current SoC are summarised on pages 305 and 306, which are unaudited.

The consolidated financial statements were approved for issue by the Board of Directors on 27 February 2023.

Australia business update in 2022

During the year, extreme and exceptional price surges have occurred in the Australian National Electricity Market (NEM) driven by the confluence of the unavailability of major coal-fired power stations and high fuel prices. As a consequence, forward electricity prices have been elevated as compared to historic levels and resulted in an unrealised fair value loss on our electricity forward contracts not qualifying for hedge accounting of HK$4,196 million (A$774 million), after tax HK$2,937 million (A$542 million) included in fuel and other operating expenses for the year. In addition, while generation revenue has increased in 2022, the operating earnings in Australia (before the unrealised fair value loss) reduced by HK$2,581 million as compared with 2021 mainly due to short positions caused by lower generation from Yallourn because of unplanned outages and Mount Piper due to coal supply constraints. Collectively the unrealised fair value loss and the operating challenges were the primary reasons for the significant decrease in Group's earnings for the year.

In addition, substantial margin account requirements were met to cover the net sold position on open futures contracts which led to significant increase in other receivables (Note 19) at year end and negatively impacted our operating cash flow for the year. More information of our Australia business can be found on "Business Performance and Outlook" on pages 53 to 58 of the Annual Report.

## 2. Revenue

### Accounting Policy

(A) Revenue from contracts with customers

Revenues from sales of electricity and gas are recognised when electricity and gas are supplied to and consumed by the customers. Revenues are measured at the amounts billed to the customers based on the periodic cycle meter readings and the estimated accruals for the value of electricity and gas consumed from the meter reading date to the end of the reporting period ("unbilled revenue").

(B) Revenue from sales of properties

Revenue from sales of properties is recognised when the control of asset is transferred to the customer, being at the point in time the physical possession or the legal title of the completed property, and the Group has present right to payment and the collection of the consideration is probable.

(C) Other revenue

Revenue from power purchase agreements represents operating lease income comprising capacity charge and energy charge. Capacity charge is recognised to the extent that capacity has been made available to the offtakers during the year. Energy charge is recognised when electricity is supplied.

## 2. Revenue (continued)

### Critical Accounting Estimates and Judgements: Unbilled Retail Revenue

The Group records revenues from retail energy sales using the accrual accounting method. In Hong Kong, the unbilled retail revenue is calculated using estimates including consumption quantity based on electricity sent-out adjusted by loss factors, pattern of residential and non-residential consumption, weather and certain other factors. In Australia, the unbilled retail revenue is calculated based on the electricity purchased and applicable tariffs for the mass market customers, as well as actual meter readings and contracted rates for commercial and industrial customers. The amount is adjusted for physical energy loss and other measurable factors. Unbilled retail revenue of the Group (included in trade and other receivables) totalled HK$3,470 million at 31 December 2022 (2021: HK$3,186 million).

The Group's revenue primarily represents sales of electricity and gas, which is recognised over time, and is disaggregated as follows:

| | **2022 HK$M** | 2021 HK$M |
|---|---|---|
| Revenue from contracts with customers | | |
| Sales of electricity in Hong Kong | **50,919** | 45,222 |
| Transfer for SoC from revenue (Note 25(A)) | **(604)** | (1,183) |
| SoC sales of electricity | **50,315** | 44,039 |
| Sales of electricity outside Hong Kong | **39,186** | 29,719 |
| Sales of gas in Australia | **5,183** | 5,121 |
| Sales of properties in Hong Kong | **421** | – |
| Others | **1,459** | 1,174 |
| | **96,564** | 80,053 |
| Other revenue | | |
| Power purchase agreements | | |
| Fixed capacity charge | **400** | 593 |
| Variable capacity charge | **275** | 267 |
| Energy charge | **3,087** | 2,704 |
| Others | **336** | 342 |
| | **4,098** | 3,906 |
| | **100,662** | 83,959 |

## 3. Segment Information

### Accounting Policy

Operating segments are reported in a manner consistent with the internal reporting provided to the Chief Executive Officer, who is the chief operating decision-maker of the Group. In accordance with the Group's internal organisation and reporting structure, the operating segments are based on geographical regions.

Segment revenue is based on the geographical region in which the electricity is generated and / or services are rendered. Segment capital additions represent the total costs incurred during the year to acquire fixed assets and other segment assets that are expected to be used for more than one year. Unallocated items comprise mainly corporate expenses, corporate assets, and the Company's liquid funds and borrowings.

Substantially all the principal activities of the Group in each region are for the generation and supply of electricity which are managed and operated on an integrated basis.

The Group operates, through its subsidiaries, joint ventures and associates, in five major geographical regions – Hong Kong, Mainland China, Australia, India and Southeast Asia and Taiwan.

## 3. Segment Information (continued)

| | Hong Kong HK$M | Mainland China HK$M | Australia HK$M | India HK$M | Southeast Asia & Taiwan HK$M | Unallocated Items HK$M | Total HK$M |
|---|---|---|---|---|---|---|---|
| **For the year ended 31 December 2022** | | | | | | | |
| Revenue from contracts with customers | 51,638 | 1,824 | 41,778 | 1,320 | 4 | – | 96,564 |
| Other revenue | 138 | 53 | 61 | 3,833 | – | 13 | 4,098 |
| Revenue | 51,776 | 1,877 | 41,839 | 5,153 | 4 | 13 | 100,662 |
| EBITDAF | 17,541 | 1,260 | (695) | (2,887) | (6) | (1,087) | 14,126 |
| Share of results, net of income tax | | | | | | | |
| Joint ventures | (21) | 327 | – | – | 19 | – | 325 |
| Associates | – | 2,135 | – | – | – | – | 2,135 |
| Consolidated EBITDAF | 17,520 | 3,722 | (695) | (2,887) | 13 | (1,087) | 16,586 |
| Depreciation and amortisation | (5,388) | (814) | (2,368) | (283) | – | (51) | (8,904) |
| Fair value adjustments | (54) | – | (4,196) | – | – | – | (4,250) |
| Finance costs | (973) | (245) | (345) | (498) | – | (24) | (2,085) |
| Finance income | 136 | 9 | 34 | 46 | – | 18 | 243 |
| Profit / (loss) before income tax | 11,241 | 2,672 | (7,570) | (3,622) | 13 | (1,144) | 1,590 |
| Income tax (expense) / credit | (1,893) | (356) | 2,303 | (155) | (2) | – | (103) |
| Profit / (loss) for the year | 9,348 | 2,316 | (5,267) | (3,777) | 11 | (1,144) | 1,487 |
| Earnings attributable to | | | | | | | |
| Perpetual capital securities holders | (139) | – | – | – | – | – | (139) |
| Other non-controlling interests | (848) | (9) | – | 433 | – | – | (424) |
| Earnings / (loss) attributable to shareholders | 8,361 | 2,307 | (5,267) | (3,344) | 11 | (1,144) | 924 |
| Excluding: Items affecting comparability | (23) | 185 | – | 3,537 | – | – | 3,699 |
| Operating earnings | 8,338 | 2,492 | (5,267) | 193 | 11 | (1,144) | 4,623 |
| Capital additions | 12,283 | 588 | 2,335 | 620 | – | 29 | 15,855 |
| Impairment provisions | | | | | | | |
| Receivables and others | 13 | 30 | 195 | 27 | – | – | 265 |
| **At 31 December 2022** | | | | | | | |
| Fixed assets, right-of-use assets and investment property | 132,791 | 9,158 | 13,628 | – | – | 181 | 155,758 |
| Goodwill and other intangible assets | 5,545 | 3,396 | 9,510 | – | – | – | 18,451 |
| Interests in and loans to joint ventures | 1,910 | 5,138 | – | 3,106 | 1,594 | – | 11,748 |
| Interests in associates | – | 9,090 | – | – | – | – | 9,090 |
| Deferred tax assets | 3 | 83 | 2,046 | – | – | – | 2,132 |
| Other assets | 14,446 | 6,510 | 16,489 | 632 | 72 | 698 | 38,847 |
| Total assets | 154,695 | 33,375 | 41,673 | 3,738 | 1,666 | 879 | 236,026 |
| Bank loans and other borrowings | 48,559 | 5,531 | 5,127 | – | – | – | 59,217 |
| Current and deferred tax liabilities | 16,586 | 1,191 | 14 | – | 32 | – | 17,823 |
| Other liabilities | 26,856 | 931 | 15,002 | 3 | 2 | 498 | 43,292 |
| Total liabilities | 92,001 | 7,653 | 20,143 | 3 | 34 | 498 | 120,332 |

EBITDAF stands for earnings before interest, taxes, depreciation and amortisation, and fair value adjustments. For this purpose, fair value adjustments include fair value gains or losses on non-debt related derivative financial instruments relating to transactions not qualified for hedge accounting, ineffectiveness and de-designation of cash flow hedges.

## 3. Segment Information (continued)

| | Hong Kong HK$M | Mainland China HK$M | Australia HK$M | India HK$M | Southeast Asia & Taiwan HK$M | Unallocated Items HK$M | Total HK$M |
|---|---|---|---|---|---|---|---|
| For the year ended 31 December 2021 | | | | | | | |
| Revenue from contracts with customers | 44,869 | 1,747 | 32,215 | 1,218 | 4 | – | 80,053 |
| Other revenue | 125 | 53 | 56 | 3,648 | – | 24 | 3,906 |
| Revenue | 44,994 | 1,800 | 32,271 | 4,866 | 4 | 24 | 83,959 |
| EBITDAF | 17,471 | 1,539 | 1,230 | 1,189 | 296 | (819) | 20,906 |
| Share of results, net of income tax | | | | | | | |
| Joint ventures | (20) | (271) | – | – | 194 | – | (97) |
| Associates | – | 2,071 | – | – | – | – | 2,071 |
| Consolidated EBITDAF | 17,451 | 3,339 | 1,230 | 1,189 | 490 | (819) | 22,880 |
| Depreciation and amortisation | (5,507) | (807) | (2,327) | (617) | – | (50) | (9,308) |
| Fair value adjustments | (20) | – | (477) | – | – | – | (497) |
| Finance costs | (907) | (253) | (133) | (436) | – | (15) | (1,744) |
| Finance income | 39 | 14 | 7 | 42 | – | 6 | 108 |
| Profit / (loss) before income tax | 11,056 | 2,293 | (1,700) | 178 | 490 | (878) | 11,439 |
| Income tax (expense) / credit | (2,040) | (329) | 524 | (52) | (68) | – | (1,965) |
| Profit / (loss) for the year | 9,016 | 1,964 | (1,176) | 126 | 422 | (878) | 9,474 |
| Earnings attributable to | | | | | | | |
| Perpetual capital securities holders | (138) | – | – | – | – | – | (138) |
| Other non-controlling interests | (789) | (3) | – | (53) | – | – | (845) |
| Earnings / (loss) attributable to shareholders | 8,089 | 1,961 | (1,176) | 73 | 422 | (878) | 8,491 |
| Excluding: Items affecting comparability | 34 | – | 1,093 | 148 | (249) | – | 1,026 |
| Operating earnings | 8,123 | 1,961 | (83) | 221 | 173 | (878) | 9,517 |
| Capital additions | 10,443 | 826 | 2,666 | 174 | – | 47 | 14,156 |
| Impairment provisions | | | | | | | |
| Fixed assets | – | – | – | 330 | – | – | 330 |
| Receivables and others | 11 | – | 214 | 31 | – | – | 256 |
| At 31 December 2021 | | | | | | | |
| Fixed assets, right-of-use assets and investment property | 126,255 | 9,960 | 14,551 | 11,175 | – | 213 | 162,154 |
| Goodwill and other intangible assets | 5,545 | 3,675 | 10,476 | 14 | – | – | 19,710 |
| Interests in and loans to joint ventures | 1,191 | 7,531 | – | – | 1,880 | – | 10,602 |
| Interests in associates | – | 8,769 | – | – | – | – | 8,769 |
| Deferred tax assets | 5 | 88 | 246 | 37 | – | – | 376 |
| Other assets | 12,737 | 5,375 | 12,566 | 3,985 | 72 | 3,463 | 38,198 |
| Total assets | 145,733 | 35,398 | 37,839 | 15,211 | 1,952 | 3,676 | 239,809 |
| Bank loans and other borrowings | 46,351 | 5,856 | – | 6,008 | – | – | 58,215 |
| Current and deferred tax liabilities | 15,655 | 1,220 | 7 | 318 | 35 | – | 17,235 |
| Other liabilities | 24,291 | 1,252 | 11,153 | 467 | 2 | 485 | 37,650 |
| Total liabilities | 86,297 | 8,328 | 11,160 | 6,793 | 37 | 485 | 113,100 |

Items affecting comparability refer to significant unusual events such as acquisition / disposal, impairment of non-current assets, property valuation gain / loss, provision for legal disputes and change in law or natural catastrophe. They have no impact in assessing the underlying operating performance of the Group and are separately disclosed to allow a better understanding and comparison of the financial results. Details of the items affecting comparability can be found on page 30.

## 4. Other Charges

| | 2022 HK$M | 2021 HK$M |
|---|---|---|
| Loss on sale of subsidiaries [(a)] | 4,312 | – |
| The Settlement [(b)] | – | 1,110 |
| | 4,312 | 1,110 |

Notes:

(a) In late December 2022, CLP GPEC (Mauritius) Holdings Limited, an indirect wholly-owned subsidiary of the Company, completed the sale of 10% shareholding in Apraava Energy Private Limited (Apraava Energy) in India to CDPQ Infrastructures Asia II Pte. Ltd. for a total consideration of US dollar equivalent of Rs6.6 billion (HK$625 million) (the "Sell Down"). The Group's equity interest in Apraava Energy was reduced from 60% to 50%. Apraava Energy and its subsidiaries (Apraava Energy group) ceased to be subsidiaries (deconsolidated from the date of disposal) and became a joint venture of the Group.

Apraava Energy group was presented as a disposal group held for sale on 30 June 2022 and losses of HK$1,635 million (CLP's share: HK$986 million) on measurement of the disposal group to the lower of its carrying amount and its fair value less costs to sell were recognised and included as part of the loss on sale of subsidiaries. The measurement losses have been applied to reduce the carrying amounts of goodwill and fixed assets within the disposal group.

Calculation of the loss on sale of subsidiaries is as follows:

| | HK$M |
|---|---|
| On reclassification to asset held for sale | |
| Loss on measurement of the disposal group upon initial classification | (1,635) |
| On completion of the Sell Down (i.e. date of disposal) | |
| Cash consideration for sale of 10% interest | 625 |
| Fair value of 50% interest retained (i.e. joint venture) (Note 14) | 3,106 |
| Carrying value of 40% non-controlling interest | 2,628 |
| Less: Carrying amount of net assets disposed of * | (6,531) |
| Reclassification of CLP's share of reserves to profit or loss | |
| Translation reserve | (2,515) |
| Cash flow hedge reserve | 10 |
| Loss on disposal upon completion of the Sell Down | (2,677) |
| Total loss on sale of subsidiaries # | (4,312) |

* Adjusted for loss on measurement of Apraava Energy group upon initial classification as a disposal group held for sale in June 2022

\# Total loss on sale of subsidiaries attributable to shareholders amounted to HK$3,663 million

(b) In March 2021, full and final settlement of all claims made by Lochard Energy (Iona Operations Holding) Pty Ltd against EnergyAustralia Holdings Limited (EnergyAustralia) arising from the disposal of Iona Gas Plant ("The Settlement") was paid.

## 5. Operating Profit

Operating profit is stated after charging / (crediting) the following:

| | 2022 HK$M | 2021 HK$M |
|---|---|---|
| **Charging** | | |
| Retirement benefits costs [(a)] | **473** | 510 |
| Auditors' remuneration | | |
| Audit services | | |
| PricewaterhouseCoopers | **42** | 41 |
| Other auditor [(b)] | **3** | 2 |
| Permissible audit related and non-audit services | | |
| PricewaterhouseCoopers [(c)] | **12** | 10 |
| Other auditor [(b)] | **–** | – |
| Variable lease expenses | **21** | 15 |
| Cost of properties sold | **325** | – |
| Net losses on disposal of fixed assets | **241** | 386 |
| Impairment of | | |
| Fixed assets [(d)] | **–** | 330 |
| Inventories – stores and fuel | **10** | 12 |
| Trade receivables | **255** | 244 |
| Revaluation loss on investment property | **57** | 34 |
| Loss / (gain) on sale of a joint venture [(e)] | **185** | (307) |
| Morwell River Diversion solution [(f)] | **–** | 452 |
| Fair value losses / (gains) on investments at fair value through profit or loss | **13** | (163) |
| Net exchange losses / (gains) | **373** | (8) |
| **Crediting** | | |
| Gain on sale of a subsidiary | **–** | (79) |
| Rental income from investment property | **(26)** | (25) |
| Dividends from equity investments | **(14)** | (15) |
| Net fair value (gains) / losses on non-debt related derivative financial instruments | | |
| Cash flow hedge | | |
| Reclassified from cash flow hedge reserve and cost of hedging reserve to | | |
| Purchases and distributions of electricity and gas | **(1,693)** | (1,182) |
| Fuel and other operating expenses [(g)] | **(1,691)** | (39) |
| Ineffectiveness of cash flow hedge | **(52)** | (100) |
| Not qualified for hedge accounting | **5,606** | 631 |

## 5. Operating Profit (continued)

Notes:

(a) Retirement benefits costs for the year amounted to HK$630 million (2021: HK$652 million), of which HK$157 million (2021: HK$142 million) was capitalised.

(b) KPMG India has been the statutory auditor of Apraava Energy group since April 2017. The Group does not regard KPMG India as a principal auditor of the Group given the relative small quantum of the audit fees, which reflect the scale of operations of Apraava Energy group. Our policy with regard to non-principal auditors for providing non-audit services is to ensure that, within country, the non-audit fees are not paid out of proportion to the audit fees so as to compromise in-country independence. The figure of audit related and non-audit services represented KPMG India's fees charged to Apraava Energy group during the period from 1 January 2022 to the date of disposal (the Period). Other KPMG offices have also provided services to our businesses in other regions which amounted to HK$7 million for the Period (2021: HK$14 million).

(c) Permissible audit related and non-audit services provided by PricewaterhouseCoopers comprised Sustainability Report limited assurance, Continuing Connected Transactions limited assurance, review on accounting policies and profit projection for business development, limited assurance over EnergyAustralia's regulatory reviews and reporting, audits of CLP's provident funds, auditor's attestation and other advisory services.

(d) In 2021, management viewed that it was unlikely that Jhajjar's power purchase agreements would be renewed after their expiry and an impairment provision of HK$330 million was recognised.

(e) In November 2022, the Group completed the sale of its entire 70% interest in CLP Guangxi Fangchenggang Power Company Limited (Fangchenggang), at a consideration of RMB1,507 million (HK$1,648 million). As a result, a loss of HK$185 million was recognised. Consideration receivable was included under trade and other receivables (Note 19(b)) at 31 December 2022.

In 2021, a gain of HK$307 million was recognised from the sale of its entire interest in a joint venture, OneEnergy Asia Limited.

(f) After exceptionally heavy rain in June 2021, cracks were discovered in the structures of the Morwell River Diversion which runs through the Yallourn mine site and an expenditure of HK$452 million was recognised in 2021 for repairs and damage assessment.

(g) Net fair value gains of HK$1,500 million (2021: HK$34 million) were reclassified from cash flow hedge reserve upon de-designation of certain energy contracts in Australia.

## 6. Finance Costs and Income

### Accounting Policy

Borrowing costs are recognised as an expense in the year in which they are incurred, except to the extent that they are capitalised when they are directly attributable to the acquisition, construction or production of an asset which necessarily takes a substantial period of time to get ready for its intended use.

Interest and other finance income is recognised on a time proportion basis using the effective interest method.

| | **2022 HK$M** | 2021 HK$M |
|---|---|---|
| Finance costs | | |
| Interest expenses on | | |
| Bank loans and overdrafts | **920** | 522 |
| Other borrowings | **1,143** | 1,118 |
| Tariff Stabilisation Fund [(a)] | **40** | 3 |
| Customers' deposits and others | **5** | – |
| Lease liabilities | **47** | 57 |
| Net fair value changes on debt related derivative financial instruments | | |
| Cash flow hedge | | |
| Reclassified from cash flow hedge reserve | **453** | 316 |
| Reclassified from cost of hedging reserve | **(21)** | (8) |
| Ineffectiveness of cash flow hedges | **3** | 1 |
| Fair value hedge | | |
| Net fair value losses | **571** | 193 |
| Reclassified from cost of hedging reserve | **14** | 14 |
| Ineffectiveness of fair value hedges | **14** | – |
| Not qualified for hedge accounting | **(22)** | 10 |
| Net fair value gains on hedged items in fair value hedges | **(571)** | (193) |
| Net exchange gains on financing activities | **(296)** | (175) |
| Finance charges | **251** | 203 |
| | **2,551** | 2,061 |
| Less: amount capitalised [(b)] | **(466)** | (317) |
| | **2,085** | 1,744 |
| Finance income | | |
| Interest income on | | |
| Bank deposits | **95** | 59 |
| Loans to joint ventures and others | **148** | 49 |
| | **243** | 108 |

Notes:

(a) In accordance with the provisions of the SoC Agreement, CLP Power is required to credit, to a Rate Reduction Reserve in its financial statements, a charge of the average of one-month Hong Kong Interbank Offered Rate on the average balance of the Tariff Stabilisation Fund (Note 25(B)).

(b) Finance costs of the Group's general borrowings have been capitalised at average interest rates of 2.86% – 4.47% (2021: 2.64% – 4.32%) per annum.

## 7. Income Tax Expense

Income tax in the consolidated statement of profit or loss represents the income tax of the Company and subsidiaries and is analysed below:

| | **2022 HK$M** | 2021 HK$M |
|---|---|---|
| Current income tax expense | **1,649** | 1,720 |
| Deferred tax (credit) / expense | **(1,546)** | 245 |
| | **103** | 1,965 |

Hong Kong profits tax has been provided at the rate of 16.5% (2021: 16.5%) on the estimated assessable profits for the year. Income tax on profits assessable outside Hong Kong has been provided at the rates prevailing in the respective jurisdictions.

The income tax on the Group's profit before income tax differs from the theoretical amount that would arise using the Hong Kong profits tax rate as follows:

| | **2022 HK$M** | 2021 HK$M |
|---|---|---|
| Profit before income tax | **1,590** | 11,439 |
| Less: Share of results of joint ventures and associates, net of income tax | **(2,460)** | (1,974) |
| | **(870)** | 9,465 |
| Calculated at an income tax rate of 16.5% (2021: 16.5%) | **(144)** | 1,562 |
| Effect of different income tax rates in other countries | **(805)** | 14 |
| Income not subject to tax | **(103)** | (115) |
| Expenses not deductible for tax purposes | **1,097** | 616 * |
| Revenue adjustment for SoC not subject to tax | **100** | 195 |
| Tariff rebates deductible for tax purposes | **(118)** | – |
| Under / (over)-provision in prior years | **59** | (312)* |
| Tax losses not recognised | **17** | 5 |
| Income tax expense | **103** | 1,965 |

* The tax implication of HK$333 million of the Settlement (Note 4(b)) was treated as a non-deductible expense in 2021 with a corresponding adjustment to the prior year's tax return when the initial sales proceeds were recognised in 2015.

## 8. Dividends

| | **2022** | | 2021 | |
|---|---|---|---|---|
| | **HK$ per Share** | **HK$M** | HK$ per Share | HK$M |
| First to third interim dividends paid | **1.89** | **4,775** | 1.89 | 4,775 |
| Fourth interim dividend declared | **1.21** | **3,057** | 1.21 | 3,057 |
| | **3.10** | **7,832** | 3.10 | 7,832 |

At the Board meeting held on 27 February 2023, the Directors declared the fourth interim dividend of HK$1.21 per share (2021: HK$1.21 per share). The fourth interim dividend is not reflected as a dividend payable in the financial statements.

## 9. Earnings per Share

The earnings per share are computed as follows:

| | **2022** | 2021 |
|---|---|---|
| Earnings attributable to shareholders (HK$M) | **924** | 8,491 |
| Weighted average number of shares in issue (thousand shares) | **2,526,451** | 2,526,451 |
| Earnings per share (HK$) | **0.37** | 3.36 |

Basic and fully diluted earnings per share are the same as the Company did not have any dilutive equity instruments throughout the years ended 31 December 2022 and 2021.

## 10. Fixed Assets

### Accounting Policy

Fixed assets are stated at cost less accumulated depreciation and accumulated impairment losses. Cost includes expenditure that is directly attributable to the acquisition of the fixed asset. Cost may also include transfer from equity of any gains / losses on qualifying cash flow hedges of foreign currency purchases of fixed assets. Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. For any asset replacement, the carrying amount of the replaced part is derecognised. All other repairs and maintenance are recognised as expenses in the period in which they are incurred.

Depreciation of fixed assets is calculated, using the straight-line method, to allocate their costs to their estimated residual values over their estimated useful lives. The estimated useful lives of the fixed assets are set out below:

| | SoC fixed assets | Non-SoC fixed assets |
|---|---|---|
| Freehold land | not applicable | not depreciable |
| Cable tunnels | 100 years | 30 years |
| Buildings and civil structures at power stations | 35 years | 20 – 50 years |
| Ash lagoon | 35 years | 20 – 40 years |
| Other buildings and civil structures | 60 years | 10 – 60 years |
| Generating plants | 25 – 45 years* | 10 – 41 years |
| Overhead lines (33kV and above) | 60 years | 20 – 40 years |
| Overhead lines (below 33kV) | 45 years | 18 – 20 years |
| Cables | 60 years | 10 – 30 years |
| Switchgear and transformers | 50 years | 15 – 35 years |
| Substation miscellaneous | 25 years | 15 – 20 years |
| Meters | 15 years | 10 – 15 years |
| Other equipment, furniture and fittings, motor vehicles and marine crafts | 5 – 10 years | 2 – 30 years |

* Useful lives of certain generating plants have been extended by 10 – 20 years after mid-life refurbishments

The assets' residual values and useful lives are reviewed and adjusted, if appropriate, at the end of each reporting period. For plant under construction, no depreciation is provided until the construction is completed and the assets are ready for their intended use. An asset's carrying amount is written down immediately to its estimated recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount. The gain or loss on disposal of a fixed asset is the difference between the net sales proceeds and the carrying amount of the relevant asset, and is recognised in profit or loss.

## 10. Fixed Assets (continued)

### Critical Accounting Estimates and Judgements

(A) Assessment of the Carrying Value of Generation Assets in Australia

Given continued changes in the NEM in Australia and changes in the supply and demand equilibrium, risk is introduced in market modelling which heightens the criticality of this judgement area. As part of making these critical judgements, risks do exist in the assumptions made around supply and demand with regard to the generation assets in Australia. In certain circumstances, where demand expectations and supply side responses vary substantially from the assumptions made, significant changes in the value of the assets could eventuate.

EnergyAustralia aims to address the enormous challenges associated with climate change and is committed to Australia's transition to net zero emissions with cleaner, reliable and affordable energy for customers. EnergyAustralia is transforming its generation portfolio, investing in cleaner forms of energy, while helping customers to reduce their own emissions. When determining whether the carrying value of the generation assets is supportable, scenarios are produced which reflect a range of economic conditions that may exist over the life of the assets. The scenarios consider a broad range of outcomes including increased renewable generation, emissions reduction and carbon pricing schemes, potential regulatory changes and the impact to the useful lives of the generation assets in Australia. The scenarios are then considered in terms of likelihood to arrive at management's best estimate.

Key estimates and assumptions for assessing the carrying value of the generation assets are as follows:

- Critical judgement exists in estimating forward electricity pool prices (the forward curve), generation volumes, retail volumes, gas prices and long-term assumptions around market movements and growth rates.
- Operating costs are escalated by relevant cost drivers using activity-based costing principles. Significant uncertainties exist around fuel supply and non-contracted fuel costs are based on management's estimate of future fuel prices.

The assessment concluded that the carrying value of generation assets (HK$12.9 billion) was supported and no impairment was required. Management particularly considers the generation CGU to be highly sensitive to a change in expected long-term wholesale prices. The Group will continually assess the carrying value of the generation assets as the market and the Group transition towards a cleaner energy future.

(B) Assessment of the Carrying Values of Fixed Assets and Right-of-use Assets in Other Regions

The Group has also made substantial investments in fixed assets and right-of-use assets (mainly leasehold land and land use rights) in other regions. The Group conducts impairment reviews of these assets whenever events or changes in circumstances indicate that their carrying amounts may not be recoverable.

Determining whether an asset or a CGU should be impaired requires an estimation of the recoverable amount, which requires the Group to estimate the future cash flows, a growth rate (that reflects the economic environments in which the Group operates) and a pre-tax discount rate (that reflects the current market assessments of the time value of money and the risks specific to the asset, inclusive of climate change impact) in order to calculate the present value. Where the present value of the expected cash flows is less than the asset's carrying amount, an impairment loss may arise. During 2022, after reviewing the business environment as well as the Group's strategies and past performance of the investments, management concluded that there was no indication of impairment for fixed assets and right-of-use assets.

## 10. Fixed Assets (continued)

Fixed assets included assets under construction with book value of HK$19,580 million (2021: HK$14,744 million). The movements during the year are set out below:

| | Freehold Land HK$M | Buildings HK$M | Plant, Machinery and Equipment HK$M | Total HK$M |
|---|---|---|---|---|
| Net book value at 1 January 2021 | 1,134 | 21,988 | 125,332 | 148,454 |
| Acquisition of a subsidiary | – | 1 | 1,910 | 1,911 |
| Sale of a subsidiary | – | – | (10) | (10) |
| Additions | – | 1,304 | 11,846 | 13,150 |
| Transfers and disposals | (1) | (78) | (430) | (509) |
| Depreciation | – | (816) | (7,327) | (8,143) |
| Impairment charge | – | (44) | (286) | (330) |
| Exchange differences | (25) | 53 | (493) | (465) |
| Net book value at 31 December 2021 | 1,108 | 22,408 | 130,542 | 154,058 |
| | | | | |
| Cost | 1,215 | 37,795 | 240,885 | 279,895 |
| Accumulated depreciation and impairment | (107) | (15,387) | (110,343) | (125,837) |
| Net book value at 31 December 2021 | 1,108 | 22,408 | 130,542 | 154,058 |
| | | | | |
| Net book value at 1 January 2022 | 1,108 | 22,408 | 130,542 | 154,058 |
| Additions | 3 | 1,708 | 12,853 | 14,564 |
| Transfers and disposals | – | (32) | (288) | (320) |
| Depreciation | – | (828) | (7,019) | (7,847) |
| Loss on measurement of disposal group upon reclassification (Note 4(a)) | – | (170) | (1,452) | (1,622) |
| Reclassification to assets of disposal group (Note 4(a)) | (753) | (378) | (8,154) | (9,285) |
| Exchange differences | (62) | (275) | (1,944) | (2,281) |
| **Net book value at 31 December 2022** | **296** | **22,433** | **124,538** | **147,267** |
| | | | | |
| Cost | 374 | 38,086 | 232,606 | 271,066 |
| Accumulated depreciation and impairment | (78) | (15,653) | (108,068) | (123,799) |
| **Net book value at 31 December 2022** | **296** | **22,433** | **124,538** | **147,267** |

Apraava Energy group was reclassified as a disposal group held for sale since June 2022 and any subsequent changes in assets / liabilities (e.g. fixed assets additions) were recognised under assets / liabilities of disposal group held for sale (but not presented under individual balance sheet items). In addition, fixed assets ceased to depreciate since the reclassification. Depreciation that would have been recognised had the disposal group not been classified as held for sale would be amounted to HK$278 million (CLP's after tax share of HK$126 million).

## 11. Right-of-Use Assets

### Accounting Policy

The Group as a lessee recognises right-of-use assets at the commencement date of the lease (i.e. the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognised, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease term or the estimated useful lives of the assets.

The Group has lease contracts for land and buildings and various items of plant, machinery and equipment used in its operations. The movements during the year are set out below:

| | Prepaid Leasehold Land [a] HK$M | Land and Buildings [b] HK$M | Plant, Machinery and Equipment [b] HK$M | Total HK$M |
|---|---|---|---|---|
| Net book value at 1 January 2021 | 5,603 | 728 | 730 | 7,061 |
| Acquisition of a subsidiary | 3 | – | – | 3 |
| Additions | 456 | 19 | 19 | 494 |
| Transfers and disposals | – | – | (23) | (23) |
| Depreciation | (202) | (96) | (44) | (342) |
| Exchange differences | 4 | (33) | (34) | (63) |
| Net book value at 31 December 2021 | 5,864 | 618 | 648 | 7,130 |
| Net book value at 1 January 2022 | 5,864 | 618 | 648 | 7,130 |
| Additions | 878 | 84 | (1) | 961 |
| Transfers and disposals | – | (12) | – | (12) |
| Depreciation | (202) | (98) | (52) | (352) |
| Reclassification to assets of disposal group (Note 4(a)) | (47) | – | – | (47) |
| Exchange differences | (18) | (38) | (42) | (98) |
| **Net book value at 31 December 2022** | **6,475** | **554** | **553** | **7,582** |

Notes:

(a) Prepaid leasehold land represents upfront lease payments, including land premium, on lease of land with the tenure of 20 to 150 years.

(b) The Group has leased several assets including a water treatment plant, offices and battery storage facilities. Lease terms are negotiated on an individual basis and contain a wide range of terms and conditions. Tenures of the leases range from 1 to 30 years.

## 12. Investment Property

### Accounting Policy

Investment properties include properties that are being constructed or developed for future use as investment properties. Land held under an operating lease is accounted for as an investment property when the rest of the definition of an investment property under the accounting standard is met. Investment properties are measured initially at cost, including related transaction costs. Subsequent to initial recognition, investment properties are measured at fair value, unless they are still in the course of construction or development at the end of the reporting period and their fair value cannot be reliably measured at that time. Fair value is based on active market prices, adjusted, if necessary, for any difference in the nature, location or condition of the specific asset. If the information is not available, the Group uses alternative valuation methods such as recent prices on less active markets or discounted cash flow projections. Any gains and losses arising from changes in the fair value or from the retirement or disposal of an investment property are recognised in profit or loss in the period in which they arise.

## 12. Investment Property (continued)

| | 2022 HK$M | 2021 HK$M |
|---|---|---|
| At 1 January | **966** | 1,000 |
| Revaluation loss | **(57)** | (34) |
| At 31 December | **909** | 966 |

Investment property represents the commercial interest of the retail portion of the Laguna Mall in Hong Kong, which is leased out by the Group under operating leases.

Investment property was valued by Cushman & Wakefield Limited (Cushman), an independent qualified valuer, who holds recognised relevant professional qualifications and has recent experience in the locations and segments of the investment property valued.

Cushman has valued the property at 31 December 2022 by using the income capitalisation approach, cross-referenced with comparable market transactions. The income capitalisation approach is based on the capitalisation of the existing rental / licence income and potential reversionary income over the remaining tenure of the property from the date of valuation at appropriate capitalisation rates that by reference to the yields achieved in analysed market sales transactions and as expected by investors. The significant unobservable input is the capitalisation rates adopted for the valuation which are ranging from 3.90% to 4.15% (2021: 3.90% to 4.15%). The fair value is negatively correlated to the capitalisation rate.

The fair value measurement of the Group's investment property is categorised within Level 3 of the fair value hierarchy at 31 December 2022 and 2021.

## 13. Goodwill and Other Intangible Assets

### Accounting Policy

(A) Goodwill

Goodwill arises from the acquisition of subsidiaries and represents the excess of the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition-date fair value of any previous equity interest in the acquiree over the fair value of the identifiable net assets acquired.

For the purpose of impairment testing, goodwill acquired in a business combination is allocated to each of the CGUs, or groups of CGUs, that is expected to benefit from the synergies of the combination. Each CGU or group of CGUs to which the goodwill is allocated represents the lowest level within the entity at which the goodwill is monitored for internal management purposes. Goodwill is monitored at the operating segment level.

Goodwill impairment reviews are undertaken at least annually or if events or changes in circumstances indicate a potential impairment. The carrying value of the CGU containing the goodwill is compared to the recoverable amount, which is the higher of value in use and the fair value less costs of disposal. Any impairment is recognised immediately as an expense and cannot be subsequently reversed.

(B) Other intangible assets

Intangible assets other than goodwill are measured initially at cost or, if acquired in a business combination, fair value at the acquisition date. An intangible asset with a finite useful life is amortised on a straight-line basis over its useful life and carried at cost less accumulated amortisation and accumulated impairment losses.

## 13. Goodwill and Other Intangible Assets (continued)

### Critical Accounting Estimates and Judgements: Goodwill Impairment

The recoverable amounts of CGUs with allocated goodwill are determined based on value in use calculations, which use cash flow projections as at 31 December 2022. These cash flow projections are derived from the approved business plan and a forecast covering a period of ten years which have incorporated necessary updates. Projections for a period of greater than five years have been used on the basis that a longer projection period represents the long-dated nature of our generation and electricity supply assets and a more appropriate reflection of future cash flows from potential legislative, regulatory and structural changes in the industry.

Energy retail business in Australia

**Key assumptions for value in use calculations**

The key assumptions used in the value in use calculations reflect a combination of internal and external factors impacting gross margin, number of customer accounts and discount rates.

The assumptions impacting gross margin include:

- Retail tariffs are sensitive to regulatory changes including regulation and deregulation, and based on management estimates and expectations of current and expected market conditions arising from known and potential regulatory outcomes.
- Electricity and gas volumes for purchases and sales in the short term represent the forecast projections in EnergyAustralia's Business Plan. External information is used to verify and align internal estimates.
- Electricity and gas network (transmission and distribution) cost assumptions are based on published regulated prices. When no estimates are available, network costs are assumed to escalate by the relevant consumer price index.
- Electricity pool prices, generation volumes, dispatch levels and gas prices were derived using modelling of the electricity and gas wholesale markets. NEM modelling is prepared internally using, where possible, observable inputs. The modelling used for the electricity and gas wholesale markets is based on experience and observable market activity.

Other assumptions include:

- The number of customer accounts in the short term for electricity and gas aligns with EnergyAustralia's Business Plan.
- The cash flow projections are discounted using a pre-tax discount rate of 11.0% (2021: 9.9%). The discount rates reflect the current market assessments of the time value of money and are based on the estimated cost of capital.
- A long term growth rate of 2.5% (2021: 2.8%) is applied in the terminal value calculation after the first ten years of cash flows.

## 13. Goodwill and Other Intangible Assets (continued)

### Critical Accounting Estimates and Judgements: Goodwill Impairment (continued)

Energy retail business in Australia (continued)

**Sensitivity analysis for the energy retail CGU valuation**

When undertaking the value in use calculation of our retail CGU at year end, the results indicate that minimal headroom remains. The energy retail CGU valuation is sensitive to certain key assumptions, in particular, gross margin and customer accounts growth. Both retail tariffs and customer account growth assumptions are judgemental and have a direct impact on our CGU valuation. Movements in discount rates, whilst driven by different assumptions, would also have an impact.

- A 5% decrease in long term gross margin would decrease the recoverable amount by HK$1,533 million (A$290 million).
- A 1% decrease in long term annual customer growth rate would decrease the recoverable amount by HK$1,512 million (A$286 million).
- An increase in the discount rate of 0.5% would decrease the recoverable amount by HK$1,258 million (A$238 million).

These sensitivities are based on a change in the relevant assumption while holding other assumptions constant. In practice, this is unlikely to occur and changes in some of the assumptions may be correlated. As a result of the minimal headroom, any material adverse shift in a key assumption without any favourable valuation movement is likely to result in a potential impairment. Up to the date of this report, there were no confirmed material changes in any of the key assumptions mentioned above that would have caused the recoverable amount to be less than its carrying value.

Hong Kong electricity business

The key assumptions used in the value in use calculations are as follows:

- Goodwill arising from the acquisition of CAPCO has been allocated to CLP Power and CAPCO as a combined CGU as the acquisition is considered beneficial to the whole SoC business.
- The electricity tariff for the supply of electricity in meeting the demand of customers in Hong Kong over the forecast periods is determined with reference to the rate-setting mechanism under the SoC.
- The forecast for electricity demand is based on the load forecast to support local infrastructure development and meeting customer load requirements, maintaining safety and supply reliability, and meeting environmental requirements.
- Expenditures for the supply of electricity in meeting the forecast demand are based on committed purchase contracts where applicable, and inputs on cost trends specific to the electricity business in Hong Kong. Such forecast aligns with the projection in the Business Plan for our Hong Kong electricity business, with capital expenditures up to 2023 aligned with those forecasted in the approved Development Plan.
- Terminal value of the CGU is adopted to estimate the cash flows to be generated for the periods beyond ten years. This is expressed as a multiple of net asset values which corresponds to our return model based on fixed assets investment. The terminal value is a multiple of 1.2 times of the net asset values forecasted as at the end of 2032.
- The cash flow projections are discounted using a pre-tax discount rate of 9.69% (2021: 9.82%), or a post-tax return of 8.00% (2021: 8.00%) which reflects the SoC return rate applicable to the electricity business in Hong Kong.

Up to the date of this report, there were no reasonably possible changes in any of the key assumptions mentioned above that would have caused the recoverable amount of this CGU to be less than its carrying value.

## 13. Goodwill and Other Intangible Assets (continued)

| | Goodwill [a] HK$M | Capacity Right [b] HK$M | Others HK$M | Total HK$M |
|---|---|---|---|---|
| Net carrying value at 1 January 2021 | 14,946 | 3,901 | 1,712 | 20,559 |
| Additions | – | 16 | 496 | 512 |
| Disposals | – | – | (2) | (2) |
| Amortisation | – | (279) | (544) | (823) |
| Exchange differences | (455) | – | (81) | (536) |
| Net carrying value at 31 December 2021 | 14,491 | 3,638 | 1,581 | 19,710 |
| Cost | 21,232 | 5,743 | 6,286 | 33,261 |
| Accumulated amortisation and impairment | (6,741) | (2,105) | (4,705) | (13,551) |
| Net carrying value at 31 December 2021 | 14,491 | 3,638 | 1,581 | 19,710 |
| Net carrying value at 1 January 2022 | 14,491 | 3,638 | 1,581 | 19,710 |
| Additions | – | 4 | 326 | 330 |
| Write-offs | – | – | (185) | (185) |
| Amortisation | – | (280) | (425) | (705) |
| Loss on measurement of disposal group upon reclassification (Note 4(a)) | (13) | – | – | (13) |
| Exchange differences | (590) | – | (96) | (686) |
| **Net carrying value at 31 December 2022** | **13,888** | **3,362** | **1,201** | **18,451** |
| Cost | 20,174 | 5,747 | 5,683 | 31,604 |
| Accumulated amortisation and impairment | (6,286) | (2,385) | (4,482) | (13,153) |
| **Net carrying value at 31 December 2022** | **13,888** | **3,362** | **1,201** | **18,451** |

Notes:

(a) Goodwill mainly arose from the acquisitions of energy retail business in Australia of HK$8,271 million (2021: HK$8,854 million) and the acquisition of CAPCO under Hong Kong electricity business of HK$5,545 million (2021: HK$5,545 million).

(b) Capacity right represents the right to use 50% of the pumped storage capacity of Phase I of the Guangzhou Pumped Storage Power Station in Conghua, Guangzhou and the corresponding right to use the associated transmission facilities until 2034.

## 14. Interests in and Loans to Joint Ventures Accounting Policy No. 3(B)

The table below lists the material joint ventures of the Group at 31 December 2022:

| Name | % of Ownership Interest at 31 December 2022 | 2021 | Place of Incorporation / Business | Principal Activity |
|---|---|---|---|---|
| Apraava Energy Private Limited (Note 4(a)) | 50 | 60 * | India | Generation of electricity and power projects investment holding |
| CSEC Guohua International Power Company Limited (CSEC Guohua) [a] | 30 | 30 | Mainland China | Generation of electricity |
| Hong Kong LNG Terminal Limited (HKLTL) [b] | 49 | 49 | Hong Kong | Development, construction, operation, maintenance and owning of LNG terminal and provision of related services |
| OneEnergy Taiwan Ltd (OneEnergy Taiwan) [c] | 50 | 50 | British Virgin Islands / Taiwan | Investment holding |
| ShenGang Natural Gas Pipeline Company Limited (SNGPC) [d] | 40 | 40 | Mainland China | Natural gas transportation |

* Apraava Energy was a 60% indirectly owned subsidiary of the Company at 31 December 2021

Notes:

(a) Registered as Sino-Foreign Joint Stock Company under People's Republic of China (PRC) law

(b) HKLTL is 70% owned by CAPCO which is 70% owned by CLP Power

(c) OneEnergy Taiwan indirectly owns 40% interest in Ho-Ping Power Company

(d) Registered as Sino-Foreign Equity Joint Venture Enterprise under PRC law

More detailed information of our joint ventures can be found on "Our Portfolio" on pages 316 to 319 of the Annual Report.

## 14. Interests in and Loans to Joint Ventures (continued)

Summarised financial information of joint ventures and the Group's share of results and net assets are as follows:

| | Apraava Energy (Note 4(a)) HK$M | CSEC Guohua HK$M | HKLTL HK$M | OneEnergy Taiwan HK$M | SNGPC HK$M | Fang-chenggang (Note 5(e)) HK$M | Others HK$M | Total HK$M |
|---|---|---|---|---|---|---|---|---|
| **For the year ended 31 December 2022** | | | | | | | | |
| Revenue | **–** | **16,499** | **8** | **–** | **1,102** | **3,934** | **4,545** | **26,088** |
| Depreciation and amortisation | **–** | **(1,447)** | **–** | **–** | **(194)** | **(229)** | **(1,642)** | **(3,512)** |
| Interest income | **–** | **8** | **–** | **–** | **6** | **7** | **5** | **26** |
| Interest expense | **–** | **(181)** | **–** | **–** | **(9)** | **(175)** | **(138)** | **(503)** |
| Other expenses | **–** | **(14,064)** | **(8)** | **(3)** | **(251)** | **(3,648)** | **(2,474)** | **(20,448)** |
| Share of results of joint ventures | **–** | **–** | **–** | **6** | **–** | **–** | **(1)** | **5** |
| Profit / (loss) before income tax | **–** | **815** | **–** | **3** | **654** | **(111)** | **295** | **1,656** |
| Income tax (expense) / credit | **–** | **(171)** | **–** | **–** | **(169)** | **33** | **(82)** | **(389)** |
| Profit / (loss) for the year | **–** | **644** | **–** | **3** | **485** | **(78)** | **213** | **1,267** |
| Non-controlling interests | **–** | **(306)** | **–** | **–** | **–** | **–** | **–** | **(306)** |
| Profit / (loss) for the year attributable to shareholders | **–** | **338** | **–** | **3** | **485** | **(78)** | **213** | **961** |
| Profit / (loss) for the year | **–** | **644** | **–** | **3** | **485** | **(78)** | **213** | **1,267** |
| Other comprehensive income | **–** | **–** | **–** | **–** | **–** | **–** | **(3)** | **(3)** |
| Total comprehensive income | **–** | **644** | **–** | **3** | **485** | **(78)** | **210** | **1,264** |
| Group's share | | | | | | | | |
| Profit / (loss) for the year attributable to shareholders | **–** | **102** | **–** | **2** | **194** | **(54)** | **81** | **325** |
| Other comprehensive income | **–** | **–** | **–** | **–** | **–** | **–** | **(1)** | **(1)** |
| Total comprehensive income | **–** | **102** | **–** | **2** | **194** | **(54)** | **80** | **324** |
| Dividend income from joint ventures | **–** | **21** | **–** | **100** | **160** | **3** | **111** | **395** |
| For the year ended 31 December 2021 | | | | | | | | |
| Revenue | – | 14,433 | 1 | – | 1,115 | 4,395 | 7,248 | 27,192 |
| Depreciation and amortisation | – | (1,411) | – | – | (194) | (250) | (1,653) | (3,508) |
| Interest income | – | 11 | – | – | 2 | 12 | 3 | 28 |
| Interest expense | – | (199) | – | – | (17) | (232) | (133) | (581) |
| Other expenses | – | (14,151) | (1) | (3) | (177) | (4,106) | (6,293) | (24,731) |
| Share of results of joint ventures | – | – | – | 252 | – | – | (29) | 223 |
| (Loss) / profit before income tax | – | (1,317) | – | 249 | 729 | (181) | (857) | (1,377) |
| Income tax credit / (expense) | – | 393 | – | – | (184) | 46 | 54 | 309 |
| (Loss) / profit for the year | – | (924) | – | 249 | 545 | (135) | (803) | (1,068) |
| Non-controlling interests | – | 431 | – | – | – | – | – | 431 |
| (Loss) / profit for the year attributable to shareholders | – | (493) | – | 249 | 545 | (135) | (803) | (637) |
| (Loss) / profit for the year | – | (924) | – | 249 | 545 | (135) | (803) | (1,068) |
| Other comprehensive income | – | – | – | – | – | – | (20) | (20) |
| Total comprehensive income | – | (924) | – | 249 | 545 | (135) | (823) | (1,088) |
| Group's share | | | | | | | | |
| (Loss) / profit for the year attributable to shareholders | – | (148) | – | 124 | 218 | (95) | (196) | (97) |
| Other comprehensive income | – | – | – | – | – | – | (4) | (4) |
| Total comprehensive income | – | (148) | – | 124 | 218 | (95) | (200) | (101) |
| Dividend income from joint ventures | – | 13 | – | 501 | 91 | 46 | 230 | 881 |

## 14. Interests in and Loans to Joint Ventures (continued)

| | Apraava Energy (Note 4(a)) HK$M | CSEC Guohua HK$M | HKLTL HK$M | OneEnergy Taiwan HK$M | SNGPC HK$M | Fang-chenggang (Note 5(e)) HK$M | Others HK$M | Total HK$M |
|---|---|---|---|---|---|---|---|---|
| **At 31 December 2022** | | | | | | | | |
| Non-current assets | **10,154** | **18,040** | **2,777** | **2,793** | **3,348** | **–** | **8,341** | **45,453** |
| Current assets | | | | | | | | |
| Cash and cash equivalents | **1,872** | **1,484** | **25** | **14** | **331** | **–** | **585** | **4,311** |
| Other current assets | **4,774** | **2,271** | **11** | **2** | **46** | **–** | **1,349** | **8,453** |
| | **6,646** | **3,755** | **36** | **16** | **377** | **–** | **1,934** | **12,764** |
| Current liabilities | | | | | | | | |
| Financial liabilities [a] | **(2,353)** | **(2,421)** | **(38)** | **–** | **(40)** | **–** | **(2,948)** | **(7,800)** |
| Other current liabilities [a] | **(2,789)** | **(1,690)** | **(171)** | **(1)** | **(243)** | **–** | **(2,024)** | **(6,918)** |
| | **(5,142)** | **(4,111)** | **(209)** | **(1)** | **(283)** | **–** | **(4,972)** | **(14,718)** |
| Non-current liabilities | | | | | | | | |
| Financial liabilities [a] | **(4,713)** | **(2,174)** | **–** | **–** | **(74)** | **–** | **(738)** | **(7,699)** |
| Shareholders' loans | **–** | **–** | **(2,604)** | **–** | **–** | **–** | **(36)** | **(2,640)** |
| Other non-current liabilities [a] | **(732)** | **(2,111)** | **–** | **–** | **(649)** | **–** | **(18)** | **(3,510)** |
| | **(5,445)** | **(4,285)** | **(2,604)** | **–** | **(723)** | **–** | **(792)** | **(13,849)** |
| Non-controlling interests | **–** | **(5,881)** | **–** | **–** | **–** | **–** | **–** | **(5,881)** |
| Net assets | **6,213** | **7,518** | **–** | **2,808** | **2,719** | **–** | **4,511** | **23,769** |
| Group's share of net assets | **3,106** | **2,255** | **–** | **1,404** | **1,087** | **–** | **1,994** | **9,846** |
| Goodwill | **–** | **–** | **–** | **–** | **–** | **–** | **35** | **35** |
| Interests in joint ventures | **3,106** | **2,255** | **–** | **1,404** | **1,087** | **–** | **2,029** | **9,881** |
| Loans to joint ventures | **–** | **–** | **1,850** [b] | **–** | **–** | **–** | **17** | **1,867** |
| | **3,106** | **2,255** | **1,850** | **1,404** | **1,087** | **–** | **2,046** | **11,748** |
| At 31 December 2021 | | | | | | | | |
| Non-current assets | – | 20,691 | 2,105 | 3,302 | 3,848 | 7,811 | 8,851 | 46,608 |
| Current assets | | | | | | | | |
| Cash and cash equivalents | – | 1,647 | 1 | 7 | 251 | 473 | 297 | 2,676 |
| Other current assets | – | 1,811 | 1 | 2 | 75 | 1,085 | 2,494 | 5,468 |
| | – | 3,458 | 2 | 9 | 326 | 1,558 | 2,791 | 8,144 |
| Current liabilities | | | | | | | | |
| Financial liabilities [a] | – | (3,528) | – | – | (169) | (642) | (2,824) | (7,163) |
| Other current liabilities [a] | – | (1,942) | (517) | – | (276) | (758) | (3,123) | (6,616) |
| | – | (5,470) | (517) | – | (445) | (1,400) | (5,947) | (13,779) |
| Non-current liabilities | | | | | | | | |
| Financial liabilities [a] | – | (2,645) | – | – | (146) | (4,917) | (736) | (8,444) |
| Shareholders' loans | – | – | (1,590) | – | – | – | (30) | (1,620) |
| Other non-current liabilities [a] | – | (1,934) | – | – | (702) | (58) | (30) | (2,724) |
| | – | (4,579) | (1,590) | – | (848) | (4,975) | (796) | (12,788) |
| Non-controlling interests | – | (6,150) | – | – | – | – | – | (6,150) |
| Net assets | – | 7,950 | – | 3,311 | 2,881 | 2,994 | 4,899 | 22,035 |
| Group's share of net assets | – | 2,385 | – | 1,655 | 1,152 | 2,095 | 2,152 | 9,439 |
| Goodwill | – | – | – | – | – | – | 35 | 35 |
| Interests in joint ventures | – | 2,385 | – | 1,655 | 1,152 | 2,095 | 2,187 | 9,474 |
| Loans to joint ventures | – | – | 1,113 [b] | – | – | – | 15 | 1,128 |
| | – | 2,385 | 1,113 | 1,655 | 1,152 | 2,095 | 2,202 | 10,602 |

## 14. Interests in and Loans to Joint Ventures (continued)

Notes:

(a) Financial liabilities exclude trade and other payables and provisions which are included in other current and non-current liabilities.

(b) Pursuant to agreement between shareholders of HKLTL, shareholders' loan facilities are provided to HKLTL by the shareholders pro-rata to their shareholdings to finance the construction of the LNG terminal. The loans to HKLTL are unsecured, carry interest at rates which are benchmarked to market interest rates. Instalment repayment of the loans will commence after the commissioning of the LNG terminal with final maturity at the end of the related asset lives of the LNG terminal. At 31 December 2022, outstanding committed shareholder's loan facilities by the Group as 70% shareholder of HKLTL amounted to HK$296 million (2021: HK$518 million).

The expected credit loss of loans to joint ventures is close to zero.

| | **2022 HK$M** | 2021 HK$M |
|---|---|---|
| Share of capital commitments | **394** | 419 |
| Share of lease and other commitments * | **3,796** | 3,800 |
| Share of contingent liabilities | **–** | 59 |

* Representing the share of lease and other commitments in relation to the use and operation of a floating storage and regasification unit and related support vessels

Following the deconsolidation of Apraava Energy in December 2022, CLP's share of Apraava Energy's commitments and contingent liabilities, if any, is presented in this note.

The Group's capital commitments in relation to its interests in joint ventures are disclosed in Note 31(C).

## 15. Interests in Associates Accounting Policy No. 3(B)

The table below lists the associates of the Group at 31 December 2022:

| **Name** | **% of Ownership Interest at 31 December 2021 and 2022** | **Place of Incorporation / Business** | **Principal Activity** |
|---|---|---|---|
| Guangdong Nuclear Power Joint Venture Company, Limited (GNPJVC) [(a)] | 25 | Mainland China | Generation of electricity |
| Yangjiang Nuclear Power Co., Ltd. (Yangjiang Nuclear) [(a)] | 17 | Mainland China | Generation of electricity |

More detailed information of our associates can be found on "Our Portfolio" on page 316 of the Annual Report.

## 15. Interests in Associates (continued)

Summarised financial information of the associates and the Group's share of results and net assets are as follows:

| | GNPJVC HK$M | Yangjiang Nuclear [(b)] HK$M | Total HK$M |
|---|---|---|---|
| **For the year ended 31 December 2022** | | | |
| Revenue | **8,524** | **21,809** | **30,333** |
| Profit and total comprehensive income | **4,084** | **6,550** | **10,634** |
| Group's share of profit and total comprehensive income | **1,021** | **1,114** | **2,135** |
| Dividend income from associates | **41** | **1,117** | **1,158** |
| For the year ended 31 December 2021 | | | |
| Revenue | 8,183 | 21,668 | 29,851 |
| Profit and total comprehensive income | 4,050 | 6,228 | 10,278 |
| Group's share of profit and total comprehensive income | 1,012 | 1,059 | 2,071 |
| Dividend income from associates | 1,959 | 728 | 2,687 |
| **At 31 December 2022** | | | |
| Non-current assets | **4,073** | **91,007** | **95,080** |
| Current assets | **10,498** | **12,297** | **22,795** |
| Current liabilities | **(2,134)** | **(18,372)** | **(20,506)** |
| Non-current liabilities | **(5,252)** | **(42,027)** | **(47,279)** |
| Net assets | **7,185** | **42,905** | **50,090** |
| Group's share of net assets | **1,796** | **7,294** | **9,090** |
| At 31 December 2021 | | | |
| Non-current assets | 6,973 | 103,589 | 110,562 |
| Current assets | 7,410 | 14,033 | 21,443 |
| Current liabilities | (5,946) | (21,643) | (27,589) |
| Non-current liabilities | (5,154) | (49,229) | (54,383) |
| Net assets | 3,283 | 46,750 | 50,033 |
| Group's share of net assets | 821 | 7,948 | 8,769 |

At 31 December 2022, the Group's share of capital commitments of its associates was HK$638 million (2021: HK$782 million).

Notes:

(a) Registered as Sino-Foreign Equity Joint Venture Enterprise under PRC law

(b) The share of results of Yangjiang Nuclear included amortisation of the fair value adjustment on fixed assets

## 16. Derivative Financial Instruments

### Accounting Policy

A derivative is initially recognised at fair value on the date a derivative contract is entered into and is subsequently remeasured at fair value. The method of recognising the resulting gain or loss depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged. Fair value gain or loss arising from derivatives not designated or not qualified for hedge accounting are recognised immediately in profit or loss.

The Group designates certain derivatives as either fair value hedges, which are hedges of the fair value of recognised financial assets or financial liabilities or firm commitments (e.g. fixed interest rate loans and foreign currency trade receivables) or cash flow hedges, which are hedges of the cash flows of recognised financial assets or financial liabilities or highly probable forecast transactions (e.g. floating interest rate loans and future purchases of fuels denominated in US dollar).

The Group documents at the inception of the transaction the intended relationship between hedging instruments and hedged items, as well as its risk management objectives and strategy for undertaking hedge transactions. The Group also documents its assessment, both at hedge inception and on an ongoing basis, of whether the hedging relationship meets the hedge effectiveness requirements.

(A) Fair value hedges

Changes in the fair values of derivatives that are designated and qualify as fair value hedges are recognised in profit or loss, which offset any changes in the fair values recognised in profit or loss of the corresponding hedged asset or liability that are attributable to the hedged risk and achieve the overall hedging result.

(B) Cash flow hedges

The effective portion of changes in the fair values of derivatives that are designated and qualify as cash flow hedges is recognised in other comprehensive income. The ineffective portion is recognised immediately in profit or loss.

Amounts accumulated in equity are reclassified to profit or loss in the periods when the hedged items affect profit or loss. Such reclassification from equity will offset the effect on profit or loss of the corresponding hedged item to achieve the overall hedging result. However, when the highly probable forecast transaction that is hedged results in the recognition of a non-financial asset (for example, inventory or fixed assets), the gains and losses previously deferred in equity are transferred from equity and included in the initial measurement of the cost of the asset at the time of acquisition. The deferred amounts are ultimately recognised in fuel costs in the case of inventory or in depreciation in the case of fixed assets.

For cash flow hedges affected by the Interest Rate Benchmark Reform (the Reform), the Group retains the cumulative gain or loss in the cash flow hedge reserve, even though there is uncertainty arising from the Reform with respect to the timing and amount of the cash flows of the hedged items. Should the Group consider that the hedged future cash flows are no longer expected to occur due to reasons other than the Reform, the cumulative gain or loss will be immediately reclassified to profit or loss.

When a hedging instrument expires, or is sold or terminated, or when a hedge no longer meets the criteria for hedge accounting, hedge accounting is discontinued prospectively. Any cumulative gain or loss remains in equity at that time is accounted for according to the nature of the underlying transactions (as discussed above) once the hedged cash flow occurs. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that has been recorded in equity is reclassified to profit or loss immediately.

## 16. Derivative Financial Instruments (continued)

### Accounting Policy (continued)

(C) Costs of hedging

Time value of options, forward element of forward contracts and foreign currency basis spread of financial instruments may be separated and excluded from the designated hedging instruments. In such case, the Group treats the excluded elements as costs of hedging. The fair value changes of these elements are recognised in a separate component of equity. For time-period related hedged items, these elements at the date of designation (to the extent that it relates to the hedged item) are amortised on a systematic and rational basis to profit or loss over the hedging period. For transaction related hedged items, the cumulative change of these elements is included in the initial carrying amount of any non-financial asset recognised when the hedged transaction occurs or is recognised in profit or loss if the hedged transaction affects profit or loss.

(D) Rebalancing of hedge relationships

If the hedge ratio for risk management purposes is no longer optimal but the risk management objective remains unchanged and the hedge continues to qualify for hedge accounting, the hedge relationship will be rebalanced by adjusting either the volume of the hedging instrument or the volume of the hedged item so that the hedge ratio aligns with the ratio used for risk management purposes. Any hedge ineffectiveness is calculated and accounted for in profit or loss at the time of the hedge relationship rebalancing.

| | **2022** | | 2021 | |
|---|---|---|---|---|
| | **Assets HK$M** | **Liabilities HK$M** | Assets HK$M | Liabilities HK$M |
| Cash flow hedges | | | | |
| Forward foreign exchange contracts and options | **3** | **207** | 75 | 126 |
| Cross currency interest rate swaps | **33** | **1,011** | 51 | 987 |
| Interest rate swaps | **59** | **–** | – | 80 |
| Energy contracts | **3,152** | **599** | 2,256 | 314 |
| Fair value hedges | | | | |
| Cross currency interest rate swaps | **6** | **377** | 129 | 59 |
| Interest rate swaps | **–** | **80** | 14 | 7 |
| Not qualified for hedge accounting | | | | |
| Forward foreign exchange contracts | **20** | **83** | 82 | 61 |
| Interest rate swaps | **–** | **–** | 5 | – |
| Energy contracts | **777** | **4,358** | 870 | 1,032 |
| | **4,050** | **6,715** | 3,482 | 2,666 |
| Current | **2,107** | **5,310** | 1,475 | 1,302 |
| Non-current | **1,943** | **1,405** | 2,007 | 1,364 |
| | **4,050** | **6,715** | 3,482 | 2,666 |

At 31 December 2022, the contractual maturity profile of the hedging instruments from the end of the reporting period is summarised below:

| | |
|---|---|
| Forward foreign exchange contracts | Up to 4 years |
| Cross currency interest rate swaps | Up to 14 years |
| Interest rate swaps | Up to 10 years |
| Energy contracts | Up to 8 years |

## 17. Other Non-current Assets

### Accounting Policy

(A) Investments

Investments classified at fair value through other comprehensive income are initially recognised at fair value and are elected to present subsequent changes in fair value in other comprehensive income. The gains or losses on such investments are never reclassified to profit or loss and no impairment is recognised in profit or loss. Cumulative gains and losses recognised in other comprehensive income are transferred to retained profits on disposal of the investment. Dividends on the investments are recognised in profit or loss unless they clearly represent a recovery of part of the cost of the investment, in which case they are deducted from the carrying amounts of the investments directly.

Investments classified at fair value through profit or loss (mainly investments in funds) are initially recognised at fair value and subsequent changes in fair value are recognised in profit or loss.

(B) Contract acquisition costs

Incremental costs to obtain a contract with a customer are capitalised if they are expected to be recoverable. Costs capitalised are amortised on a straight-line basis over the expected benefit periods of the contracts. Non-incremental costs, i.e. costs that would have been incurred regardless of whether the contract is obtained, are expensed when incurred.

| | **2022 HK$M** | 2021 HK$M |
|---|---|---|
| Investments at fair value through other comprehensive income | **300** | 373 |
| Investments at fair value through profit or loss | **678** | 542 |
| Prepayment for purchase of a property [(a)] | **676** | 338 |
| Contract acquisition costs | **220** | 180 |
| Defined benefit asset [(b)] | **217** | 221 |
| Service concession receivables | **–** | 234 |
| Others | **352** | 415 |
| | **2,443** | 2,303 |

Notes:

(a) On 6 December 2021, the Group and Far East Consortium Limited entered into a sale and purchase agreement to purchase a target company which currently owns a land situated in Kai Tak, Hong Kong, for a development divided into a hotel portion and a non-industrial portion (including an office portion) ("the Office Portion"). At completion, the target company will hold only the Office Portion which will become CLP's new Head Office. A coordination agreement was signed on the same date to facilitate the construction and development of the Office Portion directed by CLP. The consideration under the sale and purchase agreement amounted to HK$3.38 billion subject to post completion adjustments including additional costs in respect of any add-on designs required by the Group. At 31 December 2022, the remaining amount is included in capital commitments under Note 31(A). The transaction is expected to be completed by 2024.

(b) The most recent actuarial valuation of the defined benefit plans for the Group's Australian subsidiaries, as at 31 December 2022, was prepared by Mr Mark Samuels of Mercer Consulting (Australia) Pty Ltd, a fellow of the Institute of Actuaries of Australia. In respect of the plans for the Group's Australian subsidiaries: (i) the principal actuarial assumptions used include discount rate of 5.2% (2021: 2.9%), long-term salary increase rate of 2.5% to 3.3% (2021: 2.5%) and pension increase rate of 2.5% to 3.5% (2021: 2.0%); (ii) the level of funding is 160% (2021: 145%).

The costs for these defined benefit plans represent an immaterial portion to the Group's total retirement benefit costs. For the year ended 31 December 2022, the associated costs represented 1.0% (2021: 1.5%) of the Group's total retirement benefit costs.

## 18. Properties for Sale / under Development

**Accounting Policy**

Properties for sale / under development comprises leasehold land and building and are carried at the lower of cost and net realisable value. Properties for sale / under development are included in current assets when it is expected to be realised or is intended for sales in the normal operating cycle.

On 18 December 2017, the Group and Sino Land Company Limited (Sino Land) agreed to collaborate on redeveloping the Group's former headquarters at Argyle Street for residential purposes and to preserve the Clock Tower building for community use. Under the development arrangement, Sino Land is fully responsible for all development costs such as land premium, construction costs, professional fees etc. and paid a non-refundable upfront payment of HK$3 billion to the Group.

The arrangement entered into by the Group and Sino Land does not involve an establishment of a separate legal entity and is considered as a joint operation under HKFRS 11 Joint Arrangements. The non-refundable upfront payment forms part of the proceeds from the property development and is recorded as deferred revenue (Note 22(e)). When legal titles of the units in the developed property are passed to the purchasers, deferred revenue and the percentage share of the sale proceeds to which the Group is entitled will be credited to the profit or loss as revenue, while cost of properties will be charged to the profit or loss as cost of sales.

The residential property development was completed in November 2022 and the balance was transferred from properties under development to properties for sale. Cost of properties of HK$325 million (2021: nil) and deferred revenue of HK$320 million (2021: nil) were recognised to profit or loss following the completion of sales of certain properties in 2022. The sale of residential units is undergoing.

## 19. Trade and Other Receivables

### Accounting Policy

Trade and other receivables are recognised initially at transaction price and are subsequently stated at amortised cost using the effective interest method, less allowances for expected credit losses. The Group measures the loss allowance for its trade receivables at an amount equal to the lifetime expected credit losses. The amount of expected credit losses (or reversal) that is required to adjust the loss allowance at the reporting date to its recognised amount is recognised in profit or loss, as an impairment loss or a reversal of an impairment loss. Trade and other receivables are written off (either partially or in full) when there is no reasonable expectation of recovery.

Expected credit losses are a probability-weighted estimate of credit losses (i.e. the present value of all cash shortfalls) over the expected life of the trade receivables. Expected credit losses on trade receivables are calculated by using the provision matrix approach. Trade receivables are categorised by common risk characteristics that are representative of the customers' abilities to pay all amounts due in accordance with the contractual terms. The provision matrix is determined based on historical observed default rates over the expected life of the trade receivables and is adjusted for forward-looking estimates. At every reporting date the historical observed default rates are updated and changes in the forward-looking estimates are analysed.

If there is no significant increase in credit risk since initial recognition, impairment on other receivables is measured at 12-month expected credit losses. If a significant increase in credit risk has occurred, then impairment is measured as lifetime expected credit losses.

### Critical Accounting Estimates and Judgements: Recoverability of Trade Receivables

Provision for expected credit losses is made when the Group does not expect to collect all amounts due. The provision is determined by grouping together trade debtors with similar risk characteristics and collectively or individually assessing them for likelihood of recovery. The provision reflects lifetime expected credit losses i.e. possible default events over the expected life of the trade receivables, weighted by the probability of that default occurring. Judgement has been applied in determining the level of provision for expected credit losses, taking into account the credit risk characteristics of customers and the likelihood of recovery assessed on a combination of collective and individual basis as relevant. While the provision is considered appropriate, changes in estimation basis or in economic conditions could lead to a change in the level of provision recorded and consequently on the charge or credit to profit or loss.

| | **2022**<br>**HK$M** | 2021<br>HK$M |
|---|---|---|
| Trade receivables [a] | **10,504** | 11,707 * |
| Deposits, prepayments and other receivables [b] | **6,499** | 2,526 |
| Dividend receivables from | | |
| Joint ventures | **76** | 190 |
| An associate | **228** | 975 |
| Current accounts with [c] | | |
| Joint ventures | **6** | 5 |
| An associate | **1** | 1 |
| | **17,314** | 15,404 |

* Included Apraava Energy's renewable receivables of HK$883 million and disputed receivables from the offtakers of Jhajjar Power Limited (JPL) of HK$351 million in which the Group considered JPL to have a strong case.

## 19. Trade and Other Receivables (continued)

Notes:

(a) Trade receivables

The ageing analysis of the trade receivables at 31 December based on invoice date is as follows:

| | **2022 HK$M** | 2021 HK$M |
|---|---|---|
| 30 days or below * | **9,257** | 9,285 |
| 31 – 90 days | **585** | 670 |
| Over 90 days | **662** | 1,752 |
| | **10,504** | 11,707 |

* Including unbilled revenue

**Movements in provision for impairment**

| | **2022 HK$M** | 2021 HK$M |
|---|---|---|
| Balance at 1 January | **1,456** | 1,602 |
| Provision for impairment | **260** | 246 |
| Receivables written off during the year as uncollectible | **(331)** | (332) |
| Amounts reversed | **(5)** | (2) |
| Sale of subsidiaries # | **(419)** | – |
| Exchange differences | **(109)** | (58) |
| Balance at 31 December | **852** | 1,456 |

\# Included the amount reclassified to assets of disposal group held for sale before completion of the Sell Down (Note 4(a))

**Credit risk management**

The Group has no significant concentrations of credit risk with respect to the trade receivables in Hong Kong and Australia as their customer bases are widely dispersed in different sectors and industries. The Group has established credit policies for customers in each of its retail businesses.

In Hong Kong, electricity bills are due within two weeks after issuance. To limit the credit risk exposure, the Group has a policy to require cash deposits or bank guarantees from customers for an amount determined from time to time by reference to the usage of the customers, and in the normal course of events will not exceed the highest expected charge for 60 days. For all the deposits held, customers are paid a floating market interest rate equivalent to the HSBC bank saving rate. At 31 December 2022, such cash deposits amounted to HK$6,551 million (2021: HK$6,251 million) and the bank guarantees stood at HK$867 million (2021: HK$835 million). The customers' deposits are treated on the statement of financial position as current liabilities on the basis that they are repayable on demand.

In Australia, customers are allowed to settle their electricity bills in no more than 45 days after issue, while certain large commercial customers can range up to 90 days. EnergyAustralia has policies in place to ensure that sales of products and services are made to retail customers (including residential and commercial customers) of an appropriate credit quality and collectability is reviewed on an ongoing basis. At 31 December 2022, EnergyAustralia held cash deposits of HK$82 million (2021: nil) from Commercial and Industrial customers as security in relation to outstanding receivable balances.

Trade receivables arising from sales of electricity to the offtakers in Mainland China, which are mainly state-owned enterprises, are due for settlement within 30 to 90 days after bills issuance. Management has closely monitored the credit qualities and the collectability of these trade receivables.

## 19. Trade and Other Receivables (continued)

Notes (continued):

(a) Trade receivables (continued)

**Expected credit losses**

For trade receivables relating to accounts which are long overdue with significant amounts or known insolvencies or non-response to collection activities, they are assessed individually for impairment allowance. CLP Power and EnergyAustralia determine the provision for expected credit losses by grouping together trade receivables with similar credit risk characteristics and collectively assessing them for likelihood of recovery, taking into account prevailing economic conditions and forward looking assumptions.

CLP Power

CLP Power classifies its trade receivables by nature of customer accounts. These include active accounts and terminated accounts.

| | Lifetime Expected Credit Loss Rate | Gross Carrying Amount HK$M | Lifetime Expected Credit Loss HK$M | Net Carrying Amount HK$M |
|---|---|---|---|---|
| **At 31 December 2022** | | | | |
| Active accounts | | | | |
| Provision on individual basis | **100%** | **8** | **(6)** | **2** |
| Provision on collective basis | **0%** * | **2,662** | **(12)** | **2,650** |
| Terminated accounts | | | | |
| Provision on individual basis | **100%** | **5** | **(5)** | **–** |
| Provision on collective basis | **24%** | **4** | **(1)** | **3** |
| | | **2,679** | **(24)** | **2,655** |
| At 31 December 2021 | | | | |
| Active accounts | | | | |
| Provision on individual basis | 100% | 14 | (8) | 6 |
| Provision on collective basis | 0% * | 2,203 | (9) | 2,194 |
| Terminated accounts | | | | |
| Provision on individual basis | 100% | 3 | (3) | – |
| Provision on collective basis | 28% | 6 | (2) | 4 |
| | | 2,226 | (22) | 2,204 |

* Expected credit loss is close to zero as these trade receivables are mostly secured by cash deposits or bank guarantees from customers and have no recent history of default.

## 19. Trade and Other Receivables (continued)

Notes (continued):

(a) Trade receivables (continued)

**Expected credit losses (continued)**

EnergyAustralia

EnergyAustralia categorises its trade receivables based on their ageing. EnergyAustralia recognises lifetime expected credit losses for receivables by assessing future cash flows for each group of trade receivables including a probability weighted amount determined by evaluating a range of possible outcomes based on twelve month rolling historical credit loss experience by customer segment, geographical region, tenure and type of customer and applying that weighting to the receivables held at year end. The determining factor impacting collectability is customer attributes. The impact of economic factors, both current and future, is considered in assessing the likelihood of recovery from customers.

| | Weighted Average Lifetime Expected Credit Loss Rate | Gross Carrying Amount HK$M | Lifetime Expected Credit Loss HK$M | Net Carrying Amount HK$M |
|---|---|---|---|---|
| **At 31 December 2022** | | | | |
| Current | **0%** | **3,998** | **(15)** | **3,983** |
| 1 – 30 days | **6%** | **432** | **(26)** | **406** |
| 31 – 60 days | **13%** | **228** | **(30)** | **198** |
| 61 – 90 days | **18%** | **168** | **(30)** | **138** |
| Over 90 days | **57%** | **1,210** | **(691)** | **519** |
| | | **6,036** | **(792)** | **5,244** |
| At 31 December 2021 | | | | |
| Current | 1% | 3,290 | (22) | 3,268 |
| 1 – 30 days | 7% | 408 | (29) | 379 |
| 31 – 60 days | 18% | 221 | (39) | 182 |
| 61 – 90 days | 22% | 139 | (31) | 108 |
| Over 90 days | 63% | 1,371 | (866) | 505 |
| | | 5,429 | (987) | 4,442 |

Mainland China

As at 31 December 2022, the Group had total receivables of HK$2,111 million (2021: HK$2,302 million) relating to unpaid Renewable National Subsidies. The application, approval and settlement of the Renewable National Subsidy are governed by the relevant policies issued by the Central People's Government. All of the relevant wind and solar projects are qualified for renewable energy subsidy in accordance with the prevailing government policies. There is no due date for the settlement of Renewable National Subsidies as the collection is subject to the allocation of funds by relevant government authorities to local grid companies, which takes a relatively long time for settlement. The expected credit loss is close to zero as continuous settlements have been noted with no history of default and the subsidy is funded by the Renewable Energy Development Fund set up and administered by the Ministry of Finance.

(b) At 31 December 2022, other receivables mainly represented EnergyAustralia's futures margin account of HK$3.4 billion (2021: HK$1.1 billion) and the consideration receivable from the sale of Fangchenggang (Note 5(e)) of HK$1,684 million (2021: nil), 90% of which was received in February 2023 with the remaining to be received in the first half of 2023.

(c) The current accounts with joint ventures and an associate are unsecured, interest free and have no fixed repayment terms.

## 20. Bank Balances, Cash and Other Liquid Funds

### Accounting Policy

Cash and cash equivalents comprise cash at banks and on hand, demand deposits with banks and other financial institutions, short-term highly liquid investments that are readily convertible to cash, subjected to insignificant risk of change in value and with a maturity of three months or less from date of investment, and bank overdrafts. Bank overdrafts are shown within borrowings in current liabilities on the statement of financial position.

| | **2022 HK$M** | 2021 HK$M |
|---|---|---|
| Trust accounts (Significant Accounting Policy No. 2(A)) | **–** | 299 |
| Deposits with banks with maturities of less than three months | **1,289** | 5,907 |
| Cash at banks and on hand | **2,962** | 1,993 |
| Cash and cash equivalents | **4,251** | 8,199 |
| Bank deposits with maturities of more than three months | **2** | 61 |
| Restricted cash* | **33** | – |
| Short-term deposits and restricted cash | **35** | 61 |
| Bank balances, cash and other liquid funds | **4,286** | 8,260 |

* Represents restricted bank balances held by the stakeholders of the properties held for sale (Note 18) which can be released to stakeholders after relevant conditions are met

The bank balances, cash and other liquid funds are denominated in the following currencies:

| | **2022 HK$M** | 2021 HK$M |
|---|---|---|
| Hong Kong dollar | **1,045** | 6,119 |
| Renminbi | **1,664** | 1,011 |
| Australian dollar | **858** | 335 |
| Indian rupee | **–** | 669 |
| US dollar | **697** | 103 |
| Others | **22** | 23 |
| | **4,286** | 8,260 |

The balances denominated in the currencies other than the functional currencies of the corresponding Group entities amounted to HK$404 million (2021: HK$409 million) which were mostly denominated in Renminbi (2021: Renminbi).

## 21. Fuel Clause Account

The cost of fuel consumed by CLP Power is passed on to the customers. Any variations between the actual cost of fuel and the fuel cost billed to customers are captured in the fuel clause account. The balance on the account (inclusive of interest) represents amounts over-recovered or under-recovered and is treated as an amount due to or from customers. CLP Power may adjust fuel related tariff from time to time, including on a monthly basis, in accordance with the SoC, to reflect changes in the cost of fuels consumed by the SoC Companies for the generation of electricity. As at 31 December 2022, the fuel clause account asset balance represented the right of CLP Power to collect the under-recovered fuel costs from the customers under the SoC.

## 22. Trade Payables and Other Liabilities

### Accounting Policy

(A) Trade and other payables

Trade and other payables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method.

(B) Lease liabilities

At the commencement date of the lease, the Group recognises lease liabilities measured at the present value of lease payments with reference to an expected lease term, which includes optional lease periods when the lessee is reasonably certain to exercise the option to extend or not to terminate the lease. The lease payments include fixed payments (including in substance fixed payments) less any lease incentives receivable; variable lease payments that depend on an index or a rate; and amounts expected to be paid under residual value guarantees. Variable lease payments that do not depend on an index or a rate are recognised as expenses (unless they are incurred to produce inventories) in the period in which the event or condition that triggers the payment occurs.

Lease payments are discounted using the interest rate implicit in the lease, if this cannot be readily determined, an incremental borrowing rate that the lessee would have to pay to borrow the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment, over a similar term and with a similar security. Lease liabilities are subsequently measured by increasing the carrying amounts to reflect interest on the lease liabilities (using the effective interest method) and by reducing the carrying amounts to reflect the lease payments made. Lease liabilities are remeasured (with a corresponding adjustment made to the related right-of-use asset) when there is a change in future lease payments in case of renegotiation, changes of an index or rate or in case of reassessment of options under certain conditions.

| | **2022**<br>**HK$M** | 2021<br>HK$M |
|---|---|---|
| Trade payables [a] | **6,511** | 6,119 |
| Other payables and accruals | **8,868** | 7,504 |
| Lease liabilities [b] | **229** | 217 |
| Advances from non-controlling interests [c] | **860** | 832 |
| Current accounts with [d] | | |
| Joint ventures | **2** | 1 |
| An associate | **359** | 564 |
| Deferred revenue [e] | **2,798** | 3,144 |
| | **19,627** | 18,381 |

Notes:

(a) The ageing analysis of trade payables at 31 December based on invoice date is as follows:

| | **2022**<br>**HK$M** | 2021<br>HK$M |
|---|---|---|
| 30 days or below | **6,345** | 5,800 |
| 31 – 90 days | **144** | 219 |
| Over 90 days | **22** | 100 |
| | **6,511** | 6,119 |

At 31 December 2022, trade payables denominated in currencies other than the functional currencies of the corresponding Group entities amounted to HK$1,280 million (2021: HK$1,073 million), of which HK$1,130 million (2021: HK$897 million) were denominated in US dollar (2021: US dollar).

## 22. Trade Payables and Other Liabilities (continued)

Notes (continued):

(b) Maturity profile of the lease liabilities at 31 December is as follows:

| | **2022 HK$M** | 2021 HK$M |
|---|---|---|
| Within one year | **229** | 217 |
| Between one and two years | **167** | 213 |
| Between two and five years | **283** | 346 |
| Over five years | **276** | 393 |
| | **955** | 1,169 |
| Less: amount due after one year included under other non-current liabilities | **(726)** | (952) |
| | **229** | 217 |

(c) The advances from non-controlling interests represented the advances from China Southern Power Grid International (HK) Co., Limited (CSGHK) to CAPCO. Pursuant to the agreement between the shareholders of CAPCO, both CLP Power and CSGHK are required to provide shareholders' advances pro rata to their shareholdings in CAPCO. The advances are unsecured, interest free and repayable on demand. The advances are denominated in Hong Kong dollar.

(d) The amounts payable to joint ventures and an associate are unsecured, interest free and have no fixed repayment terms.

(e) Deferred revenue included the non-refundable upfront payment for the property development at Argyle Street of HK$2.7 billion (2021: HK$3 billion) (Note 18) and payments received in advance for other services. Non-current deferred revenue of HK$1,474 million (2021: HK$1,459 million) was included under other non-current liabilities.

## 23. Bank Loans and Other Borrowings

### Accounting Policy

Borrowings are recognised initially at fair value of proceeds received, net of transaction costs incurred. Transaction costs are incremental costs that are directly attributable to the acquisition or issue of a financial liability. Borrowings are subsequently stated at amortised cost. Any difference between the proceeds (net of transaction costs) and the redemption value is amortised to profit or loss or capitalised as cost of the qualifying assets over the period of the borrowings using the effective interest method. Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the end of the reporting period.

The Group's bank loans and other borrowings at 31 December were repayable as follows:

| | Bank Loans | | Other Borrowings * | | Total | |
|---|---|---|---|---|---|---|
| | **2022 HK$M** | 2021 HK$M | **2022 HK$M** | 2021 HK$M | **2022 HK$M** | 2021 HK$M |
| Within one year | **8,275** | 8,893 | **3,039** | 1,619 | **11,314** | 10,512 |
| Between one and two years | **5,728** | 3,068 | **880** | 3,410 | **6,608** | 6,478 |
| Between two to five years | **5,866** | 3,657 | **11,742** | 6,253 | **17,608** | 9,910 |
| Over five years | **3,870** | 3,555 | **19,817** | 27,760 | **23,687** | 31,315 |
| | **23,739** | 19,173 | **35,478** | 39,042 | **59,217** | 58,215 |

* Relating to Medium Term Notes of HK$35,478 million (2021: mainly Medium Term Notes of HK$37,472 million and bonds of HK$1,274 million).

Another presentation of the Group's liquidity risk is set out on pages 295 to 297.

## 23. Bank Loans and Other Borrowings (continued)

Bank loans for subsidiaries in Mainland China of HK$5,085 million (2021: HK$5,476 million) are secured by rights of receipt of tariff and by fixed assets and land use rights with carrying amounts of HK$9,574 million (2021: HK$11,069 million). Total borrowings at 31 December 2021 included secured liabilities of Apraava Energy group of HK$6,008 million.

At 31 December 2022 and 2021, all of the Group's borrowings are either in the functional currencies of the corresponding Group entities or hedged into those currencies.

At 31 December 2022, the Group had undrawn bank loans and overdraft facilities of HK$31,633 million (2021: HK$28,076 million).

An analysis of borrowings by currencies is shown in "Financial Review" on page 34 of the Annual Report.

## 24. Deferred Tax

### Accounting Policy

Deferred tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, deferred tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred tax is determined using tax rates (and laws) that have been enacted or substantively enacted by the end of the reporting period and are expected to apply when the related deferred tax asset is realised or the deferred tax liability is settled. Deferred tax assets are recognised to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised. Deferred tax is also provided on temporary differences arising on investments in subsidiaries, joint ventures and associates, except where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax assets and liabilities are netted off when the taxes relate to the same tax authority and where offsetting is legally enforceable. The following amounts, determined after appropriate offsetting, are shown separately on the consolidated statement of financial position:

| | **2022 HK$M** | 2021 HK$M |
|---|---|---|
| Deferred tax assets | **2,132** | 376 |
| Deferred tax liabilities | **(16,246)** | (15,886) |
| | **(14,114)** | (15,510) |

Deferred tax asset = income tax recoverable in the future
Deferred tax liability = income tax payable in the future

## 24. Deferred Tax (continued)

The gross movement on the deferred tax account is as follows:

| | 2022 HK$M | 2021 HK$M |
|---|---|---|
| Balance at 1 January | (15,510) | (14,858) |
| Sale of subsidiaries* and a joint venture | 373 | – |
| Credited/(charged) to profit or loss (Note 7) | 1,546 | (245) |
| Charged to other comprehensive income | (496) | (398) |
| Exchange differences | (27) | (9) |
| Balance at 31 December | (14,114) | (15,510) |

The movements in the deferred tax assets and liabilities (prior to offsetting of balances within the same tax jurisdiction) during the year are as follows:

### Deferred tax assets (prior to offset)

| | Tax Losses [a] | | Accruals and Provisions | | Others [b] | | Total | |
|---|---|---|---|---|---|---|---|---|
| | 2022 HK$M | 2021 HK$M | 2022 HK$M | 2021 HK$M | 2022 HK$M | 2021 HK$M | 2022 HK$M | 2021 HK$M |
| Balance at 1 January | 468 | 415 | 1,739 | 1,609 | 1,246 | 1,436 | 3,453 | 3,460 |
| Acquisition of a subsidiary | – | 36 | – | – | – | – | – | 36 |
| Sale of subsidiaries* and a joint venture | (355) | – | (106) | – | (364) | – | (825) | – |
| Credited/(charged) to profit or loss | 854 | 22 | (102) | 238 | 1,146 | (127) | 1,898 | 133 |
| Charged to other comprehensive income | – | – | (4) | (33) | (28) | (20) | (32) | (53) |
| Exchange differences | (65) | (5) | (119) | (75) | (115) | (43) | (299) | (123) |
| Balance at 31 December | 902 | 468 | 1,408 | 1,739 | 1,885 | 1,246 | 4,195 | 3,453 |

### Deferred tax liabilities (prior to offset)

| | Accelerated Tax Depreciation | | Withholding Tax | | Intangibles | | Others [b] | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2022 HK$M | 2021 HK$M | 2022 HK$M | 2021 HK$M | 2022 HK$M | 2021 HK$M | 2022 HK$M | 2021 HK$M | 2022 HK$M | 2021 HK$M |
| Balance at 1 January | (16,560) | (15,829) | (342) | (322) | (677) | (720) | (1,384) | (1,447) | (18,963) | (18,318) |
| Acquisition of a subsidiary | – | (36) | – | – | – | – | – | – | – | (36) |
| Sale of subsidiaries* and a joint venture | 1,134 | – | 4 | – | – | – | 60 | – | 1,198 | – |
| (Charged)/credited to profit or loss | (817) | (737) | (73) | (20) | 52 | 43 | 486 | 336 | (352) | (378) |
| Charged to other comprehensive income | – | – | – | – | – | – | (464) | (345) | (464) | (345) |
| Exchange differences | 162 | 42 | 14 | – | – | – | 96 | 72 | 272 | 114 |
| Balance at 31 December | (16,081) | (16,560) | (397) | (342) | (625) | (677) | (1,206) | (1,384) | (18,309) | (18,963) |

* Included the amount reclassified to assets/liabilities of disposal group held for sale before completion of the Sell Down (Note 4(a))

Notes:

(a) The deferred tax asset arising from tax losses mainly related to the electricity business in Australia (2021: Australia and India). There is no expiry on tax losses recognised.

(b) Others mainly related to temporary differences arising from derivative financial instruments, right-of-use assets and corresponding lease liabilities.

## 25. SoC Reserve Accounts

**Critical Accounting Estimates and Judgements: Classification of SoC-related Accounts**

As stipulated in the SoC, the balances in the Tariff Stabilisation Fund and the Rate Reduction Reserve shall represent liabilities in the financial statements of CLP Power and shall not accrue to the benefit of its shareholders save as provided for by the SoC. The Group considers that CLP Power is required under the SoC to discharge its obligations arising from the SoC upon the expiry of the SoC Agreement such that these account balances meet the definition of a liability.

The Tariff Stabilisation Fund, Rate Reduction Reserve and Rent and Rates Refunds of the Group's major subsidiary, CLP Power, are collectively referred to as SoC reserve accounts. The respective balances at the end of the year are:

| | **2022 HK$M** | 2021 HK$M |
|---|---|---|
| Tariff Stabilisation Fund (A) | **2,928** | 3,109 |
| Rate Reduction Reserve (B) | **40** | 3 |
| Rent and Rates Refunds (C) | **126** | 328 |
| | **3,094** | 3,440 |

The movements in SoC reserve accounts during the year are shown as follows:

(A) Tariff Stabilisation Fund

| | **2022 HK$M** | 2021 HK$M |
|---|---|---|
| At 1 January | **3,109** | 2,019 |
| Transfer from Rate Reduction Reserve | **3** | 18 |
| Transfer under the SoC [(a)] | | |
| – transfer for SoC from revenue (Note 2) | **604** | 1,183 |
| – charge for asset decommissioning [(b)] | **(73)** | (111) |
| Special rebate to customers [(c)] | **(715)** | – |
| At 31 December | **2,928** | 3,109 |

Notes:

(a) Under the SoC Agreement, if the gross tariff revenue in a period is less than or exceeds the total of the SoC operating costs, permitted return and taxation charges, such deficiency shall be deducted from, or such excess shall be added to, the Tariff Stabilisation Fund. In any period, the amount of deduction from or addition to the Tariff Stabilisation Fund is recognised as a revenue adjustment to the extent that the return and charges under the SoC are recognised in the profit or loss.

(b) Under the SoC, a periodic charge to accrue for asset decommissioning is made with corresponding deferred liabilities recognised in the statement of financial position of the SoC Companies. The balance of the asset decommissioning liabilities account of HK$1,463 million (2021: HK$1,421 million) (Note 26) recognised under the SoC represents a liability of the Group.

(c) A special rebate of HK¢2.1 per unit was made to customers during the year.

## 25. SoC Reserve Accounts (continued)

(B) Rate Reduction Reserve

| | 2022 HK$M | 2021 HK$M |
|---|---|---|
| At 1 January | **3** | 18 |
| Transfer to Tariff Stabilisation Fund | **(3)** | (18) |
| Interest expense charged to profit or loss (Note 6) | **40** | 3 |
| At 31 December | **40** | 3 |

(C) Rent and Rates Refunds

CLP Power has been challenging the amount of Government rent and rates levied dating back to the year of assessment 2001/02. Following the settlement of appeals up to 2017/18 in 2020, CLP Power further reached settlement with the Hong Kong Government in respect of the remaining appeals from 2018/19 to 2021/22.

Following settlement with the Hong Kong Government of the remaining appeals from 2018/19 to 2021/22, a refund of HK$200 million was received for the appeals from 2018/19 to 2020/21, and a HK$40 million refund was receivable for the 2021/22 appeal. Using the total amount of refunds from the Hong Kong Government for all appeal years of HK$3,031 million, CLP Power has provided customers with the Rent and Rates Special Rebate. Including the rebate of HK$442 million paid during the year, the Rent and Rates Special Rebate made to customers has reached an aggregate amount of HK$2,905 million.

The refunds are classified within the SoC reserve accounts. The Rent and Rates Special Rebate paid to customers was offset against the refunds received.

## 26. Asset Decommissioning Liabilities and Retirement Obligations

### Accounting Policy

When the Group has a legal and / or constructive obligation for remediation and the likelihood of economic outflow is probable, provisions for asset retirement obligations are recorded for estimated remediation costs of reclamation, plant closure, dismantling and waste disposal. A provision for asset retirement costs is determined by estimating the expected costs associated to remediate the site based on the current legal requirements and technologies and is discounted to its present value with an unwind adjustment recognised in finance costs. An asset is recognised on initial recognition of the provision and is depreciated over the useful life of the facility. The asset retirement costs are reviewed annually and adjustments are made to the carrying amount of the assets to reflect changes made to these estimated discount rates or future costs.

### Critical Accounting Estimates and Judgements

Estimating the amount and timing of the obligation to be recorded requires significant judgement. Management has assessed the Group's obligations for each asset based on the local regulatory environment and expected closure dates.

CLP Power has been investing in the transmission and distribution network to supply electricity to the customers in its supply area in Hong Kong. As CLP Power expects that the land sites being used for the transmission and distribution network will continue to be used for the distribution of electricity supply to its customers, it is currently considered remote that the network would be removed from the existing land sites. Therefore in accordance with applicable accounting standards, asset retirement obligations for these assets have not been recognised by CLP Power.

## 26. Asset Decommissioning Liabilities and Retirement Obligations (continued)

### Critical Accounting Estimates and Judgements (continued)

As part of the current development plan agreed with the Hong Kong Government, CAPCO is retiring the coal-fired generation units at Castle Peak "A" Station (CPA) between 2022 to 2025. Following this retirement, the removal of CPA's coal-fired generation units has become probable. In support of the Government's net-zero carbon emissions targets in the "Hong Kong's Climate Action Plan 2050", CAPCO is in discussion with the Government to phase out the use of coal for daily electricity generation in Castle Peak "B" Station and work on ways to convert its gas-fired generation facilities to operate on green fuels. While it is envisaged that these remaining generation units will have their roles in supporting the Government's Climate Action Plan 2050, with the continuous development in decarbonisation technologies, the removal of these units and replacement by alternative facilities is possible. Under the SoC, CAPCO makes a periodic charge to accrue in the statement of financial position a liability balance to be utilised in discharging asset decommissioning costs if and when incurred. CAPCO considers that the dismantling obligation for the CPA units is covered under the asset decommissioning liability accrued under the SoC as at 31 December 2022. While no provision for asset retirement obligations for the other generation units of CAPCO has been recognised, it is expected that if such an obligation be incurred, it will be met by the liability accrued and the cost recovery mechanism under the SoC.

Asset retirement obligations of EnergyAustralia as at 31 December 2022 amounted to HK$2,982 million (2021: HK$2,950 million) which mainly related to the provision for land remediation and decommissioning of generation assets. The provisions are largely based on estimates by external and internal experts that are discounted using internally determined end of plant lives. The calculation of the provision requires management judgement with respect to estimating the timing of asset removal, costs to remove infrastructure, remediate soil and groundwater, water usage and technological developments. The terms associated with the decommissioning of certain assets including site restoration plans are expected to evolve as plans are refined and agreed with the relevant bodies when approaching plant closure dates. Any future agreements with regulators or changes to regulatory requirements could impact the cost estimates used in the decommissioning provision. On an ongoing basis, we continually review and update underlying assumptions relating to forward rehabilitation estimates and timelines.

| | **2022 HK$M** | 2021 HK$M |
|---|---|---|
| Asset decommissioning liabilities (Note 25(A)(b)) | **1,463** | 1,421 |
| Provisions for land remediation and restoration costs (note) | **2,912** | 2,925 |
| | **4,375** | 4,346 |

Note: The movements of the balances, including the current portion of HK$70 million (2021: HK$25 million) under the Group's trade payables and other liabilities, are as follows:

| | **2022 HK$M** | 2021 HK$M |
|---|---|---|
| Balance at 1 January | **2,950** | 2,704 |
| Sale of a subsidiary | **–** | (52) |
| Additional provisions | **–** | 216 |
| Effect of changes in discount rate | **207** | 207 |
| Amounts used | **(21)** | (33) |
| Unwinding of discount | **46** | 51 |
| Exchange differences | **(200)** | (143) |
| Balance at 31 December | **2,982** | 2,950 |

## 27. Share Capital

| | 2022 Number of Ordinary Shares | 2022 Amount HK$M | 2021 Number of Ordinary Shares | 2021 Amount HK$M |
|---|---|---|---|---|
| Issued and fully paid, at 31 December | **2,526,450,570** | **23,243** | 2,526,450,570 | 23,243 |

## 28. Reserves

The movements in reserves attributable to shareholders during the year are shown as follows:

| | Translation Reserve HK$M | Cash Flow Hedge Reserve HK$M | Cost of Hedging Reserve HK$M | Other Reserves HK$M | Retained Profits HK$M | Total HK$M |
|---|---|---|---|---|---|---|
| Balance at 1 January 2021 | (4,534) | 118 | 97 | 1,529 | 91,747 | 88,957 |
| Earnings attributable to shareholders | – | – | – | – | 8,491 | 8,491 |
| Other comprehensive income | | | | | | |
| Exchange differences on translation of | | | | | | |
| Subsidiaries | (1,241) | (46) | – | – | 46 | (1,241) |
| Joint ventures | 204 | – | – | – | – | 204 |
| Associates | 199 | – | – | – | – | 199 |
| Cash flow hedges | | | | | | |
| Net fair value gains | – | 2,249 | – | – | – | 2,249 |
| Reclassification to profit or loss | – | (930) | – | – | – | (930) |
| Tax on the above items | – | (385) | – | – | – | (385) |
| Costs of hedging | | | | | | |
| Net fair value losses | – | – | (143) | – | – | (143) |
| Reclassification to profit or loss | – | – | 23 | – | – | 23 |
| Tax on the above items | – | – | 20 | – | – | 20 |
| Fair value gains on investments | – | – | – | 100 | – | 100 |
| Remeasurement gains on defined benefit plans | – | – | – | – | 77 | 77 |
| Share of other comprehensive income of joint ventures | – | (1) | – | (3) | – | (4) |
| Total comprehensive income attributable to shareholders | (838) | 887 | (100) | 97 | 8,614 | 8,660 |
| Transfer to fixed assets | – | 6 | – | – | – | 6 |
| Appropriation of reserves | – | – | – | 16 | (16) | – |
| Dividends paid | | | | | | |
| 2020 fourth interim | – | – | – | – | (3,057) | (3,057) |
| 2021 first to third interim | – | – | – | – | (4,775) | (4,775) |
| Balance at 31 December 2021 | (5,372) | 1,011 | (3) | 1,642 | 92,513 (note) | 89,791 |

Translation reserve – exchange rates movements arising from the consolidation of Group entities with different reporting currencies

Cash flow hedge / Cost of hedging reserve – deferred fair value gains / losses on derivative financial instruments which are qualified for hedge accounting; reclassify to profit or loss upon settlement of derivatives or amortisation of costs of hedging

Other reserves – mainly comprise revaluation reserve, other consolidated reserve arising from change in ownership interests in a subsidiary, and other legal reserves allocated from retained profits to meet local statutory and regulatory requirements of Group entities

## 28. Reserves (continued)

| | Translation Reserve HK$M | Cash Flow Hedge Reserve HK$M | Cost of Hedging Reserve HK$M | Other Reserves HK$M | Retained Profits HK$M | Total HK$M |
|---|---|---|---|---|---|---|
| Balance at 1 January 2022 | (5,372) | 1,011 | (3) | 1,642 | 92,513 | 89,791 |
| Earnings attributable to shareholders | – | – | – | – | 924 | 924 |
| Other comprehensive income | | | | | | |
| Exchange differences on translation of | | | | | | |
| Subsidiaries | (2,779) | (109) | – | – | 109 | (2,779) |
| Joint ventures | (857) | – | – | – | – | (857) |
| Associates | (644) | – | – | – | – | (644) |
| Cash flow hedges | | | | | | |
| Net fair value gains | – | 4,766 | – | – | – | 4,766 |
| Reclassification to profit or loss | – | (2,962) | – | – | – | (2,962) |
| Tax on the above items | – | (508) | – | – | – | (508) |
| Costs of hedging | | | | | | |
| Net fair value losses | – | – | (238) | – | – | (238) |
| Reclassification to profit or loss | – | – | 59 | – | – | 59 |
| Tax on the above items | – | – | 30 | – | – | 30 |
| Fair value losses on investments | – | – | – | (73) | – | (73) |
| Remeasurement gains on defined benefit plans | – | – | – | – | 10 | 10 |
| Share of other comprehensive income of joint ventures | – | (1) | – | – | – | (1) |
| Sale of subsidiaries (Note 4(a)) | 2,515 | (10) | – | 789 | (789) | 2,505 |
| Sale of a joint venture (Note 5(e)) | 18 | – | – | – | – | 18 |
| Release of revaluation gains upon sale of properties | – | – | – | (219) | 219 | – |
| Total comprehensive income attributable to shareholders | (1,747) | 1,176 | (149) | 497 | 473 | 250 |
| Transfer to fixed assets | – | 46 | – | – | – | 46 |
| Appropriation of reserves | – | – | – | 55 | (55) | – |
| Dividends paid | | | | | | |
| 2021 fourth interim | – | – | – | – | (3,057) | (3,057) |
| 2022 first to third interim | – | – | – | – | (4,775) | (4,775) |
| **Balance at 31 December 2022** | **(7,119)** | **2,233** | **(152)** | **2,194** | **85,099** (note) | **82,255** |

Note: The fourth interim dividend declared for the year ended 31 December 2022 was HK$3,057 million (2021: HK$3,057 million). The balance of retained profits after the fourth interim dividend of the Group was HK$82,042 million (2021: HK$89,456 million).

## 29. Perpetual Capital Securities and Other Non-Controlling Interests

(A) Perpetual Capital Securities

A total of US$500 million perpetual capital securities was issued by the wholly-owned subsidiary, CLP Power HK Finance Ltd. in 2019. The securities are perpetual, non-callable in the first 5.25 years (with issuer call option at par at any time in the 3 months before 5 February 2025) and entitle the holders to receive distributions at a distribution rate of 3.55% per annum in the first 5.25 years, floating thereafter and with fixed step up margins at year 10.25 and at year 25.25, payable semi-annually in arrears, cumulative and compounding. The distributions are at the Group's discretion, as long as the issuer and CLP Power, as guarantor of the securities, do not (a) declare or pay dividends to their shareholders or (b) cancel or reduce their share capitals within each distribution payment period.

## 29. Perpetual Capital Securities and Other Non-Controlling Interests (continued)

(B) Other Non-controlling Interests

Other non-controlling interests included CSGHK's pro-rata share of HK$5,115 million (2021: HK$5,115 million) of redeemable shareholder capital of CAPCO. The redeemable shareholder capital is subordinated, unsecured, interest free and has no fixed terms of repayment. CAPCO can, at its sole discretion, redeem all or part of the redeemable shareholder capital at any time after 31 December 2032.

As both the perpetual capital securities and redeemable shareholder capital do not contain any contractual obligation to pay cash or other financial assets, in accordance with HKAS 32, they are classified as equity and regarded as part of non-controlling interests for accounting purpose.

## 30. Notes to the Consolidated Statement of Cash Flows

(A) Reconciliation of profit before income tax to net cash inflow from operations

| | 2022 HK$M | 2021 HK$M |
|---|---|---|
| Profit before income tax | **1,590** | 11,439 |
| Adjustments for: | | |
| Finance costs | **2,085** | 1,744 |
| Finance income | **(243)** | (108) |
| Dividend income from equity investments | **(14)** | (15) |
| Share of results of joint ventures and associates, net of income tax | **(2,460)** | (1,974) |
| Depreciation and amortisation | **8,904** | 9,308 |
| Impairment charge | **265** | 586 |
| Net losses on disposal of fixed assets | **241** | 386 |
| Revaluation loss on investment property | **57** | 34 |
| Loss on write-off of other intangible assets | **185** | – |
| Fair value losses / (gains) on investment at fair value through profit or loss | **13** | (163) |
| Loss / (gain) on sale of subsidiaries | **4,312** | (79) |
| Loss / (gain) on sale of a joint venture | **185** | (307) |
| Fair value changes of non-debt related derivative financial instruments and net exchange difference | **1,922** | (1,642) |
| The Settlement (Note 4(b)) | **–** | 1,110 |
| SoC items | | |
| Increase in customers' deposits | **300** | 356 |
| Increase in fuel clause account | **(2,357)** | (1,455) |
| Decrease in rent and rates refunds | **(242)** | (9) |
| Special rebates to customers | **(715)** | – |
| Transfer for SoC | **604** | 1,183 |
| | **(2,410)** | 75 |
| Increase in trade receivables and other current assets | **(4,750)** | (2,347) |
| Increase in restricted cash | **(33)** | – |
| Changes in non-debt related derivative financial instruments | **2,512** | 2,068 |
| Increase in trade and other payables | **1,398** | 128 |
| Decrease in current accounts due to joint ventures and associates | **(204)** | (20) |
| Net cash inflow from operations | **13,555** | 20,223 |

## 30. Notes to the Consolidated Statement of Cash Flows (continued)

(B) Reconciliation of liabilities arising from financing activities

| | Bank Loans and Other Borrowings HK$M | Interest and Other Finance Costs Payables HK$M | Lease Liabilities HK$M | Debt-related Derivative Financial Instruments HK$M | Advances from Non-controlling Interests HK$M | Total HK$M |
|---|---|---|---|---|---|---|
| Balance at 1 January 2021 | 54,348 | 134 | 1,411 | 830 | 1,021 | 57,744 |
| Cash flows changes | | | | | | |
| Proceeds from long-term borrowings | 7,796 | – | – | – | – | 7,796 |
| Repayment of long-term borrowings | (5,329) | – | – | – | – | (5,329) |
| Increase in short-term borrowings | 314 | – | – | – | – | 314 |
| Payment of principal portion of lease liabilities | – | – | (271) | – | – | (271) |
| Interest and other finance costs paid | – | (1,575) | – | – | – | (1,575) |
| Settlement of derivative financial instruments | – | – | – | (366) | – | (366) |
| Decrease in advances from non-controlling interests | – | – | – | – | (189) | (189) |
| Non-cash changes | | | | | | |
| Acquisition of a subsidiary | 1,049 | 17 | – | – | – | 1,066 |
| Fair value losses of derivative financial instruments charged to equity | – | – | – | 376 | – | 376 |
| Additions of leases | – | – | 29 | – | – | 29 |
| Net exchange and translation differences | (278) | (1) | (57) | – | – | (336) |
| Interest and other finance costs charged to profit or loss | – | 1,536 | 57 | 98 | – | 1,691 |
| Other non-cash movements | 315 | 3 | – | – | – | 318 |
| Balance at 31 December 2021 | 58,215 | 114 | 1,169 | 938 | 832 | 61,268 |
| Balance at 1 January 2022 | 58,215 | 114 | 1,169 | 938 | 832 | 61,268 |
| Cash flows changes | | | | | | |
| Proceeds from long-term borrowings | 20,121 | – | – | – | – | 20,121 |
| Repayment of long-term borrowings | (12,782) | – | – | – | – | (12,782) |
| Increase in short-term borrowings | 2,957 | – | – | – | – | 2,957 |
| Payment of principal portion of lease liabilities | – | – | (261) | – | – | (261) |
| Interest and other finance costs paid | – | (1,854) | – | – | – | (1,854) |
| Settlement of derivative financial instruments | – | – | – | (267) | – | (267) |
| Increase in advances from non-controlling interests | – | – | – | – | 28 | 28 |
| Non-cash changes | | | | | | |
| Sale of subsidiaries (Note 4(a)) | (7,066) | (11) | (4) | 121 | – | (6,960) |
| Fair value losses of derivative financial instruments charged to equity | – | – | – | 158 | – | 158 |
| Additions of leases | – | – | 87 | – | – | 87 |
| Net exchange and translation differences | (2,228) | (2) | (70) | 7 | – | (2,293) |
| Interest and other finance costs charged to profit or loss | – | 1,833 | 47 | 457 | – | 2,337 |
| Other non-cash movements | – | 82 | (13) | – | – | 69 |
| **Balance at 31 December 2022** | **59,217** | **162** | **955** | **1,414** | **860** | **62,608** |

## 31. Commitments

(A) Capital expenditure contracted for but not yet incurred at the end of the year is as follows:

| | 2022 HK$M | 2021 HK$M |
|---|---|---|
| Fixed assets and leasehold land | **9,683** | 13,150 |
| Intangible assets | **3** | – |
| | **9,686** | 13,150 |

(B) At 31 December 2022, leases for assets committed but not yet commenced were as follows:

(i) Kidston Pumped Hydro Energy Storage Facility

The Group has entered into a long-term Energy Storage Services Agreement (ESSA) to be the market operator of the 250MW Kidston pumped hydro energy storage facility in Queensland. This facility is currently under construction and the ESSA is subject to a number of conditions precedent which must be satisfied before the lease commencement date, which is expected to occur before 31 December 2025. At 31 December 2022, the expected undiscounted contractual lease payments under this agreement were approximately HK$1.9 billion (2021: HK$2.1 billion).

(ii) Riverina Battery Storage Systems

The Group has entered into two long-term Battery Storage Services Agreements to be the market operator of two Riverina battery storage systems with a combined 90MW capacity in New South Wales. These facilities are currently under construction and the lease commencement date is expected to occur in December 2023. At 31 December 2022, the expected undiscounted contractual lease payments under these agreements were approximately HK$0.4 billion (2021: nil).

(C) Equity contributions to be made for joint ventures and private equity partnerships at 31 December 2022 were HK$199 million (2021: HK$54 million) and HK$163 million (2021: HK$203 million) respectively.

## 32. Related Party Transactions

**Accounting Policy**

Related parties are individuals and companies, including subsidiaries, fellow subsidiaries, joint ventures, associates and key management personnel, where the individual or company has the ability, directly or indirectly, to control or jointly control the other party or exercise significant influence over the other party in making financial and operating decisions. A close family member of any such individual is considered to be a related party.

Related Parties ≠ Connected Parties
They sometimes overlap but should not be confused. Accounting standards define related parties, while the Listing Rules of the Hong Kong Stock Exchange define connected parties.

Below are the more significant transactions with related parties for the year:

(A) CLP Power is obliged to purchase 70% of the output of Guangdong Daya Bay Nuclear Power Station (GNPS). The price paid by CLP Power for electricity generated by GNPS throughout the terms of the PPA is determined by a formula based on GNPS's operating costs and a calculation of profits with reference to the capacity factors. The purchase of nuclear electricity under the arrangement was HK$5,822 million (2021: HK$5,678 million).

Under a separate purchase arrangement with GNPJVC and its shareholder, Guangdong Nuclear Investment Company Limited, CLP Power would purchase approximately 10% of additional nuclear electricity from GNPS on a best endeavour basis from October 2014 to end of 2023, at the same unit price as that under the above purchase arrangement. The purchase of nuclear electricity under the arrangements was HK$838 million (2021: HK$813 million).

## 32. Related Party Transactions (continued)

(B) The loans and shareholder's loan facilities to joint ventures are disclosed under Note 14. Other amounts due from and to the related parties at 31 December 2022 are disclosed in Notes 19 and 22 respectively. At 31 December 2022, the Group did not have any guarantees which were of a significant amount given to or received from these entities (2021: nil).

(C) Remuneration of key management personnel

Under HKAS 24 Related Party Disclosures, key management personnel are defined as those persons having authority and responsibility for planning, directing and controlling the activities of the Group, directly or indirectly, including any directors (whether executive or otherwise) of the Group. The total remuneration of the key management personnel shown below comprises the Non-executive Directors and the Senior Management Group. During the year, members of the Senior Management Group include one (2021: two) Executive Director and ten (2021: ten) senior management personnel.

| | **2022 HK$M** | 2021 HK$M |
|---|---|---|
| Fees | **14** | 13 |
| Recurring remuneration items (note) | | |
| Base compensation, allowances & benefits | **62** | 73 |
| Performance bonus | | |
| Annual incentive | **45** | 67 |
| Long-term incentive | **25** | 35 |
| Provident fund contribution | **13** | 14 |
| Non-recurring remuneration items (note) | | |
| Other payments | **15** | 24 |
| | **174** | 226 |

Note: Refer to remuneration items on page 182 of Human Resources & Remuneration Committee Report.

At 31 December 2022, the CLP Holdings' Board was composed of thirteen Non-executive Directors and one Executive Director. Remuneration of all Directors for the year totalled HK$42 million (2021: HK$68 million). The five highest paid individuals in the Group during the year included one Director (2021: one Director and a former director) and four members (2021: three members) of Senior Management. The total remuneration of these five highest paid individuals amounted to HK$93 million (2021: HK$119 million). Further details of the remuneration of the Director and Senior Management, on a named basis, and remuneration paid to the five highest paid individuals by bands are disclosed in highlighted sections of the Human Resources & Remuneration Committee Report with a heading of "Audited" on pages 181 to 184 and 190 to 193. These sections are part of the financial statements.

(D) Interest of Directors

There are no loans, quasi-loans or other dealings in favour of directors, their controlled body corporates and connected entities (2021: nil).

During the year and at the year end, no director of the Company had or has a material interest, directly or indirectly, in any significant transactions, arrangements and contracts in relation to the Group's business to which the Group was or is a party (2021: nil).

## 33. Statement of Financial Position of the Company

| | 2022<br>HK$M | 2021<br>HK$M |
|---|---|---|
| **Non-current assets** | | |
| Fixed assets | **151** | 171 |
| Right-of-use assets | **93** | 44 |
| Investments in subsidiaries | **43,047** | 44,651 |
| Other non-current assets | **17** | 15 |
| | **43,308** | 44,881 |
| **Current assets** | | |
| Trade and other receivables | **58** | 80 |
| Dividend receivable | **2,500** | 2,500 |
| Cash and cash equivalents | **24** | 27 |
| | **2,582** | 2,607 |
| **Current liabilities** | | |
| Trade payables and other liabilities | **(539)** | (543) |
| Net current assets | **2,043** | 2,064 |
| **Total assets less current liabilities** | **45,351** | 46,945 |
| **Financed by:** | | |
| **Equity** | | |
| Share capital | **23,243** | 23,243 |
| Retained profits | **22,052** | 23,671 |
| Shareholders' funds | **45,295** | 46,914 |
| **Non-current liabilities** | | |
| Lease and other liabilities | **56** | 31 |
| **Equity and non-current liabilities** | **45,351** | 46,945 |
| The movement of retained profits is as follows: | | |
| Balance at 1 January | **23,671** | 24,308 |
| Profit and total comprehensive income for the year | **6,213** | 7,195 |
| Dividends paid | | |
| 2021/2020 fourth interim | **(3,057)** | (3,057) |
| 2022/2021 first to third interim | **(4,775)** | (4,775) |
| Balance at 31 December | **22,052** | 23,671 |

The fourth interim dividend declared for the year ended 31 December 2022 was HK$3,057 million (2021: HK$3,057 million). The balance of retained profits after the fourth interim dividend of the Company was HK$18,995 million (2021: HK$20,614 million).

**Andrew Brandler**
Vice Chairman

**Richard Lancaster**
Chief Executive Officer

**Nicolas Tissot**
Chief Financial Officer

Hong Kong, 27 February 2023

## 34. Subsidiaries

The table below lists the principal subsidiaries of the Group at 31 December 2022:

| Name | Issued Share Capital / Registered Capital | % of Ownership Interest at 31 December 2021 and 2022 | Place of Incorporation / Business | Principal Activity |
|---|---|---|---|---|
| CLP Power Hong Kong Limited | HK$20,400,007,269.65 divided into 2,488,320,000 ordinary shares | 100 | Hong Kong | Generation and supply of electricity |
| Castle Peak Power Company Limited | HK$50,000,000 divided into 500,000 ordinary shares | 70 (a) | Hong Kong | Generation and sale of electricity |
| Hong Kong Pumped Storage Development Company, Limited | HK$10,000,000 divided into 100,000 ordinary shares | 100 (a) | Hong Kong | Provision of pumped storage services |
| Hong Kong Nuclear Investment Company Limited | HK$300,000,000 divided into 300,000 ordinary shares | 100 | Hong Kong / Mainland China | Power projects investment holding |
| CLP Nuclear Investment Company Limited | 1 ordinary share of US$1 each | 100 | Hong Kong / British Virgin Islands | Power projects investment holding |
| CLP*e* Holdings Limited | HK$49,950,002 divided into 49,950,002 ordinary shares | 100 | Hong Kong | Investment holding of energy & infrastructure solutions and e-commerce business |
| CLP Power Asia Limited | 1,000 ordinary shares of US$1 each | 100 | British Virgin Islands / International and Mainland China | Power projects investment holding |
| CLP Power International Limited | 692,000 ordinary shares of US$1,000 each | 100 (a) | British Virgin Islands / International | Power projects investment holding |
| CLP Power China Limited | 192,000,000 ordinary shares of US$1 each | 100 (a) | British Virgin Islands / Mainland China and Hong Kong | Power projects investment holding |
| CLP Properties Limited | HK$150,000,000 divided into 15,000,000 ordinary shares | 100 | Hong Kong | Property investment holding |
| CLP Innovation Enterprises Limited | 1 ordinary share of HK$1 each | 100 | Hong Kong | Innovation projects investment holding |
| EnergyAustralia Holdings Limited | A$1,585,491,005 for 1,585,491,005 ordinary shares | 100 (a) | Australia | Energy business investment holding |
| EnergyAustralia Yallourn Pty Ltd | A$15 for 15 ordinary shares | 100 (a) | Australia | Generation and supply of electricity |
| EnergyAustralia Pty Ltd | A$3,368,686,988 for 3,368,686,988 ordinary shares | 100 (a) | Australia | Retailing of electricity and gas |

## 34. Subsidiaries (continued)

| Name | Issued Share Capital / Registered Capital | % of Ownership Interest at 31 December 2021 and 2022 | Place of Incorporation / Business | Principal Activity |
|---|---|---|---|---|
| EnergyAustralia NSW Pty Ltd | A$2 for 2 ordinary shares | 100 [(a)] | Australia | Generation of electricity |
| CLP Sichuan (Jiangbian) Power Company Limited [(b)] | RMB496,380,000 | 100 [(a)] | Mainland China | Generation of electricity |
| Guangdong Huaiji Changxin Hydro-electric Power Company Limited [(c)] | RMB69,098,976 | 84.9 [(a)] | Mainland China | Generation of electricity |
| Guangdong Huaiji Gaotang Hydro-electric Power Company Limited [(c)] | RMB249,430,049 | 84.9 [(a)] | Mainland China | Generation of electricity |
| Guangdong Huaiji Weifa Hydro-electric Power Company Limited [(c)] | US$13,266,667 | 84.9 [(a)] | Mainland China | Generation of electricity |
| Guangdong Huaiji Xinlian Hydro-electric Power Company Limited [(c)] | RMB141,475,383 | 84.9 [(a)] | Mainland China | Generation of electricity |

Notes:

(a) Indirectly held through subsidiaries of the Company

(b) Registered as a Wholly Foreign Owned Enterprise under PRC law

(c) Registered as Sino-Foreign Cooperative Joint Ventures under PRC law

Summarised financial information of CAPCO which has material non-controlling interest at 31 December 2022, is set out below:

| | 2022 HK$M | 2021 HK$M |
|---|---|---|
| Results for the year | | |
| Revenue | 25,471 | 19,365 |
| Profit for the year | 3,205 | 3,008 |
| Other comprehensive income for the year | (64) | (45) |
| Total comprehensive income for the year | 3,141 | 2,963 |
| Dividends paid to non-controlling interests | 947 | 885 |
| Net assets | | |
| Non-current assets | 42,809 | 38,328 |
| Current assets | 7,379 | 7,263 |
| Current liabilities | (10,868) | (11,803) |
| Non-current liabilities | (21,372) | (15,889) |
| | 17,948 | 17,899 |
| Cash flows | | |
| Net cash inflow from operating activities | 3,561 | 2,414 |
| Net cash outflow from investing activities | (2,741) | (2,699) |
| Net cash outflow from financing activities | (1,386) | (371) |
| Net decrease in cash and cash equivalents | (566) | (656) |

## 1. Financial Risk Factors

The Group's activities expose it to a variety of financial risks: market risk (including foreign exchange risk, fair value and cash flow interest rate risks, and energy portfolio risk), credit risk and liquidity risk. The Group's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise the impact of exchange rate, interest rate and energy price fluctuations on the Group's financial performance. The Group uses different derivative financial instruments to manage its exposure in these areas. All derivative financial instruments are employed solely for hedging purposes.

Risk management for Hong Kong operations is carried out by the Group's central treasury department (Group Treasury) under policies approved by the Board of Directors or the Finance & General Committee of relevant Group entities. Overseas subsidiaries conduct their risk management activities in accordance with policies approved by their respective Boards. Group Treasury identifies, evaluates and monitors financial risks in close co-operation with the Group's operating units. The Group has written policies covering specific areas, such as foreign exchange risk, interest rate risk, credit risk, use of derivative financial instruments and cash management.

### Foreign exchange risk

The Group operates in the Asia-Pacific region and is exposed to foreign exchange risk arising from future commercial transactions, and from recognised assets and liabilities and net investments in foreign operations. This is primarily with respect to Australian dollar and Renminbi. Additionally, the Group has significant foreign currency obligations relating to its foreign currency denominated debts and major capital project payments, US dollar denominated nuclear power purchase offtake commitments and other fuel related payments. The Group uses forward contracts and currency swaps to manage its foreign exchange risk arising from future commercial transactions, and from recognised assets and liabilities which are denominated in a currency that is not the functional currency of the respective Group entity. Hedging is only considered for firm commitments and highly probable forecast transactions.

<u>SoC Companies</u>

Under the SoC, the SoC Companies are allowed to pass-through foreign exchange gains and losses arising from future non-capital projects related commercial transactions and recognised liabilities which are denominated in a currency other than Hong Kong dollar, thus retaining no significant foreign exchange risk of such payments over the long term. The SoC Companies use forward contracts and currency swaps to hedge all their debt repayment obligations denominated in foreign currencies for the full tenor, and a significant portion of their US dollar obligations on fuel and nuclear power purchases, provided that for US dollar the hedging can be accomplished at rates below the Hong Kong Government's historical target peg rate of HK$7.8: US$1. The objective is to reduce the potential impact of foreign exchange movement on electricity tariffs. The SoC Companies also use forward contracts to manage the foreign exchange risks arising from non-Hong Kong dollar payment obligations for major capital projects, for which the exchange gains and losses are capitalised.

At the end of the reporting period, the fair value movement of the derivative financial instruments in a cash flow hedge relationship is recorded in equity. The extent of the impact to the cash flow hedge reserve under equity due to exchange rate movements, with all other variables held constant, is as follows:

| | **2022 HK$M** | 2021 HK$M |
|---|---|---|
| Increase / (decrease) in the cash flow hedge reserve | | |
| Hong Kong dollar against US dollar | | |
| If Hong Kong dollar weakened by 0.6% (2021: 0.6%) | **107** | 111 |
| If Hong Kong dollar strengthened by 0.6% (2021: 0.6%) | **(107)** | (111) |
| Hong Kong dollar against Euro | | |
| If Hong Kong dollar weakened by 4% (2021: 2%) | **23** | 22 |
| If Hong Kong dollar strengthened by 4% (2021: 2%) | **(23)** | (22) |

## 1. Financial Risk Factors (continued)

### Foreign exchange risk (continued)

The Group's Asia-Pacific Investments

With respect to the power project investments in the Asia-Pacific region, the Group is exposed to both foreign currency translation and transaction risks.

The Group closely monitors translation risk using a Value-at-Risk (VaR) approach but does not hedge foreign currency translation risk because translation gains or losses do not affect the project company's cash flow or the Group's annual profit until an investment is sold. At 31 December 2022, the Group's net investment subject to translation exposure was HK$52,619 million (2021: HK$64,082 million), arising mainly from our investments in Mainland China, Australia, India and Southeast Asia and Taiwan. This means that, for each 1% (2021: 1%) average foreign currency movement, our translation exposure will vary by about HK$526 million (2021: HK$641 million). All the translation exposures are recognised in other comprehensive income and therefore have no impact on the profit or loss.

We consider that the non-functional currency transaction exposures at the individual project company level, if not managed properly, can lead to significant financial distress. Our primary risk mitigation is therefore to ensure that project-level debt financings are implemented on a local currency basis to the maximum extent possible. Each overseas subsidiary and project company has developed its own hedging programme into local currency taking into consideration any indexing provision in project agreements, tariff reset mechanisms, lender requirements, and tax and accounting implications.

Most foreign currency exposures of the Group entities are hedged and / or their transactions are predominantly conducted through the functional currency of the respective entity. The following analysis presents the Group's (apart from the SoC Companies) sensitivity to a reasonably possible change in the functional currencies of the Group entities against the US dollar and Renminbi, with all other variables held constant. The sensitivity rates in US dollar and Renminbi used are considered reasonable given the current level of exchange rates and the volatility observed in the different functional currencies of the Group entities. These are both on a historical basis and market expectations for future movement at the end of the reporting period and under the economic environments in which the Group operates. The extent of the impact to post-tax profit or equity due to exchange rate movements of US dollar and Renminbi against different functional currencies of Group entities, with all other variables held constant, is as follows:

| | **2022 HK$M** | 2021 HK$M |
|---|---|---|
| US dollar | | |
| If US dollar strengthened by 7% (2021: 3%) | | |
| Post-tax profit for the year | **–** | 26 |
| Equity – cash flow hedge reserve | **20** | 21 |
| If US dollar weakened by 7% (2021: 3%) | | |
| Post-tax profit for the year | **–** | (26) |
| Equity – cash flow hedge reserve | **(17)** | (21) |
| Renminbi | | |
| If Renminbi strengthened by 5% (2021: 2%) | | |
| Post-tax profit for the year | **18** | 5 |
| Equity – cash flow hedge reserve | **–** | – |
| If Renminbi weakened by 5% (2021: 2%) | | |
| Post-tax profit for the year | **(18)** | (5) |
| Equity – cash flow hedge reserve | **–** | – |

## 1. Financial Risk Factors (continued)

### Energy portfolio risk

EnergyAustralia's activity in energy markets exposes it to financial risk.

The electricity market is a competitive power pool. In this market generation supply and retail demand are exposed to spot (5-minute intervals) prices. EnergyAustralia purchases and sells majority of its electricity through the pool, at the same time EnergyAustralia enters into electricity spot-price-linked derivative financial instruments to manage the spot electricity price risk against forecast retail and generation exposures.

The gas market is a balancing market. To meet retail demand, EnergyAustralia procures gas supply agreements from various gas producers. The contract prices of certain agreements comprise a fixed component, and a variable component that is linked to oil spot prices on the global markets. EnergyAustralia enters into oil-price-linked derivative financial instruments to manage this oil price risk component.

Energy portfolio exposure is managed through an established risk management framework. The framework consists of policies which place appropriate limits on overall energy market exposures, hedging strategies and targets, delegations of authority on trading, approved product lists, regular exposure reporting, and segregation of duties. The corporate governance process also includes oversight by an Audit & Risk Committee (ARC-EA) which acts on behalf of EnergyAustralia's Board.

Risk monitoring includes physical position reporting, stress testing of the portfolios and "at-risk" analyses of potential earnings. At-risk measures are derived by modelling potential variability in spot and forward market prices and supply and demand volumes, across the wholesale energy portfolio, through Monte Carlo simulations, historic simulations, and scenarios. Overall Earnings-at-Risk (EaR) exposure for the coming financial year is reported as the 1 in 20 probability downside (2021: 1 in 4 probability downside) of the expected earnings distribution, as simulated with the above methods. The updated probability level better reflects recognisable scenarios. The energy portfolio risk exposure for EnergyAustralia as at 31 December 2022 was HK$651 million (2021: HK$441 million).

### Interest rate risk

The Group's interest rate risk arises from borrowings. Borrowings issued at variable rates expose the Group to cash flow interest rate risk, and borrowings issued at fixed rates expose the Group to fair value interest rate risk. The risks are managed by monitoring an appropriate mix between fixed and floating rate borrowings, and by the use of interest rate swaps.

The appropriate level of the fixed / floating mix is determined for each operating company subject to a regular review. For instance, SoC Companies conducts an annual review to determine a preferred fixed / floating interest rate mix appropriate for its business profile. Each overseas subsidiary and project company has developed its own hedging programme taking into consideration project debt service sensitivities to interest rate movements, lender requirements, tax and accounting implications.

The sensitivity analysis below presents the effects on the Group's post-tax profit for the year (as a result of change in interest expense on floating rate borrowings) and equity (as a result of change in the fair value of derivative instruments which qualify as cash flow hedges). Such amounts accumulated in equity are reclassified to profit or loss in the periods when the hedged items affect profit or loss, and offset one another in the profit or loss.

## 1. Financial Risk Factors (continued)

### Interest rate risk (continued)

The analysis has been determined based on the exposure to interest rates for both derivative and non-derivative financial instruments at the end of the reporting period. For floating rate borrowings, the analysis is prepared assuming the amount of liability outstanding at the end of the reporting period was outstanding for the whole year. The sensitivity to interest rates used is considered reasonable given the market forecasts available at the end of the reporting period and under the economic environments in which the Group operates, with all other variables held constant.

| | **2022 HK$M** | 2021 HK$M |
|---|---|---|
| Hong Kong dollar | | |
| If interest rates were 0.5% (2021: 0.3%) higher | | |
| Post-tax profit for the year | **(65)** | (29) |
| Equity – cash flow hedge reserve | **12** | 10 |
| If interest rates were 0.5% (2021: 0.3%) lower | | |
| Post-tax profit for the year | **65** | 29 |
| Equity – cash flow hedge reserve | **(12)** | (10) |
| Australian dollar | | |
| If interest rates were 1% (2021: 0.5%) higher | | |
| Post-tax profit for the year | **(30)** | – |
| Equity – cash flow hedge reserve | **–** | – |
| If interest rates were 1% (2021: 0.5%) lower | | |
| Post-tax profit for the year | **30** | – |
| Equity – cash flow hedge reserve | **–** | – |
| Renminbi | | |
| If interest rates were 0.3% (2021: 0.3%) higher | | |
| Post-tax profit for the year | **(12)** | (12) |
| Equity – cash flow hedge reserve | **–** | – |
| If interest rates were 0.3% (2021: 0.3%) lower | | |
| Post-tax profit for the year | **12** | 12 |
| Equity – cash flow hedge reserve | **–** | – |

## 1. Financial Risk Factors (continued)

### Credit risk

The Group's approach to managing credit risk for trade receivables is discussed in Note 19.

On the treasury side, all finance-related hedging transactions and bank deposits of the Group entities are made with counterparties with good credit quality in conformance to the Group treasury policies to minimise credit exposure. Good credit ratings from reputable credit rating agencies and scrutiny of the financial position of non-rated counterparties are two important criteria in the selection of counterparties. The credit quality of counterparties will be closely monitored over the life of the transaction. The Group further assigns mark-to-market limits to its financial counterparties to reduce credit risk concentrations relative to the underlying size and credit strength of each counterparty. In an attempt to forestall adverse market movement, the Group also monitors potential exposures to each financial institution counterparty, using VaR methodology. All derivatives transactions are entered into at the sole credit of the respective subsidiaries, joint ventures and associates without recourse to the Company.

### Liquidity risk

Prudent liquidity risk management implies maintaining sufficient cash and making available an adequate amount of committed credit facilities with staggered maturities to reduce refinancing risk in any year and to fund working capital, debt servicing, dividend payments, new investments and close out market positions if required. The Group maintains significant flexibility to respond to opportunities and events by ensuring that committed credit lines are available to meet future funding requirements. In addition, CLP Power will fund its committed contractual maturities through cash flows earned under the terms of the SoC and financing available under its credit lines and MTN programme. Management also monitors rolling forecasts of the Group's undrawn borrowing facilities and cash and cash equivalents on the expected cash flows.

Cash flow forecasting at least for next 12 months of the Group is performed by Group Treasury. It monitors rolling forecasts of the Group's liquidity requirements to ensure it has sufficient cash to meet operational, financing and investing needs while maintaining sufficient headroom on its undrawn committed borrowing facilities at all times. Such forecasting takes into consideration the Group's debt financing plans, applicable financial ratios, covenant compliance, applicable external regulatory or legal requirements, and potential market impacts arising from unforeseeable events such as COVID-19 and currency restrictions.

## 1. Financial Risk Factors (continued)

### Liquidity risk (continued)

The table below analyses the remaining contractual maturities at the end of the reporting period of the Group's non-derivative financial liabilities, derivative financial liabilities (both net settled and gross settled) and derivative financial assets (gross settled) based on the contractual undiscounted cash flows.

| | Within 1 year HK$M | Between 1 and 2 years HK$M | Between 2 to 5 years HK$M | Over 5 years HK$M | Total HK$M |
|---|---|---|---|---|---|
| **At 31 December 2022** | | | | | |
| Non-derivative financial liabilities | | | | | |
| Bank loans | 9,365 | 6,275 | 6,811 | 4,518 | 26,969 |
| Other borrowings | 3,901 | 1,914 | 14,419 | 21,838 | 42,072 |
| Customers' deposits | 6,633 | – | – | – | 6,633 |
| Trade payables and other liabilities | 16,866 | 195 | 342 | 290 | 17,693 |
| SoC reserve accounts | – | – | – | 3,094 | 3,094 |
| Asset decommissioning liabilities | – | – | – | 1,463 | 1,463 |
| | 36,765 | 8,384 | 21,572 | 31,203 | 97,924 |
| Derivative financial liabilities – net settled | | | | | |
| Interest rate swaps | 27 | 21 | 42 | – | 90 |
| Energy contracts | 4,682 | 277 | 112 | 42 | 5,113 |
| | 4,709 | 298 | 154 | 42 | 5,203 |
| Derivative financial liabilities – gross settled | | | | | |
| Gross contractual amounts payable | | | | | |
| Forward foreign exchange contracts | 23,269 | 1,487 | 4,052 | – | 28,808 |
| Cross currency interest rate swaps | 3,562 | 1,827 | 6,009 | 17,778 | 29,176 |
| | 26,831 | 3,314 | 10,061 | 17,778 | 57,984 |
| Gross contractual amounts receivable | | | | | |
| Forward foreign exchange contracts | (23,123) | (1,398) | (3,989) | – | (28,510) |
| Cross currency interest rate swaps | (3,073) | (1,499) | (5,512) | (17,627) | (27,711) |
| | (26,196) | (2,897) | (9,501) | (17,627) | (56,221) |
| Net payable | 635 | 417 | 560 | 151 | 1,763 |
| Derivative financial assets – gross settled | | | | | |
| Gross contractual amounts payable | | | | | |
| Forward foreign exchange contracts | 3,569 | 199 | 61 | – | 3,829 |
| Cross currency interest rate swaps | 188 | 188 | 6,583 | – | 6,959 |
| | 3,757 | 387 | 6,644 | – | 10,788 |
| Gross contractual amounts receivable | | | | | |
| Forward foreign exchange contracts | (3,585) | (205) | (62) | – | (3,852) |
| Cross currency interest rate swaps | (200) | (199) | (6,628) | – | (7,027) |
| | (3,785) | (404) | (6,690) | – | (10,879) |
| Net receivable | (28) | (17) | (46) | – | (91) |
| Total payable | 607 | 400 | 514 | 151 | 1,672 |

## 1. Financial Risk Factors (continued)

### Liquidity risk (continued)

| | Within 1 year HK$M | Between 1 and 2 years HK$M | Between 2 to 5 years HK$M | Over 5 years HK$M | Total HK$M |
|---|---|---|---|---|---|
| At 31 December 2021 | | | | | |
| Non-derivative financial liabilities | | | | | |
| Bank loans | 9,420 | 3,445 | 4,142 | 4,072 | 21,079 |
| Other borrowings | 2,732 | 4,295 | 8,954 | 30,451 | 46,432 |
| Customers' deposits | 6,254 | – | – | – | 6,254 |
| Trade payables and other liabilities | 15,279 | 251 | 420 | 428 | 16,378 |
| SoC reserve accounts | – | – | – | 3,440 | 3,440 |
| Asset decommissioning liabilities | – | – | – | 1,421 | 1,421 |
| Financial guarantee contract | 970 | – | – | – | 970 |
| | 34,655 | 7,991 | 13,516 | 39,812 | 95,974 |
| Derivative financial liabilities – net settled | | | | | |
| Interest rate swaps | 49 | 17 | 15 | 9 | 90 |
| Energy contracts | 878 | 192 | 110 | 244 | 1,424 |
| | 927 | 209 | 125 | 253 | 1,514 |
| Derivative financial liabilities – gross settled | | | | | |
| Gross contractual amounts payable | | | | | |
| Forward foreign exchange contracts | 2,661 | 704 | 4,334 | – | 7,699 |
| Cross currency interest rate swaps | 1,080 | 947 | 3,091 | 18,499 | 23,617 |
| | 3,741 | 1,651 | 7,425 | 18,499 | 31,316 |
| Gross contractual amounts receivable | | | | | |
| Forward foreign exchange contracts | (2,587) | (661) | (4,266) | – | (7,514) |
| Cross currency interest rate swaps | (849) | (668) | (2,780) | (18,319) | (22,616) |
| | (3,436) | (1,329) | (7,046) | (18,319) | (30,130) |
| Net payable | 305 | 322 | 379 | 180 | 1,186 |
| Derivative financial assets – gross settled | | | | | |
| Gross contractual amounts payable | | | | | |
| Forward foreign exchange contracts | 20,506 | 536 | 76 | – | 21,118 |
| Cross currency interest rate swaps | 294 | 2,625 | 3,042 | 6,591 | 12,552 |
| | 20,800 | 3,161 | 3,118 | 6,591 | 33,670 |
| Gross contractual amounts receivable | | | | | |
| Forward foreign exchange contracts | (20,600) | (632) | (77) | – | (21,309) |
| Cross currency interest rate swaps | (371) | (2,677) | (3,102) | (6,623) | (12,773) |
| | (20,971) | (3,309) | (3,179) | (6,623) | (34,082) |
| Net receivable | (171) | (148) | (61) | (32) | (412) |
| Total payable | 134 | 174 | 318 | 148 | 774 |

## 2. Hedge Accounting

The Group seeks to apply, wherever possible, hedge accounting to present its financial statements in accordance with the economic purpose of the hedging activity. The Group determines the economic relationship between the hedged items and the hedging instruments by reviewing their critical terms. As a result, the Group concludes that the risk being hedged for the hedged items and the risk inherent in the hedging instruments are sufficiently aligned. There is no inherent mismatch in the hedging relationships. Certain ineffectiveness can arise during the hedging process. The main sources of hedge ineffectiveness are considered to be the effects of re-designation of the hedging relationships and the counterparty credit risks on the hedging instruments.

### Hedges on debt related transactions

The Group applies various types of derivative financial instruments (forward foreign currency contracts, foreign currency options, cross currency interest rate swaps and interest rate swaps) to mitigate exposures arising from the fluctuations in foreign currencies and / or interest rates of debt. In most of the cases, the hedging instruments have a one-to-one hedge ratio with the hedged items. In view of the nature of the hedging activities, no significant ineffectiveness is expected at inception.

### Hedges on non-debt related transactions

The SoC Companies use forward contracts to manage its foreign exchange risk arising from fuel and nuclear purchases obligations, and payments for major capital projects. The SoC Companies hedge a high portion of committed and highly probable forecast transactions.

EnergyAustralia uses electricity spot-price-linked forward contracts and oil-price-linked forward contracts to mitigate exposures arising from the fluctuations in electricity spot price and oil spot price embedded in gas contracts. In most of the cases, the hedging instruments have a one-to-one hedge ratio with the hedged items.

## 2. Hedge Accounting (continued)

### Effects of hedge accounting

The tables below summarise the effect of the hedge accounting on financial position and performance of the Group for the year ended 31 December 2022 and 2021:

| Cash Flow Hedges | Notional amount of hedging instruments HK$M | Carrying amount of hedging instrument assets/(liabilities) HK$M | Favourable/(Unfavourable) changes in fair value used for measuring ineffectiveness: Hedging instruments HK$M | Hedged items HK$M | Fair value losses/(gains) recognised in cash flow hedge reserve HK$M | Hedge ineffectiveness charged/(credited) to profit or loss [a] HK$M | Amount reclassified from cash flow hedge reserve and credited/(charged) to profit or loss [a]: Hedged items affected profit or loss HK$M | Hedged future cash flows no longer expected to occur HK$M |
|---|---|---|---|---|---|---|---|---|
| **At 31 December 2022** | | | | | | | | |
| Debt related transactions | | | | | | | | |
| Interest rate risk [b] | **25,623** | **(919)** | **(35)** | **25** | **32** | **3** | **(479)** | **-** |
| Foreign exchange risk | **-** | **-** | **27** | **(27)** | **(27)** | **-** | **26** | **-** |
| Non-debt related transactions | | | | | | | | |
| Foreign exchange risk | **27,196** | **(204)** | **121** | **(121)** | **(121)** | **-** | **167** | **135** |
| Energy portfolio risk – electricity [c] | **N/A** | **2,700** | **3,550** | **(3,498)** | **(3,498)** | **(52)** | **386** | **1,500** |
| Energy portfolio risk – gas [c] | **N/A** | **(147)** | **1,206** | **(1,206)** | **(1,206)** | **-** | **1,261** | **-** |
| At 31 December 2021 | | | | | | | | |
| Debt related transactions | | | | | | | | |
| Interest rate risk [b] | 28,085 | (1,016) | (232) | 227 | 231 | 1 | (326) | - |
| Foreign exchange risk | 346 | (38) | 8 | (8) | (8) | - | 10 | - |
| Non-debt related transactions | | | | | | | | |
| Foreign exchange risk | 23,501 | (13) | 39 | (39) | (39) | - | 29 | - |
| Energy portfolio risk – electricity [c] | N/A | 1,153 | 989 | (889) | (889) | (100) | 1,050 | 34 |
| Energy portfolio risk – gas [c] | N/A | 789 | 1,546 | (1,546) | (1,546) | - | 134 | - |

| Fair Value Hedges | Notional amount of hedging instruments HK$M | Carrying amount of hedged items HK$M | Accumulated fair value hedge adjustments included in carrying amount of hedged items HK$M | Favourable/(Unfavourable) changes in fair value used for measuring ineffectiveness: Hedging instruments HK$M | Hedged items HK$M | Hedge ineffectiveness charged to finance costs HK$M |
|---|---|---|---|---|---|---|
| **At 31 December 2022** | | | | | | |
| Debt related transactions | | | | | | |
| Interest rate risk [b] | **6,388** | **(6,074)** | **424** | **(585)** | **571** | **14** |
| At 31 December 2021 | | | | | | |
| Debt related transactions | | | | | | |
| Interest rate risk [b] | 5,509 | (5,615) | (147) | (193) | 193 | - |

Notes:

(a) Hedge ineffectiveness and amounts reclassified from cash flow hedge reserve on non-debt and debt related transactions were recognised in fuel and other operating expenses and finance costs respectively.

(b) Interest rate risk included foreign exchange risk in case of foreign currency debts.

(c) The aggregate notional volumes of the outstanding energy derivatives were 101,875GWh (2021: 108,041GWh) and 5.6 million barrels (2021: 5.9 million barrels) for electricity and oil, respectively.

## 2. Hedge Accounting (continued)

### Effects of hedge accounting (continued)

An analysis of other comprehensive income by risk category and the reconciliation of the components in equity that arises in connection with hedge accounting are as follows:

| Cash Flow Hedge Reserve | Interest Rate Risk[b] HK$M | Foreign Exchange Risk HK$M | Energy Portfolio Risk HK$M | Total HK$M |
|---|---|---|---|---|
| Balance at 1 January 2021 | (414) | (15) | 443 | 14 |
| Fair value (losses) / gains | (231) | 47 | 2,435 | 2,251 |
| Reclassification to profit or loss | | | | |
| Hedged items affect profit or loss | 326 | (39) | (1,184) | (897) |
| Hedged future cash flows no longer expected to occur | – | – | (34) | (34) |
| Transfer to hedged assets | – | 8 | – | 8 |
| Related deferred tax | (18) | (4) | (364) | (386) |
| Exchange difference | – | – | (46) | (46) |
| Balance at 31 December 2021 | (337) | (3) | 1,250 | 910 |
| Balance at 1 January 2022 | (337) | (3) | 1,250 | 910 |
| Fair value (losses) / gains | (32) | 148 | 4,704 | 4,820 |
| Reclassification to profit or loss | | | | |
| Hedged items affect profit or loss | 479 | (193) | (1,647) | (1,361) |
| Hedged future cash flows no longer expected to occur | – | (135) | (1,500) | (1,635) |
| Transfer to hedged assets | – | 78 | – | 78 |
| Related deferred tax | (78) | 19 | (468) | (527) |
| Sale of subsidiaries (Note 4(a)) | (33) | – | – | (33) |
| Exchange difference | – | – | (109) | (109) |
| **Balance at 31 December 2022** | **(1)** | **(86)** | **2,230** | **2,143** |

| Cost of Hedging Reserve | Time Value of Options HK$M | Forward Element HK$M | Foreign Currency Basis Spread HK$M | Total HK$M |
|---|---|---|---|---|
| Balance at 1 January 2021 | 1 | 3 | 92 | 96 |
| Changes due to transaction related hedged items | | | | |
| Fair value losses | – | – | (11) | (11) |
| Reclassification to profit or loss | – | – | 26 | 26 |
| Changes due to time-period related hedged items | | | | |
| Fair value losses | (3) | (21) | (127) | (151) |
| Reclassification to profit or loss | 2 | 19 | (15) | 6 |
| Related deferred tax | – | – | 21 | 21 |
| Balance at 31 December 2021 | – | 1 | (14) | (13) |
| Balance at 1 January 2022 | – | 1 | (14) | (13) |
| Changes due to transaction related hedged items | | | | |
| Fair value losses | – | – | (58) | (58) |
| Reclassification to profit or loss | – | – | 11 | 11 |
| Changes due to time-period related hedged items | | | | |
| Fair value losses | (1) | (11) | (196) | (208) |
| Reclassification to profit or loss | – | 9 | 40 | 49 |
| Related deferred tax | 1 | 1 | 33 | 35 |
| **Balance at 31 December 2022** | **–** | **–** | **(184)** | **(184)** |

## 3. Fair Value Estimation and Hierarchy of Financial Instruments

The fair value of financial instruments traded in active markets (such as publicly traded derivatives) is based on quoted market prices at the end of the reporting period.

The fair value of financial instruments that are not traded in an active market (for example, over-the-counter derivatives) is determined by using appropriate valuation techniques and making assumptions that are based on market conditions existing at the end of each reporting period.

For the Group's financial instruments that are not measured at fair value, their carrying values approximate their fair values.

Financial instruments measured at fair value are analysed into the following fair value measurement hierarchy:

Level 1 – quoted prices (unadjusted) in active markets for identical assets or liabilities

Level 2 – inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices)

Level 3 – inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs)

(A) Fair value hierarchy

The following table presents the Group's financial instruments that are measured at fair value at 31 December:

| | Level 1 HK$M | Level 2 HK$M | Level 3 HK$M | Total HK$M |
|---|---|---|---|---|
| **At 31 December 2022** | | | | |
| Financial assets | | | | |
| Investments at fair value through other comprehensive income | **265** | **–** | **35** | **300** |
| Investments at fair value through profit or loss | **2** | **–** | **676** | **678** |
| Forward foreign exchange contracts | **–** | **23** | **–** | **23** |
| Cross currency interest rate swaps | **–** | **39** | **–** | **39** |
| Interest rate swaps | **–** | **59** | **–** | **59** |
| Energy contracts | **252** | **1,596** | **2,081** | **3,929** |
| | **519** | **1,717** | **2,792** | **5,028** |
| Financial liabilities | | | | |
| Forward foreign exchange contracts | **–** | **290** | **–** | **290** |
| Cross currency interest rate swaps | **–** | **1,388** | **–** | **1,388** |
| Interest rate swaps | **–** | **80** | **–** | **80** |
| Energy contracts | **3,702** | **1,155** | **100** | **4,957** |
| | **3,702** | **2,913** | **100** | **6,715** |
| At 31 December 2021 | | | | |
| Financial assets | | | | |
| Investments at fair value through other comprehensive income | 338 | – | 35 | 373 |
| Investments at fair value through profit or loss | 12 | – | 530 | 542 |
| Forward foreign exchange contracts | – | 156 | – | 156 |
| Foreign exchange options | – | 1 | – | 1 |
| Cross currency interest rate swaps | – | 180 | – | 180 |
| Interest rate swaps | – | 19 | – | 19 |
| Energy contracts | 329 | 1,457 | 1,340 | 3,126 |
| | 679 | 1,813 | 1,905 | 4,397 |
| Financial liabilities | | | | |
| Forward foreign exchange contracts | – | 187 | – | 187 |
| Cross currency interest rate swaps | – | 1,046 | – | 1,046 |
| Interest rate swaps | – | 87 | – | 87 |
| Energy contracts | 580 | 273 | 493 | 1,346 |
| | 580 | 1,593 | 493 | 2,666 |

## 3. Fair Value Estimation and Hierarchy of Financial Instruments (continued)

(A) Fair value hierarchy (continued)

The Group's policy is to recognise transfers into / out of fair value hierarchy levels at the date of the event or change in circumstances that caused the transfer. During 2022 and 2021, there were no transfers between Level 1 and Level 2.

(B) Valuation techniques used to determine fair values

The valuation techniques and inputs used in the fair value measurements within Level 2 and Level 3 are as follows:

| Financial Instruments | Valuation Techniques | Significant Inputs |
|---|---|---|
| Investments at fair value through profit or loss | Recent arm's length transactions or net asset value of funds | Not applicable |
| Forward foreign exchange contracts | Discounted cash flow | Observable exchange rates |
| Foreign exchange options | Garman Kohlhagen Model | Observable exchange rates, interest rates and volatility levels |
| Cross currency interest rate swaps | Discounted cash flow | Observable exchange rates and swap rates of respective currency |
| Interest rate swaps | Discounted cash flow | Observable swap rates of respective currency |
| Energy contracts | Discounted cash flow | Brokers' quotes and observable exchange traded swap and cap price curves; and long term forward electricity price and cap price curves |

The significant unobservable inputs of energy contracts used for fair value measurement included long term forward electricity price and cap price curve. The finance department of EnergyAustralia includes a team that performs the valuations of non-property assets required for financial reporting purposes, including Level 3 fair values. This team reports directly to EnergyAustralia's Chief Financial Officer (CFO-EA) and ARC-EA. The valuation of Level 3 forward energy contracts involves the use of a short term forward curve which is observable in the liquid market and an internally generated long term forward electricity price and cap price curve which is derived using unobservable inputs. This short term forward curve is reviewed at least once every six months, in line with the Group's half-yearly reporting dates. Review of the long term forward curve is performed by the CFO-EA and ARC-EA annually due to the lack of market liquidity. Analysis of fair value changes is performed on a monthly basis for reasonableness.

(C) Movements and sensitivity analysis of Level 3 financial instruments

| | **2022** | | | 2021 | | |
|---|---|---|---|---|---|---|
| | **Investments HK$M** | **Energy Contracts HK$M** | **Total HK$M** | Investments HK$M | Energy Contracts HK$M | Total HK$M |
| Opening balance | **565** | **847** | **1,412** | 326 | 392 | 718 |
| Total (losses) / gains recognised in | | | | | | |
| Profit or loss and presented in fuel and other operating expenses (note) | **(13)** | **292** | **279** | 164 | 119 | 283 |
| Other comprehensive income | **(8)** | **2,265** | **2,257** | – | 444 | 444 |
| Purchases | **167** | **–** | **167** | 128 | – | 128 |
| Sales / settlements | **–** | **(1,423)** | **(1,423)** | (53) | (108) | (161) |
| Closing balance | **711** | **1,981** | **2,692** | 565 | 847 | 1,412 |

Note: Out of which, unrealised gains recognised in profit or loss relating to the assets and liabilities held at the end of the reporting period was HK$171 million (2021: HK$282 million).

The valuation of long tenure energy contracts is sensitive to electricity pool price assumptions. Electricity forward prices have fluctuated significantly during the year and in excess of historical movements. Additional sensitivities (30% higher or lower) to the balance of the energy contracts at 31 December 2022, with all other variables held constant, are disclosed as follows:

## 3. Fair Value Estimation and Hierarchy of Financial Instruments (continued)

(C) Movements and sensitivity analysis of Level 3 financial instruments (continued)

| | 2022 HK$M | 2021 HK$M |
|---|---|---|
| Balance of Level 3 energy contracts would increase if | | |
| Electricity prices were 15% higher (2021: 15%) | **836** | 681 |
| Electricity prices were 30% higher | **1,688** | N/A |
| Balance of Level 3 energy contracts would decrease if | | |
| Electricity prices were 15% lower (2021: 15%) | **(844)** | (724) |
| Electricity prices were 30% lower | **(1,677)** | N/A |

## 4. Offsetting Financial Assets and Financial Liabilities

The following financial assets and liabilities are subject to offsetting, enforceable master netting arrangements or similar agreements:

| | Effect of offsetting in the consolidated statement of financial position | | | Related amounts not offset in the consolidated statement of financial position | | |
|---|---|---|---|---|---|---|
| | Gross amounts recognised HK$M | Gross amounts offset HK$M | Net amounts presented in the respective line HK$M | Financial instruments HK$M | Financial instrument collateral HK$M | Net amount [a] HK$M |
| **At 31 December 2022** | | | | | | |
| Financial assets | | | | | | |
| Trade receivables | **4,763** | **–** | **4,763** | **(2,117)** | **(2,567)** | **79** |
| Derivative financial instruments | **4,937** | **(914)** | **4,023** | **(83) [b]** | **–** | **3,940** |
| | **9,700** | **(914)** | **8,786** | **(2,200)** | **(2,567)** | **4,019** |
| Financial liabilities | | | | | | |
| Customers' deposits | **6,551** | **–** | **6,551** | **(2,567)** | **–** | **3,984** |
| Bank loans and other borrowings | **5,085** | **–** | **5,085** | **–** | **(2,117)** | **2,968** |
| Derivative financial instruments | **7,540** | **(914)** | **6,626** | **(83) [b]** | **–** | **6,543** |
| | **19,176** | **(914)** | **18,262** | **(2,650)** | **(2,117)** | **13,495** |
| At 31 December 2021 | | | | | | |
| Financial assets | | | | | | |
| Bank balances, cash and other liquid funds | 299 | – | 299 | (299) | – | – |
| Trade receivables and service concession receivables | 6,791 | – | 6,791 | (4,647) | (2,104) | 40 |
| Derivative financial instruments | 3,766 | (403) | 3,363 | (156) [b] | – | 3,207 |
| | 10,856 | (403) | 10,453 | (5,102) | (2,104) | 3,247 |
| Financial liabilities | | | | | | |
| Customers' deposits | 6,251 | – | 6,251 | (2,104) | – | 4,147 |
| Bank loans and other borrowings | 11,514 | – | 11,514 | – | (4,946) | 6,568 |
| Derivative financial instruments | 2,961 | (403) | 2,558 | (156) [b] | – | 2,402 |
| | 20,726 | (403) | 20,323 | (2,260) | (4,946) | 13,117 |

## 4. Offsetting Financial Assets and Financial Liabilities (continued)

Notes:

(a) Under HKFRS, amounts cannot be offset if the rights of set-off are conditional on a future event e.g. default of payment. "Net amount" column represents the net impact that would be shown on the consolidated statement of financial position if all set-off rights (e.g. master netting arrangements, collateral arrangements, etc.) were exercised. At 31 December 2022, these items include (1) trade receivables related to Hong Kong electricity business where customers' deposits are served as security for payments; (2) trade receivables of subsidiaries in Mainland China which are pledged against their bank loans and other borrowings; and (3) bank loans and other borrowings of subsidiaries in Mainland China which are secured by charges over certain financial assets or rights to income.

(b) For derivative financial instruments, the Group enters into derivative transactions under International Swaps and Derivatives Association (ISDA) master agreements in which there is a set-off provision. Under certain circumstances, for example, when a credit event such as a default occurs, all outstanding transactions under the agreement are terminated, a termination value is then assessed and only a single net amount is payable in settlement of all transactions. The ISDA agreements do not meet the criteria for offsetting in the consolidated statement of financial position since the Group does not have any currently legally enforceable right to offset recognised amounts. The right to offset is enforceable only on the occurrence of future events such as a default on the bank transactions or other credit events.

## 5. Capital Management

The primary objective of the Group's capital management is to safeguard the Group's ability to continue as a going concern, maintain a strong credit rating and a healthy capital ratio to support the business and to enhance shareholder value.

The Group manages its capital structure and fine-tunes it in light of changes in economic conditions and business strategies. To maintain or adjust the capital structure, the Group may adjust the dividend payments to shareholders, issue new shares or change the level of debts. The Group's capital management objectives, policies or processes were unchanged during 2022 and 2021.

The Group monitors capital using "total debt to total capital" and "net debt to total capital" ratios. These ratios are as follows:

| | **2022 HK$M** | 2021 HK$M |
|---|---|---|
| Total debt [(a)] | **59,217** | 58,215 |
| Net debt [(b)] | **54,931** | 49,955 |
| Total equity [(c)] | **116,554** | 127,541 |
| Total capital (based on total debt) [(d)] | **175,771** | 185,756 |
| Total capital (based on net debt) [(e)] | **171,485** | 177,496 |
| Total debt to total capital (based on total debt) ratio (%) | **33.7** | 31.3 |
| Net debt to total capital (based on net debt) ratio (%) | **32.0** | 28.1 |

Increase in the net debt to total capital was driven by increased net debt to finance EnergyAustralia's cash flow requirements and reduced capital from the loss attributable to EnergyAustralia in 2022.

Certain entities of the Group are subject to loan covenants. For both 2022 and 2021, there is no material non-compliance with those loan covenants.

Notes:

(a) Total debt equals bank loans and other borrowings.

(b) Net debt equals total debt less bank balances, cash and other liquid funds.

(c) Total equity equals equity plus advances from non-controlling interests.

(d) Total capital (based on total debt) equals total debt plus total equity.

(e) Total capital (based on net debt) equals net debt plus total equity.

## CLP Power Hong Kong Limited and Castle Peak Power Company Limited

### Overview

In Hong Kong, CLP Power Hong Kong Limited (CLP Power) operates a vertically integrated electricity generation, transmission and distribution business. The generating plants in Hong Kong are owned by Castle Peak Power Company Limited (CAPCO), in which CLP Power owned 70%. CLP Power builds and operates CAPCO's power stations under contract and is the sole customer for CAPCO's electricity which CLP Power transmits and distributes to its customers in Kowloon, New Territories and most of the outlying islands. CLP Power owns the transmission and distribution network.

Since financial year 1964, the electricity-related operations of CLP Power and CAPCO (the SoC Companies) have been governed by a Scheme of Control (SoC) Agreement with the Hong Kong Government. The SoC specifies the SoC Companies' obligations to supply adequate and reliable electricity supplies to customers at the lowest reasonable cost and the mechanism for the Hong Kong Government to monitor their financial affairs and operating performance. In return, CLP Power is allowed to charge tariffs designed to recover the operating costs (including tax) and allowed net return of the SoC Companies.

The current SoC took effect from 1 October 2018 and covers a term of over 15 years ending on 31 December 2033. The SoC contains a provision to give the SoC Companies protection for stranded costs, which may arise as a result of future changes to the market structure which adversely impact on the SoC Companies' ability to recover and to earn returns on existing investments made in good faith in accordance with the SoC. These costs will include the costs of investments, fuel and power purchase agreements previously approved by the Hong Kong Government. If stranded costs arise after the SoC Companies have implemented mitigation measures reasonably required by the Hong Kong Government, the SoC Companies are entitled to recover them from the market, consistent with international practice. Three years before market changes are introduced, the SoC Companies and the Hong Kong Government will agree on the amount of stranded costs and the mechanism for their recovery by the SoC Companies.

### Tariff Setting Mechanism

For each year, CLP Power designs the total tariff it charges to cover the SoC Companies' operating costs and allowed net return. The total tariff consists of the following components:

(i) basic tariff rate which is derived by taking into account the annual forecast of (a), (b) and (c) below, using the formula "(a-b) / c":

  (a) the allowed net return and operating costs including the standard cost of fuels; generation, transmission, distribution and administration expenses; depreciation; interest expenses; and taxes;

  (b) 80% of the profit on electricity sales to Mainland China; and

  (c) local unit sales as determined by the load forecast.

(ii) fuel clause charge or rebate (Fuel Cost Adjustment) which represents the difference between the cost of fuels (including natural gas, coal and oil) and the standard cost recovered through the basic tariff rate. The Fuel Cost Adjustment may be adjusted from time to time, including on a monthly basis, to reflect changes in the cost of fuels consumed by the SoC Companies for the generation of electricity.

Any difference between the actual profit for SoC operations and the permitted return for the year is transferred to or from a Tariff Stabilisation Fund. The Tariff Stabilisation Fund does not form part of distributable shareholders' funds and represents a liability in the accounts of CLP Power. A charge on the average balance of the Tariff Stabilisation Fund is credited to a Rate Reduction Reserve in the accounts of CLP Power, which balance as at the end of each year is to be transferred to the Tariff Stabilisation Fund in the following year.

## Permitted and Net Return

The permitted and net return that the SoC Companies are allowed under the SoC are calculated as follows:

- The annual permitted return under the SoC is 8% of the SoC Companies' average net fixed assets.
- The net return under the SoC is the permitted return after the deduction or adjustment of the following items:

(a) interest up to a maximum of 7% per annum on borrowed capital arranged for financing fixed assets;

(b) a charge of the average one-month Hong Kong Interbank Offered Rate on the average balance of the Tariff Stabilisation Fund under the SoC, which is credited to the Rate Reduction Reserve;

(c) an excess capacity adjustment of 8% less an allowed interest charge up to 7% per annum on the average related excess capacity expenditure;

(d) interest up to 7% per annum on the increase in average balance of the customers' deposits in excess of the balance as at 30 September 1998; and

(e) performance-linked incentives / penalties adjustments

| Category | % incentives (+) / penalties (-) |
|---|---|
| Operation performance related incentives / penalties | in the range of -0.05% to +0.05% on average net fixed assets |
| Energy efficiency and renewable performance incentives | > a maximum of 0.315% on average net fixed assets<br>> incentive of 10% of renewable energy certificates sales revenue<br>> five-year energy saving and renewable energy connections incentives with a maximum of 0.11% on the average net fixed assets at the final year of the five-year period |
| Demand response reduction incentive | a maximum of 0.025% on average net fixed assets |

The net return is divided between the SoC Companies in accordance with the provisions of the agreements between the SoC Companies. These provisions state that each company will receive that proportion of the total net return represented by the net return that company would receive if it were the only company under the SoC and the net return were calculated solely on the basis of its own financial statements.

Under the SoC, 65% of the energy efficiency incentives earned by the SoC Companies are to be contributed to a CLP Community Energy Saving Fund (CESF) to support programmes in promotion of energy efficiency, use of renewable energy, the disadvantaged groups and other programmes as agreed with the Hong Kong Government.

The calculations shown on next page are in accordance with the SoC and the agreements between the SoC Companies.

**For the year ended 31 December**

| | 2022 HK$M | 2021 HK$M |
|---|---|---|
| **SoC revenue** | **51,103** | 45,379 |
| Expenses | | |
| Operating costs | **5,027** | 5,186 |
| Fuel | **21,939** | 15,667 |
| Purchases of nuclear electricity | **5,822** | 5,678 |
| Provision for asset decommissioning | **73** | 111 |
| Depreciation | **5,313** | 5,434 |
| Operating interest | **800** | 857 |
| Taxation | **1,924** | 2,100 |
| | **40,898** | 35,033 |
| Profit after taxation | **10,205** | 10,346 |
| Interest on increase in customers' deposits | **4** | – |
| Interest on borrowed capital | **1,115** | 1,018 |
| Adjustment for performance incentives | **(448)** | (438) |
| Profit for SoC | **10,876** | 10,926 |
| Transfer to Tariff Stabilisation Fund | **(531)** | (1,072) |
| Permitted return | **10,345** | 9,854 |
| Deduct interest on / Adjustment for | | |
| Increase in customers' deposits as above | **4** | – |
| Borrowed capital as above | **1,115** | 1,018 |
| Performance incentives as above | **(448)** | (438) |
| Tariff Stabilisation Fund to Rate Reduction Reserve | **40** | 3 |
| | **711** | 583 |
| **Net return** | **9,634** | 9,271 |
| CESF contribution | **(218)** | (208) |
| **Net return after CESF contribution** | **9,416** | 9,063 |
| Divisible as follows: | | |
| CLP Power | **6,239** | 6,078 |
| CAPCO | **3,177** | 2,985 |
| | **9,416** | 9,063 |
| CLP Power's share of net return after CESF contribution | | |
| CLP Power | **6,239** | 6,078 |
| Interest in CAPCO | **2,224** | 2,089 |
| | **8,463** | 8,167 |

# Five-year Summary: CLP Group Economic and Financial Data

| | 2022 | 2021 | 2020 | 2019 | 2018 |
|---|---|---|---|---|---|
| **Consolidated Operating Results**, HK$M | | | | | |
| Revenue | | | | | |
| Hong Kong electricity business | **50,600** | 44,311 | 41,325 | 40,025 | 40,872 |
| Energy businesses outside Hong Kong | **48,873** | 38,941 | 37,687 | 45,088 | 49,793 |
| Others | **1,189** | 707 | 578 | 576 | 760 |
| Total | **100,662** | 83,959 | 79,590 | 85,689 | 91,425 |
| Earnings | | | | | |
| Hong Kong energy business [1] | **8,403** | 8,141 | 7,773 | 7,418 | 8,575 |
| Hong Kong energy business related | **263** | 301 | 270 | 211 | 227 |
| Mainland China | **2,229** | 1,660 | 2,233 | 2,277 | 2,163 |
| Australia | **(5,267)** | (83) | 1,690 | 1,566 | 3,302 |
| India | **193** | 221 | 175 | 263 | 572 |
| Southeast Asia and Taiwan | **11** | 173 | 386 | 335 | 162 |
| Other earnings in Hong Kong [1] | **(65)** | (18) | (193) | (169) | (109) |
| Unallocated net finance (costs) / income | **(6)** | (9) | 24 | (42) | (54) |
| Unallocated Group expenses | **(1,138)** | (869) | (781) | (738) | (856) |
| Operating earnings | **4,623** | 9,517 | 11,577 | 11,121 | 13,982 |
| Property revaluation | **(57)** | (34) | (121) | (83) | 18 |
| Profit from sale of properties | **80** | – | – | – | – |
| (Losses) / gains on sales of investments | **(3,722)** | 249 | – | – | – |
| Impairment provision | **–** | (148) | – | (6,381) | (450) |
| Other items affecting comparability from Australia | **–** | (1,093) | – | – | – |
| Total earnings | **924** | 8,491 | 11,456 | 4,657 | 13,550 |
| Dividends | **7,832** | 7,832 | 7,832 | 7,782 | 7,630 |
| Depreciation and amortisation, owned and leased assets | **8,904** | 9,308 | 8,476 | 8,118 | 8,005 |
| **Consolidated Statement of Financial Position**, HK$M | | | | | |
| SoC fixed assets | **130,842** | 124,353 | 119,873 | 117,042 | 113,295 |
| Other fixed assets | **24,916** | 37,801 | 36,642 | 33,744 | 34,650 |
| Goodwill and other intangible assets | **18,451** | 19,710 | 20,559 | 20,111 | 26,910 |
| Interests in and loans to joint ventures | **11,748** | 10,602 | 11,017 | 9,999 | 9,674 |
| Interests in associates | **9,090** | 8,769 | 9,181 | 8,708 | 7,746 |
| Other non-current assets | **6,518** | 4,686 | 3,568 | 3,193 | 2,739 |
| Current assets | **34,461** | 33,888 | 33,393 | 28,826 | 35,500 |
| Total assets | **236,026** | 239,809 | 234,233 | 221,623 | 230,514 |
| Shareholders' funds | **105,498** | 113,034 | 112,200 | 105,455 | 109,053 |
| Perpetual capital securities | **3,887** | 3,887 | 3,887 | 3,887 | 5,791 |
| Other non-controlling interests | **6,309** | 9,788 | 9,885 | 9,987 | 10,088 |
| Equity | **115,694** | 126,709 | 125,972 | 119,329 | 124,932 |
| Bank loans and other borrowings | **59,217** | 58,215 | 54,348 | 52,349 | 55,298 |
| SoC reserve accounts | **3,094** | 3,440 | 2,374 | 1,500 | 998 |
| Other current liabilities | **33,147** | 27,286 | 27,260 | 26,911 | 28,099 |
| Other non-current liabilities | **24,874** | 24,159 | 24,279 | 21,534 | 21,187 |
| Total liabilities | **120,332** | 113,100 | 108,261 | 102,294 | 105,582 |
| Equity and total liabilities | **236,026** | 239,809 | 234,233 | 221,623 | 230,514 |

A ten-year summary is on our website

| | 2022 | 2021 | 2020 | 2019 | 2018 |
|---|---|---|---|---|---|
| **Consolidated Statement of Cash Flows**, HK$M | | | | | |
| Funds from operations | **13,555** | 20,223 | 24,418 | 23,502 | 26,584 |
| Net cash inflow from operating activities | **12,734** | 17,806 | 22,374 | 21,345 | 23,951 |
| Net cash outflow from investing activities | **(15,382)** | (11,787) | (10,081) | (5,824) | (11,259) |
| Net cash outflow from financing activities | **(987)** | (8,484) | (10,211) | (14,944) | (11,505) |
| Capital expenditure, owned and leased assets | **(14,553)** | (12,431) | (10,586) | (10,448) | (10,327) |
| **Per Share Data**, HK$ | | | | | |
| Shareholders' funds per share | **41.76** | 44.74 | 44.41 | 41.74 | 43.16 |
| Earnings per share | | | | | |
| Total earnings | **0.37** | 3.36 | 4.53 | 1.84 | 5.36 |
| Operating earnings | **1.83** | 3.77 | 4.58 | 4.40 | 5.53 |
| Dividends per share | **3.10** | 3.10 | 3.10 | 3.08 | 3.02 |
| Closing share price | | | | | |
| Highest | **80.35** | 80.90 | 84.20 | 96.85 | 96.95 |
| Lowest | **51.80** | 71.75 | 65.00 | 78.40 | 75.35 |
| As at year-end | **56.95** | 78.75 | 71.70 | 81.90 | 88.50 |
| **Ratios** | | | | | |
| Return on equity, % | **0.8** | 7.5 | 10.5 | 4.3 | 12.4 |
| Operating return on equity, % | **4.2** | 8.5 | 10.6 | 10.4 | 12.8 |
| Total debt to total capital, % | **33.7** | 31.3 | 30.0 | 30.3 | 30.4 |
| Net debt to total capital, % | **32.0** | 28.1 | 25.1 | 26.7 | 25.5 |
| FFO interest cover, times | **7** | 12 | 13 | 12 | 13 |
| Price/Earnings, times | **154** | 23 | 16 | 45 | 17 |
| Dividend yield, % | **5.4** | 3.9 | 4.3 | 3.8 | 3.4 |
| Dividend cover [2], times | **0.6** | 1.2 | 1.5 | 1.4 | 1.8 |
| Dividend pay-out, % | | | | | |
| Total earnings | **847.6** | 92.2 | 68.4 | 167.1 | 56.3 |
| Operating earnings | **169.4** | 82.3 | 67.7 | 70.0 | 54.6 |
| Total return to shareholders [3], % | **2.6** | 5.8 | 5.2 | 8.7 | 9.6 |
| **Group Generation Capacity** [4] | | | | | |
| (owned / operated / under construction), MW | | | | | |
| – by region | | | | | |
| Hong Kong | **8,268** | 8,243 | 8,143 | 7,568 | 7,543 |
| Mainland China | **5,944** | 7,985 | 7,905 | 7,905 | 7,869 |
| Australia | **4,853** | 4,537 | 4,511 | 4,508 | 4,478 |
| India | **1,700** | 2,040 | 1,890 | 1,842 | 1,796 |
| Southeast Asia and Taiwan | **285** | 285 | 285 | 285 | 285 |
| | **21,050** | 23,090 | 22,734 | 22,108 | 21,971 |
| – by status | | | | | |
| Operational | **19,874** | 22,235 | 22,184 | 21,468 | 21,127 |
| Construction | **1,176** | 855 | 550 | 640 | 844 |
| | **21,050** | 23,090 | 22,734 | 22,108 | 21,971 |

Notes:

1 Reflecting our business initiatives in energy and infrastructure solutions in Hong Kong, the 2018-2021 earnings of CLP*e* have been reclassified from other earnings in Hong Kong to Hong Kong energy business to align with current year presentation.

2 Dividend cover = Operating earnings per share / Dividend per share

3 Total return to shareholders represents the 10-year annualised rate of return from the combination of share price appreciation and dividend payments.

4 Group generation capacity (in MW) is incorporated on the following basis: CAPCO on 100% capacity as stations operated by CLP Power Hong Kong and other stations on the proportion of the Group's equity interests.

# Five-year Summary: CLP Group Environmental, Social and Governance (ESG) Data

## Environmental

| Performance Indicators | Units | 2022 | 2021 | 2020 | 2019 | 2018 | GRI Standards (GRI)/ HKEx ESG Reporting Guide (HKEx)/SASB Standards for Electric Utilities (SASB)/ ISSB's Climate-related Disclosures (ISSB) |
|---|---|---|---|---|---|---|---|
| **Greenhouse Gas Emissions** | | | | | | | |
| **CLP Group** [1] | | | | | | | |
| **Total $CO_2e$ emissions – on an equity basis** [2, 3] | kt | **60,223** | 65,017 | 62,138 | 71,720 | N/A | GRI 305-1, 305-2, 305-3/ HKEx A1.2/SASB IF-EU-110a.1, IF-EU-110a.2/ISSB 21-a |
| Scope 1 $CO_2e$ [4] | kt | **44,141** | 47,690 | 45,105 | 50,047 | N/A | |
| Scope 2 $CO_2e$ | kt | **220** | 236 | 244 | 250 | N/A | |
| Scope 3 $CO_2e$ | kt | **15,861** | 17,091 | 16,790 | 21,424 | N/A | |
| **CLP Group's generation and energy storage portfolio** [3, 4, 5] | | | | | | | |
| $CO_2$ – on an equity basis [6] | kt | **44,019** | 47,574 | 44,987 | N/A | N/A | GRI 305-1, 305-2/HKEx A1.2 |
| $CO_2e$ – on an equity basis [6] | kt | **44,235** | 47,813 | N/A | N/A | N/A | |
| $CO_2$ – on an equity plus long-term capacity and energy purchase basis [7, 8] | kt | **48,074** | 51,674 | 48,621 | N/A | N/A | |
| $CO_2e$ – on an equity plus long-term capacity and energy purchase basis [7, 8] | kt | **48,323** | 51,941 | N/A | N/A | N/A | |
| $CO_2$ – on an operational control basis [6] | kt | **44,338** | 46,842 | 43,808 | 50,412 | 52,052 | |
| $CO_2e$ – on an operational control basis [6] | kt | **44,571** | 47,090 | 44,023 | 50,676 | 52,306 | |
| **Climate Vision 2050** | | | | | | | |
| **CLP Group – GHG emissions intensity of generation and energy storage portfolio** [3, 4, 5, 10] | | | | | | | |
| On an equity plus long-term capacity and energy purchase basis [7, 8] | kg $CO_2e$/kWh | **0.55** | 0.57 | 0.57 | 0.63 | 0.66 | GRI 305-4/HKEx A1.2/ISSB 21-a |
| On an equity basis [6] | kg $CO_2e$/kWh | **0.63** | 0.65 | 0.66 | 0.71 | 0.74 | |
| **Resource Use & Emissions** [11, 12] | | | | | | | |
| Nitrogen oxides ($NO_x$) emissions | kt | **43.5** | 45.7 | 43.2 | 47.0 | 60.9 | GRI 305-7/HKEx A1.1/ SASB IF-EU-120.a.1 |
| Sulphur dioxide ($SO_2$) emissions | kt | **48.9** | 52.7 | 48.0 | 44.7 | 76.1 | |
| Particulates emissions | kt | **6.8** | 7.6 | 6.9 | 7.7 | 8.5 | |
| Sulphur hexafluoride ($SF_6$) | kt | **0.003** | 0.004 | 0.003 | N/A | N/A | |
| Non-hazardous waste produced [13] | t (solid)/kl (liquid) | **12,702/23** | 24,481/65 | 17,901/3 | 13,344/59 | 11,471/52 | GRI 306-2/HKEx A1.4 |
| Non-hazardous waste recycled [13] | t (solid)/kl (liquid) | **7,917/23** | 4,214/65 | 4,458/3 | 4,986/57 | 3,990/52 | |
| Hazardous waste produced [13] | t (solid)/kl (liquid) | **869/1,103** | 1,524/1,017 | 1,503/1,091 | 862/1,578 | 1,435/1,685 | GRI 306-2/HKEx A1.3 |
| Hazardous waste recycled [13] | t (solid)/kl (liquid) | **493/797** | 520/947 | 523/1,069 | 201/1,536 | 631/1,648 | |
| Ash produced/recycled and sold | kt | **3,088/2,365** | 3,403/2,501 | 2,624/1,793 | 3,032/3,667 | 3,419/2,263 | SASB IF-EU-150a.1 |
| Gypsum produced/recycled and sold | kt | **286/280** | 367/365 | 334/335 | 441/438 | 253/250 | |
| Total water withdrawal [2] | $Mm^3$ | **5,339.3** | 5,243.7 [14] | 5,466.0 [14] | 5,475.4 [14] | 5,154.2 [15] | GRI 2-4, 303-3/HKEx A2.2/ SASB IF-EU-140a.1 |
| Total water discharge [2] | $Mm^3$ | **5,310.9** | 5,205.4 [16] | 5,438.6 [16] | 5,433.2 [16] | 5,103.2 | GRI 2-4, 303-4 |
| **Fuel Use** | | | | | | | |
| Coal consumed (for power generation) | TJ | **394,274** | 426,190 | 403,379 | 485,453 | 521,568 | GRI 302-1/HKEx A2.1 |
| Gas consumed (for power generation) | TJ | **151,327** | 142,304 | 134,776 | 107,183 | 83,364 | |
| Oil consumed (for power generation) | TJ | **2,936** | 2,717 | 2,243 | 2,620 | 3,807 | |
| **Environmental Compliance** | | | | | | | |
| Environmental regulatory non-compliances resulting in fines or prosecutions [11] | number | **0** | 0 | 0 | 0 | 0 | GRI 2-27 |
| Environmental licence limit exceedances & other non-compliances [11] | number | **6** [17] | 5 [18] | 4 | 10 | 2 | |

Notes:

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

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

3 Paguthan Power Station, the power purchase agreements of which expired in December 2018, was not included in the 2019-2022 numbers.

4 In accordance with the Greenhouse Gas Protocol, WE Station, which makes use of landfill gas from waste for power generation, is not included in CLP's Scope 1 $CO_2$ emissions and is reported separately in the Asset Performance Statistics of the Sustainability Report. Its non-$CO_2$ GHG emissions (i.e. $CH_4$ and $N_2O$) are included in CLP's Scope 1 $CO_2e$ emissions.

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

6 Numbers include Scope 1 and Scope 2 emissions.

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

8 Numbers include Scope 1, Scope 2 and Scope 3 Category 3 emissions (direct emissions from generation of purchased electricity that is sold to CLP's customers).

9 $CO_2e$ emissions of Yallourn and Hallett Power Stations were used to calculate $CO_2$ emissions metrics in 2017 due to limited data availability.

10 The 2019-2022 numbers refer to the GHG emissions intensity (kg $CO_2e$/kWh), in line with the updated Climate Vision 2050 targets. Numbers prior to 2019 refer to carbon emissions intensity (kg $CO_2$/kWh), as reported in the past.

11 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 2019-2022 number.

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

13 Waste categorised in accordance with local regulations.

14 Restated as per updated data for Newport Power Station in Australia and Jhajjar Power Station in India.

| Performance Indicators | Units | 2022 | 2021 | 2020 | 2019 | 2018 | GRI Standards (GRI)/ HKEx ESG Reporting Guide (HKEx)/SASB Standards for Electric Utilities (SASB)/ ISSB's Climate-related Disclosures (ISSB) |
|---|---|---|---|---|---|---|---|
| **Asset management** [2,19] | | | | | | | |
| **Total generation and energy storage capacity by asset type – on an equity basis** | MW (%) | **17,970 (100)** | 20,018 (100) | 19,691 (100) | 19,238 (100) | 19,108 (100) | GRI 2-4/ISSB 20 |
| Coal | MW (%) | **8,486 (47.2)** | 10,795 (53.9) | 10,765 (54.7) | 10,765 (56.0) | 10,765 (56.3) | |
| Gas | MW (%) | **4,934 (27.5)** | 4,666 (23.3) | 4,600 (23.4) | 4,194 (21.8) | 4,147 (21.7) | |
| Nuclear | MW (%) | **1,600 (8.9)** | 1,600 (8.0) | 1,600 (8.1) | 1,600 (8.3) | 1,600 (8.4) | |
| Wind [20] | MW (%) | **1,680 (9.3)** | 1,747 (8.7) | 1,521 (7.7) | 1,521 (7.9) | 1,521 (8.0) | |
| Hydro [20] | MW (%) | **489 (2.7)** | 489 (2.4) | 489 (2.5) | 489 (2.5) | 489 (2.6) | |
| Solar [20] | MW (%) | **554 (3.1)** | 499 (2.5) | 499 (2.5) | 451 (2.3) | 369 (1.9) | |
| Waste-to-energy [20] | MW (%) | **7 (0.0)** | 7 (0.0) | 7 (0.0) | 7 (0.0) | 7 (0.0) | |
| Energy Storage | MW (%) | **10 (0.1)** | 5 (0.0) | 0 (0.0) | N/A | N/A | |
| Others | MW (%) | **210 (1.2)** | 210 (1.0) | 210 (1.1) | 210 (1.1) | 210 (1.1) | |
| **Total generation and energy storage capacity by asset type – on an equity plus long-term capacity and energy purchase basis** [7] | MW (%) | **23,068 (100)** | 25,108 (100) | 24,752 (100) [21] | 24,015 (100) | 23,705 (100) | |
| Coal | MW (%) | **9,719 (42.1)** | 12,027 (47.9) | 11,997 (48.5) | 11,997 (50.0) | 11,997 (50.6) | |
| Gas | MW (%) | **6,089 (26.4)** | 5,813 (23.2) | 5,717 (23.1) | 5,139 (21.4) | 5,084 (21.4) | |
| Nuclear | MW (%) | **2,685 (11.6)** | 2,685 (10.7) | 2,685 (10.8) | 2,685 (11.2) | 2,685 (11.3) | |
| Wind [22] | MW (%) | **2,264 (9.8)** | 2,331 (9.3) | 2,105 (8.5) [21] | 2,049 (8.5) | 1,982 (8.4) | |
| Hydro [22] | MW (%) | **489 (2.1)** | 489 (1.9) | 489 (2.0) | 489 (2.0) | 489 (2.1) | |
| Solar [22] | MW (%) | **848 (3.7)** | 793 (3.2) | 793 (3.2) | 745 (3.1) | 558 (2.4) | |
| Waste-to-energy [22] | MW (%) | **10 (0.0)** | 10 (0.0) | 10 (0.0) | 10 (0.0) | 10 (0.0) | |
| Energy Storage | MW (%) | **665 (2.9)** | 660 (2.6) | 655 (2.6) | N/A | N/A | |
| Others | MW (%) | **300 (1.3)** | 300 (1.2) | 300 (1.2) | 900 (3.7) | 900 (3.8) | |
| **Total energy sent out by asset type** [3] **– on an equity basis** | GWh (%) | **69,726 (100)** | 73,113 (100) | 68,699 (100) | 70,949 (100) | N/A | GRI 2-4/SASB IF-EU-000.D/ISSB 20 |
| Coal | GWh (%) | **37,031 (53.1)** | 42,002 (57.4) | 39,438 (57.4) | 44,596 (62.9) | N/A | |
| Gas | GWh (%) | **14,435 (20.7)** | 13,233 (18.1) | 12,390 (18.0) | 9,979 (14.1) | N/A | |
| Nuclear | GWh (%) | **12,346 (17.7)** | 12,302 (16.8) | 11,192 (16.3) | 10,888 (15.3) | N/A | |
| Wind [23] | GWh (%) | **3,146 (4.5)** | 2,959 (4.0) | 2,886 (4.2) | 2,924 (4.1) | N/A | |
| Hydro [23] | GWh (%) | **1,835 (2.6)** | 1,668 (2.3) | 1,879 (2.7) | 1,758 (2.5) | N/A | |
| Solar [23] | GWh (%) | **901 (1.3)** | 922 (1.3) | 898 (1.3) | 805 (1.1) | N/A | |
| Waste-to-energy [23] | GWh (%) | **29 (0.0)** | 27 (0.0) | 15 (0.0) | 0 (0.0) | N/A | |
| Energy Storage | GWh (%) | **0 (0.0)** | 0 (0.0) | 0 (0.0) | N/A | N/A | |
| Others | GWh (%) | **1 (0.0)** | 0 (0.0) | 1 (0.0) | 0 (0.0) | N/A | |
| **Total energy sent out by asset type** [3, 24] **– on an equity plus long-term capacity and energy purchase basis** [7] | GWh (%) | **87,360 (100)** | 91,183 (100) | 85,949 (100) [21] | 88,573 (100) | (100) | |
| Coal | GWh (%) | **39,027 (44.7)** | 43,995 (48.2) | 41,118 (47.8) | 48,512 (54.8) | (60) | |
| Gas | GWh (%) | **19,507 (22.3)** | 18,461 (20.2) | 17,157 (20.0) | 13,073 (14.8) | (12) | |
| Nuclear | GWh (%) | **20,836 (23.9)** | 20,962 (23.0) | 19,923 (23.2) | 19,400 (21.9) | (20) | |
| Wind [25] | GWh (%) | **4,709 (5.4)** | 4,611 (5.1) | 4,445 (5.2) [21] | 4,474 (5.0) | | |
| Hydro [25] | GWh (%) | **1,835 (2.1)** | 1,668 (1.8) | 1,879 (2.2) | 1,758 (2.0) | (8) | |
| Solar [25] | GWh (%) | **1,472 (1.7)** | 1,524 (1.7) | 1,522 (1.8) | 1,467 (1.7) | | |
| Waste-to-energy [25] | GWh (%) | **42 (0.0)** | 38 (0.0) | 22 (0.0) | 0 (0.0) | N/A | |
| Energy Storage | GWh (%) | **-69 (-0.1)** | −75 (-0.1) | −118 (-0.1) | N/A | N/A | |
| Others | GWh (%) | **2 (0.0)** | 1 (0.0) | 1 (0.0) | -109 (-0.1) | (0) | |

Notes:

15 Restated as per updated data for Jhajjar Power Station in India.

16 Restated as per updated data for Newport Power Station in Australia.

17 The number excludes eight cases of short-term licence limit exceedances from Jhajjar. Details please refer to the section Environmental Management and Compliance – Initiatives and Progress in Sustainability Report 2022.

18 The number was restated to align the calculation methodology across years.

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

20 Renewables include wind, hydro, solar and waste-to-energy. The total capacity of renewables on an equity basis is 2,731MW (15.2%) in 2022.

21 Restated as per updated data for Power Purchase Agreement (PPA) of Waterloo Wind Farm in Australia.

22 Renewables include wind, hydro, solar and waste-to-energy. The total capacity of renewables on an equity plus long-term capacity and energy purchase basis is 3,611MW (15.7%) in 2022.

23 Renewables include wind, hydro, solar and waste-to-energy. The total sent out of renewables on an equity basis is 5,911GWh (8.5%) in 2022.

24 Only percentages are available for the year 2018.

25 Renewables include wind, hydro, solar and waste-to-energy. The total sent out of renewables on an equity plus long-term capacity and energy purchase basis is 8,058GWh (9.2%) in 2022.

*All 2022 data in the above table have been independently verified by PricewaterhouseCoopers **except** those numbers which are shaded in dark grey.*

## Social and Governance

For more detailed narrative on the "Environmental, Social and Governance" related performance indicators, please refer to Stakeholders chapters and the Corporate Governance Report of this Annual Report.

| Performance Indicators | Units | 2022 | 2021 | 2020 | 2019 | 2018 | GRI/HKEx/SASB/ISSB |
|---|---|---|---|---|---|---|---|
| **Employees** [1] | | | | | | | |
| Employees by region | | | | | | | |
| Hong Kong | number | **4,954** | 4,771 | 4,689 | 4,604 | 4,543 | GRI 2-7/HKEx B1.1 |
| Mainland China | number | **663** | 627 | 609 | 607 | 596 | |
| Australia | number | **2,251** | 2,281 | 2,320 | 2,280 | 2,246 | |
| India | number | **450** | 437 | 442 | 469 | 458 | |
| Total | number | **8,318** | 8,116 | 8,060 | 7,960 | 7,843 | |
| Employees eligible to retire within the next five years [2] | | | | | | | |
| Hong Kong | % | **18.8** | 20.1 | 20.4 | 19.5 | 20.0 | GRI EU15 |
| Mainland China | % | **15.7** | 15.1 | 13.4 | 14.5 | 13.2 | |
| Australia [3] | % | **6.7** | 6.6 | 5.7 | 5.4 | 12.8 | |
| India | % | **5.5** | 5.0 | 5.1 | 4.8 | 4.0 | |
| Total | % | **14.1** | 14.6 | 14.5 | 13.9 | 16.4 | |
| Voluntary staff turnover rate [4, 5] | | | | | | | |
| Hong Kong | % | **6.6** | 4.6 | 3.1 | 2.4 | 2.3 | GRI 401-1/HKEx B1.2 |
| Mainland China | % | **2.3** | 2.3 | 1.3 | 2.0 | 4.7 | |
| Australia | % | **18.8** | 16.1 | 7.7 | 12.9 | 13.6 | |
| India | % | **10.6** | 6.9 | 4.7 | 6.6 | 5.6 | |
| Average training hours per employee | hours | **46.2** | 51.6 | 42.5 | 40.1 | 46.1 | GRI 404-1/HKEx B3.2 |
| **Safety** [6] | | | | | | | |
| Fatalities – employees only [7,8] | number of personnel | **0** | 0 | 0 | 0 | 1 | GRI 403-2/HKEx B2.1 |
| Fatalities – contractors only [7,8] | number of personnel | **0** | 0 | 0 | 1 | 1 | |
| Fatalities – employees and contractors combined [7,8] | number of personnel | **0** | 0 | 0 | 1 | 2 | |
| Fatality Rate – employees only [9, 10] | rate | **0.00** | 0.00 | 0.00 | 0.00 | 0.01 | GRI 403-2/HKEx B2.1/ SASB IF-EU-320a.1 |
| Fatality Rate – contractors only [9, 10] | rate | **0.00** | 0.00 | 0.00 | 0.01 | 0.01 | |
| Fatality Rate – employees and contractors combined [9, 10] | rate | **0.00** | 0.00 | 0.00 | 0.00 | 0.01 | |
| Days Away From Work Injuries – employees only [8,11] | number of personnel | **6** | 4 | 12 | 7 | 11 | GRI 403-2 |
| Days Away From Work Injuries – contractors only [8,11] | number of personnel | **15** | 10 | 10 | 19 | 11 | |
| Days Away From Work Injuries – employees and contractors combined [8,11] | number of personnel | **21** | 14 | 22 | 26 | 22 | |
| Lost Time Injury Rate – employees only [10,12] | rate | **0.07** | 0.05 | 0.13 | 0.07 | 0.13 | |
| Lost Time Injury Rate – contractors only [10,12] | rate | **0.11** | 0.08 | 0.09 | 0.14 | 0.09 | |
| Lost Time Injury Rate – employees and contractors combined [10,12] | rate | **0.10** | 0.07 | 0.11 | 0.11 | 0.10 | |

Notes:

1 Starting from 2019, numbers have included full-time and part-time employees. Numbers in 2018 included full-time employees only.

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

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

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

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

6 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.

7 Refers to the number of fatalities as a result of work-related injury.

8 Starting from 2021, the unit is changed from the number of cases to the number of personnel.

9 Refers to the number of fatal injuries per 200,000 work hours in the year.

10 Rates are normalised to 200,000 work hours, which approximately equals to the number of hours worked by 100 people in one year.

11 Starting from 2021, "Days Away From Work Injuries" replaces "Lost Time Injury". Days Away From Work Injuries refers to the number of personnel who sustains work-related injury and is unfit to perform any work on any day after the occurrence of the injury. "Any day" is any calendar day which includes rest days, weekend days, leave days, public holidays or days after ceasing employment. It does not include the day the injury incident occurred. "Days Away From Work Injuries" excludes fatalities which were included in "Lost Time Injury". Numbers prior to 2021 are the previously reported numbers for "Lost Time Injury".

12 Refers to the number of Days Away From Work Injuries and Fatalities per 200,000 work hours in the year.

| Performance Indicators | Units | 2022 | 2021 | 2020 | 2019 | 2018 | GRI/HKEx/SASB/ISSB |
| --- | --- | --- | --- | --- | --- | --- | --- |
| High-consequence Injuries – employees only [13] | number of personnel | **0** | 0 | N/A | N/A | N/A | GRI 403-9 |
| High-consequence Injuries – contractors only [13] | number of personnel | **2** | 1 | N/A | N/A | N/A | |
| High-consequence Injuries – employees and contractors combined [13] | number of personnel | **2** | 1 | N/A | N/A | N/A | |
| Total Recordable Injury Rate – employees only [10,14] | rate | **0.17** | 0.14 | 0.25 | 0.19 | 0.19 | GRI 403-2/SASB IF-EU-320a.1 |
| Total Recordable Injury Rate – contractors only [10,14] | rate | **0.31** | 0.29 | 0.37 | 0.52 | 0.29 | |
| Total Recordable Injury Rate – employees and contractors combined [10,14] | rate | **0.25** | 0.23 | 0.32 | 0.38 | 0.25 | |
| Work-related Ill Health – employees only [8,15] | number of personnel | **4** | 1 | 0 | 0 | 1 | GRI 403-10/HKEx B2.1 |
| Lost Days – employees only [16] | number of days | **176** | 304 [17] | 443 [18] | 464 [19] | 249 | GRI 403-2/HKEx B2.2 |
| **Governance** | | | | | | | |
| Convicted cases of corruption reported to the Audit & Risk Committee | cases | **0** | 0 | 0 | 0 | 0 | GRI 205-3/HKEx B7.1 |
| Breaches of Code of Conduct reported to the Audit & Risk Committee | cases | **10** | 18 | 25 | 31 | 20 | |

Notes:

13 Refers to the number of personnel who sustains life-threatening or life-altering work-related injury. It is a subset of Days Away From Work Injuries.

14 Refers to the number of Total Recordable Injuries per 200,000 work hours in the year. Total Recordable Injuries include Fatalities, Days Away From Work Injuries, Restricted Work Injuries, and Medical Treatment Injuries.

15 Starting from 2021, "Work-related Ill Health" replaces "Occupational Disease". Work-related Ill Health includes the diseases listed in the ILO List of Occupational Diseases, work-related mental illnesses and work-related disorders. Numbers prior to 2021 are the previously reported numbers for "Occupational Disease".

16 Starting from 2021, "Lost Days" replaces "Days Lost". "Lost Days" is the sum total of calendar days (consecutive or otherwise) after the days on which the work-related injuries and work-related ill health occurred. "Days Lost" accounts the working days instead of calendar days. Numbers prior to 2021 are the previously reported numbers for "Days Lost".

17 19 out of 304 days were carried forward from one incident in 2020.

18 188 out of 443 days were carried forward from one incident in the past.

19 158 out of 464 days were carried forward from three incidents in the past.

*All 2022 data in the above table have been independently verified by PricewaterhouseCoopers **except** those numbers which are shaded in dark grey.*

# Five-year Summary: Scheme of Control Financial & Operating Statistics

CLP Power Hong Kong Limited and Castle Peak Power Company Limited

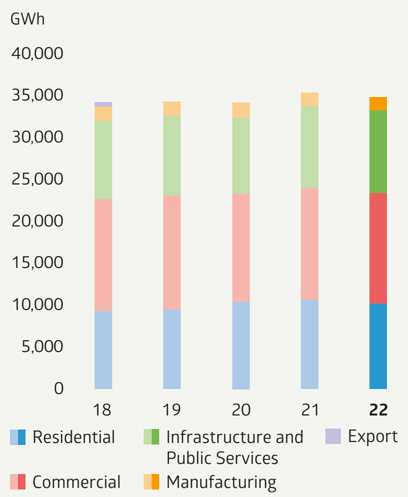
| | 2022 | 2021 | 2020 | 2019 | 2018 |
|---|---|---|---|---|---|
| **SoC Financial Statistics** | | | | | |
| **Combined Profit & Loss Statement, HK$M** | | | | | |
| Profit for SoC | **10,876** | 10,926 | 10,026 | 9,744 | 10,756 |
| Transfer to Tariff Stabilisation Fund | **(531)** | (1,072) | (519) | (526) | (191) |
| Permitted return | **10,345** | 9,854 | 9,507 | 9,218 | 10,565 |
| Deduct interest on / Adjustment for | | | | | |
| Borrowed capital | **1,115** | 1,018 | 1,111 | 1,100 | 1,055 |
| Increase in customers' deposits | **4** | – | – | 4 | 1 |
| Performance incentives | **(448)** | (438) | (416) | (392) | (105) |
| Tariff Stabilisation Fund | **40** | 3 | 18 | 22 | 11 |
| Net return | **9,634** | 9,271 | 8,794 | 8,484 | 9,603 |
| **Combined Balance Sheet, HK$M** | | | | | |
| Net assets employed | | | | | |
| Fixed assets | **132,792** | 125,827 | 120,523 | 117,157 | 113,295 |
| Non-current assets | **74** | 134 | 351 | 213 | 198 |
| Current assets | **9,681** | 8,359 | 6,350 | 4,231 | 6,559 |
| | **142,547** | 134,320 | 127,224 | 121,601 | 120,052 |
| Less: current liabilities | **27,881** | 25,311 | 23,046 | 28,115 | 24,699 |
| Net assets | **114,666** | 109,009 | 104,178 | 93,486 | 95,353 |
| Exchange fluctuation account | **465** | 606 | 555 | 9 | 81 |
| | **115,131** | 109,615 | 104,733 | 93,495 | 95,434 |
| Represented by | | | | | |
| Equity | **52,528** | 49,934 | 47,807 | 46,205 | 46,569 |
| Long-term loans and other borrowings | **40,680** | 38,328 | 37,146 | 29,792 | 32,274 |
| Deferred liabilities | **18,995** | 18,244 | 17,761 | 16,020 | 15,650 |
| Tariff Stabilisation Fund | **2,928** | 3,109 | 2,019 | 1,478 | 941 |
| | **115,131** | 109,615 | 104,733 | 93,495 | 95,434 |
| **Other SoC Information, HK$M** | | | | | |
| Total electricity sales | **50,919** | 45,222 | 41,798 | 40,473 | 40,982 |
| Capital expenditure | **12,573** | 11,222 | 8,882 | 9,097 | 8,922 |
| Depreciation | **5,313** | 5,434 | 5,011 | 4,753 | 4,931 |
| **SoC Operating Statistics** | | | | | |
| **Customers and Sales** | | | | | |
| Number of customers (thousand) | **2,752** | 2,711 | 2,672 | 2,636 | 2,597 |
| Sales analysis, millions of kWh | | | | | |
| Commercial | **13,233** | 13,423 | 12,878 | 13,584 | 13,425 |
| Manufacturing | **1,615** | 1,665 | 1,616 | 1,663 | 1,704 |
| Residential | **10,113** | 10,525 | 10,298 | 9,451 | 9,191 |
| Infrastructure and Public Services | **9,863** | 9,742 | 9,171 | 9,586 | 9,342 |
| Local | **34,824** | 35,355 | 33,963 | 34,284 | 33,662 |
| Export | **–** | – | – | – | 556 |
| Total Electricity Sales | **34,824** | 35,355 | 33,963 | 34,284 | 34,218 |
| Annual change, % | **(1.5)** | 4.1 | (0.9) | 0.2 | (0.8) |
| Renewable Energy Certificate Sold, millions of kWh | **100** | 15 | 5 | 3 | – |
| Local consumption, kWh per person | **5,680** | 5,704 | 5,404 | 5,459 | 5,433 |
| Local sales, HK¢ per kWh (average) [1] | | | | | |
| Basic Tariff | **93.3** | 93.6 | 92.3 | 90.7 | 93.3 |
| Fuel Cost Adjustment [2] | **46.1** | 30.2 | 28.4 | 27.9 | 23.2 |
| Special Rebate | **(2.1)** | – | – | – | – |
| Total Tariff | **137.3** | 123.8 | 120.7 | 118.6 | 116.5 |
| Rent and Rates Special Rebate [3] | **(1.3)** | – | (1.2) | (0.1) | (1.1) |
| Net Tariff | **136.0** | 123.8 | 119.5 | 118.5 | 115.4 |
| Annual change in Basic Tariff, % | **(0.3)** | 1.4 | 1.8 | (2.8) | 1.6 |
| Annual change in Total Tariff, % | **10.9** | 2.6 | 1.8 | 1.8 | 3.3 |
| Annual change in Net Tariff, % | **9.9** | 3.6 | 0.8 | 2.7 | 2.3 |

A [ten-year summary](#) is on our website

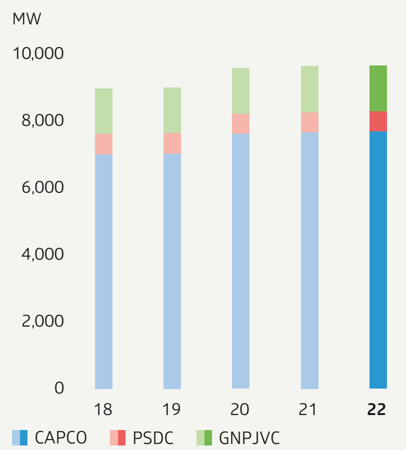
| | 2022 | 2021 | 2020 | 2019 | 2018 |
|---|---|---|---|---|---|
| **Generation (Including Affiliated Generating Companies)** | | | | | |
| Installed capacity, MW [4] | **9,648** | 9,623 | 9,573 | 8,988 | 8,963 |
| System maximum demand | | | | | |
| Local, MW [5] | **7,720** | 7,477 | 7,264 | 7,206 | 7,036 |
| Annual change, % | **3.2** | 2.9 | 0.8 | 2.4 | (1.7) |
| System load factor, % | **56.0** | 58.8 | 57.3 | 59.8 | 58.8 |
| Generation by CAPCO stations, millions of kWh | **24,828** | 25,330 | 23,752 | 24,952 | 24,642 |
| Sent out, millions of kWh – | | | | | |
| From own generation | **23,602** | 24,109 | 22,605 | 23,369 | 23,032 |
| Net transfer from GNPS/GPSPS/Others | **12,289** | 12,484 | 12,583 | 12,276 | 12,504 |
| From Feed-in Tariff customers | **199** | 111 | 45 | 9 | – |
| Total | **36,090** | 36,704 | 35,233 | 35,654 | 35,536 |
| Fuel consumed, terajoules – | | | | | |
| Oil | **1,875** | 1,928 | 1,538 | 1,711 | 2,714 |
| Coal | **77,172** | 75,307 | 63,505 | 141,830 | 150,310 |
| Gas | **128,453** | 132,609 | 131,244 | 80,695 | 72,969 |
| Total | **207,500** | 209,844 | 196,287 | 224,236 | 225,993 |
| Cost of fuel, HK$ per gigajoule – Overall | **99.18** | 70.25 | 65.94 | 55.47 | 54.79 |
| Thermal efficiency, % based on units sent out | **40.9** | 41.3 | 40.8 | 37.5 | 36.7 |
| Plant availability, % | **89.1** | 84.4 | 87.5 | 86.4 | 86.4 |
| **Transmission and Distribution** | | | | | |
| Network, circuit kilometres | | | | | |
| 400kV | **555** | 555 | 555 | 555 | 554 |
| 132kV | **1,651** | 1,638 | 1,638 | 1,630 | 1,601 |
| 33kV | **22** | 22 | 22 | 22 | 22 |
| 11kV | **14,450** | 14,182 | 13,990 | 13,782 | 13,643 |
| Transformers, MVA | **68,343** | 67,479 | 66,633 | 65,753 | 65,109 |
| Substations – | | | | | |
| Primary | **240** | 237 | 235 | 232 | 232 |
| Secondary | **15,413** | 15,204 | 15,028 | 14,867 | 14,685 |
| **Employees and Productivity** | | | | | |
| Number of SoC employees | **4,012** | 3,900 | 3,861 | 3,815 | 3,798 |
| Productivity, thousands of kWh per employee | **8,803** | 9,111 | 8,849 | 9,007 | 8,825 |

Notes:
1. Figures are rounded to one decimal place. Minor discrepancies may result from rounding.
2. The Fuel Cost Adjustment has replaced the Fuel Clause Charge effective from October 2014. Commencing 1 October 2018, the Fuel Cost Adjustment is automatically adjusted on a monthly basis to reflect changes in actual price of fuel used.
3. CLP Power provided customers with a Rent and Rates Special Rebate of 1.1 cents per unit from January 2018 to mid-February 2019, 1.2 cents per unit in 2020 and 1.3 cents per unit in 2022, returning to customers the refunds received from the Government in relation to CLP Power's claims against the Government's overcharged rent and rates.
4. Unit A1 of Castle Peak Power Station, with capacity of 350MW, was put in reserve to run only in emergency situation, after coming to the end of its asset life on 31 May 2022. The installed capacity without A1 would otherwise be 9,298MW.
5. Without taking into account the effect of the customer programme of demand response pursued to reduce electricity usage, the maximum demand would have been higher at 7,269MW in 2019, 7,369MW in 2020, 7,551MW in 2021 and 7,858MW in 2022.

### Electricity Sales by Sector




### Installed Capacity




### SoC Net Fixed Assets