CLP 中電

Together for Sustainability, Powering Tomorrow

2024

Sustainability Report

Stock Code: 00002

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Welcome to CLP's 2024 Sustainability Report

According to the International Energy Agency (IEA), 2024 was marked by 4% growth in global electricity demand. This surge represents the most substantial annual growth rate in the past two decades, excluding rebounds from economic crises. It reflects a complex interplay of economic recovery, technological advancements, climate impacts and shifts towards electrification. As CLP has navigated these intricate dynamics, our focus has remained on balancing growing electricity needs with sustainability, reliability and affordability objectives.

In response to the fast-evolving sustainability-related disclosure landscape, CLP has prepared its annual reporting suite in accordance with the recently published Hong Kong Financial Reporting Standard (HKFRS) S1 General Requirements for Disclosure of Sustainability-related Financial Information and HKFRS S2 Climate-related Disclosures as issued by the Hong Kong Institute of Certified Public Accountants. These Hong Kong standards align fully with the International Sustainability Standards Board (ISSB)'s IFRS Sustainability Disclosure Standards. As an impact-focused disclosure, this Sustainability Report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards to ensure utmost transparency regarding our impacts for stakeholders. CLP has also responded to the growing concern for nature conservation by dedicating a report chapter to nature-related topics, aligning with the Task Force on Nature-related Financial Disclosures (TNFD) recommendations.

CLP continues to adopt the double materiality approach with a framework operating on a three-year cycle, first implemented in 2021 to shape the sustainability-related content of CLP's annual disclosures. Financially material topics and associated risks and opportunities that could reasonably be expected to affect the Company's prospects are discussed in the Annual Report, while impact material topics relating to positive or negative impacts on people, the environment and the economy are covered in this Sustainability Report. Following the materiality assessment results for 2024, this report includes new sections on artificial intelligence and human rights due diligence. The supply chain sustainability management section has been also revamped.

To further enhance the accessibility of CLP's comprehensive sustainability-related disclosures, the management approach sections have been moved to the online sustainability report website. The key sustainability achievements and performance for 2024 remain accessible in this downloadable version.

In addition, CLP has disclosed its ESG data in a standalone ESG Databook for the first time. The ESG Databook has been prepared for the purpose of providing CLP's stakeholders with a quantitative overview of the Group's 2024 non-financial performance while allowing quantitative analysis with availability of all key data points. On top of this, we have also developed an online ESG Data Hub to house the interactive charts for optimal user experience.

This report aims to provide insightful and informative perspectives, offering a balanced view of CLP's sustainability efforts. Feedback on this report is welcome and can be shared through CLP's online survey form.


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The Honourable Sir Michael Kadoorie, Chairman (left), and T.K. Chiang,Chief Executive Officer (right)

Chairman and CEO's message

"The global transition to a net-zero future offers unparalleled potential for innovation and growth. CLP is resolute in our dedication to seizing these opportunities, ensuring that our investments produce long-term value for stakeholders."

The journey to sustainability requires strategy and actions to deliver change for good. Reflecting on the past year, we remained focused on growing our business and delivering the energy transition that our markets demand. To help uncover any emerging risks, opportunities or potential impacts, we carried out our annual materiality assessment to track the sustainability topics that are most likely to impact our business, stakeholders and the natural environment. The results assured us that we should remain resolute in continuing our orderly transition to a net-zero future while capturing growth opportunities. Leveraging digital innovation, empowering a future-ready workforce and ensuring thriving communities will also be our priorities.

Transitioning to net zero

Addressing climate change is inherent to the purpose of our company and in 2024, we made tangible progress with our decarbonisation goals across the markets where we operate. In Hong Kong, a new 600MW combined-cycle gas turbine generation unit at Black Point Power Station went into service in April. It serves as a key infrastructure to reduce our greenhouse gas emissions and ensure our power supply reliability together with the existing D1 unit. These enabled the retirement of three coal-fired generation units at Castle Peak Power Station over the year.

In Mainland China, we continued to expand our renewable energy investments with construction starting last year on 590MW of wind and solar projects. In January 2025, construction work on the 231MW Guanxian Wind Farm in Shandong commenced. Work will also begin later in the year on projects designed to provide a further 560MW of renewable energy capacity. We also secured a mandate to construct our first standalone battery energy storage system project in Shangdong province, one of China's pioneering locations in the development of energy storage capabilities.

Our Australian business, EnergyAustralia, meanwhile secured Federal Government support for two large-scale, four-hour battery storage initiatives with a combined storage capacity of 400MW, finalised power purchase agreements for 230MW of renewable energy and commissioned Australia's first peaking power station with direct emissions offset — the gas-fired Tallawarra B plant in New South Wales. These strategic initiatives will strengthen EnergyAustralia's ability to manage volatility in the Australian energy market and support its goal of expanding its portfolio to include up to 3 gigawatts (GW) of renewable energy, committed or operational by 2030. Its progress and pathway to achieving its ambition of net-zero Scope 3 emissions by 2050 were also outlined in its second Climate Transition Action Plan, which was released in December.

In India, our joint venture Apraava Energy had more than 2GW-equivalent of non-carbon energy projects in execution at the end of December, including wind and solar energy, transmission and advanced metering infrastructure projects. It made good progress in developing transmission projects that are critical to connect the country's solar and wind farms

to the major cities with high energy demand. The business also has contracts to supply more than 6.8 million smart meters for households in six states.

Grasping growth opportunities

While decarbonising our portfolio, we also continued to accelerate the electrification of various sectors and expand our business lines. Following the release of the Hong Kong Government's Action Plan on Green Maritime Fuel Bunkering, our energy infrastructure and solutions subsidiary CLP*e* Holdings Limited announced plans to form a joint venture with China National Offshore Oil Company Guangdong Water Transport Clean Energy Company Limited to provide LNG fuel bunkering services in the city. The joint venture is expected to come into service in the first half of 2025.

On road transportation, CLP Power also stepped up efforts to provide innovative power supply solutions and technical support to meet rising demand for electric vehicle (EV) charging from both private and commercial users. The Government recently announced the Green Transformation Roadmap of Public Buses and Taxis, setting out the future direction and policy objectives for the electrification of those vehicles. We will continue to work closely with the Government and the industry to facilitate power supply options for EV charging infrastructure.

Meanwhile, to support the sustainable growth of data centres, CLP Power Hong Kong signed a six-year agreement with data centre operator SUNeVision Holdings Ltd. for the purchase of Renewable Energy Certificates. The project will result in the reduction of around 468 tonnes of carbon emissions annually.

Leveraging digital innovation

Digitalisation allows us to enhance operational efficiency and meet our customers' fast-evolving needs for smarter, more flexible energy services. In Hong Kong, with over 2.68 million smart meters having been connected for our residential and SME customers by the end of 2024, we are on track to complete our smart meter installation programme in 2025, giving customers access to timely information about their electricity use as well as more personalised energy services and experiences.

Another key initiative in digital innovation is the implementation of our new enterprise resource planning system, which will streamline and enhance key processes across the span of our operations. This project represents a significant step forward in CLP's efforts to maintain our status as a leading utility in the years to come.

Furthermore, we continued to optimise our energy management and improve our network resilience by investing in artificial intelligence and smart grid solutions. This was supported by cyber security measures that are essential for safeguarding our operations. Over the past year, we conducted internal and external validation of our security measures and performed a cyberattack simulation exercise to proactively identify areas that need further strengthening to ensure that our cyber defence remains resilient and effective and that our customers' data and privacy are not compromised. To promote responsible innovation, mitigate risks and enhance transparency, accountability and trust, we also incorporated a set of principles on the use of artificial intelligence as a part of our efforts to strengthen security governance in 2024.

Empowering a future-ready workforce

To keep up with the changing markets, we remain focused on cultivating an agile organisational culture and upskilling and reskilling our workforce. In 2024, around 900 new hires and internal transfers were secured in Hong Kong and Mainland China to strengthen our capabilities for business growth as the energy transition and digital technologies continued to reshape the electricity market. Moreover, over 3,800 employees were engaged through development programmes, empowering them to become more agile, flexible and efficient and have an increased focus on business outcomes.

During the year, we also completed a strategic review which is designed to ensure CLP is best placed for growth as we pursue initiatives that match with the decarbonisation pathways in our markets. We look forward to implementing the strategy with a strong team and turning our collective vision into reality.

Looking ahead, the world – including the global energy sector – faces profound challenges in an increasingly unpredictable era. Amid this turbulence, we remain committed to focusing on what is right for our communities in the long term. The global transition to a net-zero future offers unparalleled potential for innovation and growth. CLP is resolute in our dedication to seizing these opportunities, ensuring that our investments produce long-term value for stakeholders. As we do so, we will continue to prioritise the development of reliable, sustainable and affordable energy solutions that have a meaningful impact on the communities we serve across the Asia-Pacific region.

The Honourable Sir Michael Kadoorie
Chairman

T.K. Chiang
Chief Executive Officer

Hong Kong, 24 February 2025

Sustainability-related targets and performance

CLP is committed to transparently tracking progress and fostering accountability through the establishment of sustainability-related targets. These targets reflect how we do business and create value for our communities and stakeholders, based on our long-term Purpose and Core Values. At CLP, each target is established for each of the six material topics, encompassing specific quantitative or qualitative aims, the duration of the target's applicability, and the reference base period for progress evaluation. This section provides comprehensive reporting on performance against these targets, while our Respecting Nature and Serving Our Stakeholders chapters provide detailed insights into CLP's strategies, programmes and responses to stakeholders.

Net-zero transition

Environment

NO_x emissions: Reduce 50% by 2030
(vs 2021 baseline)

2024 performance
Decreased by 26% vs 2021 baseline

SO_2 emissions: Reduce 55% by 2030
(vs 2021 baseline)

2024 performance
Decreased by 18% vs 2021 baseline

PM emissions: Reduce 90% by 2030
(vs 2021 baseline)

2024 performance
Decreased by 16% vs 2021 baseline

Waste products: Reduce 70% by 2030
(vs 2021 baseline)

2024 performance
Decreased by 68% vs 2021 baseline

Freshwater consumption: Reduce 85% by 2030
(vs 2021 baseline)

2024 performance
Decreased by 51% vs 2021 baseline

Climate change

GHG emission intensity: Reduce 59% to 0.26kg CO_2e/kWh by 2030
(vs 2019)

2024 performance
0.53kg CO_2e/kWh, a decrease of 16% vs 2019 baseline

Absolute Scope 3 (Category 11) GHG emissions: Reduce 28% by 2030
(vs 2019)

2024 performance
Decreased by 31% vs 2019 baseline

Maintain its commitment to phase out coal before 2040

2024 performance
On track

Achieve net-zero GHG emissions across our value chain by 2050

2024 performance
On track

Energy growth opportunities

Energy services and solutions

Connect >2.8 million smart meters for CLP Power's residential and Small and Medium Enterprises (SME) customers in Hong Kong by 2025

2024 performance
More than 2.68 million smart meters have been connected since 2018

Save 48GWh of electricity from 400 buildings through the Eco Building Fund

2024 performance
Saved around 50GWh of electricity from over 600 buildings

Conduct 600 energy saving audits for commercial and industrial customers, resulting in 48GWh in total savings

2024 performance
Saved around 50GWh of electricity with more than 600 energy audits completed

Achieve 60MW in demand response reduction performance

2024 performance
CLP Power achieved demand reductions of 144MW from residential customers and 93MW from commercial and industrial customers in Hong Kong

Digital innovation and cyber security

Innovation

Deploy 19 use cases of innovative technologies including AI across the Group

2024 performance
Deployed 26 use cases of innovative technologies including AI

Cyber security

CLP continues to invest in the latest cyber security technologies and talent, in order to prevent, detect and react to evolving cyber threats

2024 performance
On track

Future-ready workforce

Diversity and inclusion

Achieve gender balance in leadership positions by 2030

2024 performance
Women in Leadership improved from 22% (2016 baseline) to 30%

Achieve 30% of engineers to be female by 2030

2024 performance
Women in Engineering improved from 9% (2016 baseline) to 13.3%

Ensure equal pay for work of equal value is maintained in all CLP businesses

2024 performance
On track

Operational and supply chain resilience

Governance

Maintain Board diversity with a target of >30% for female Directors representation

2024 performance
36%

Maintain zero convicted cases of corruption

2024 performance
On track

Supply chain

Over 4,000 of CLP's suppliers have acknowledged to abide by CLP's Supplier Code of Conduct (SCoC) by 2026

2024 performance
Over 1,800 of CLP's suppliers have acknowledged to abide by CLP's SCoC

Community stewardship

Community investment

16,000 volunteer hours every year

2024 performance
16,498 volunteer hours

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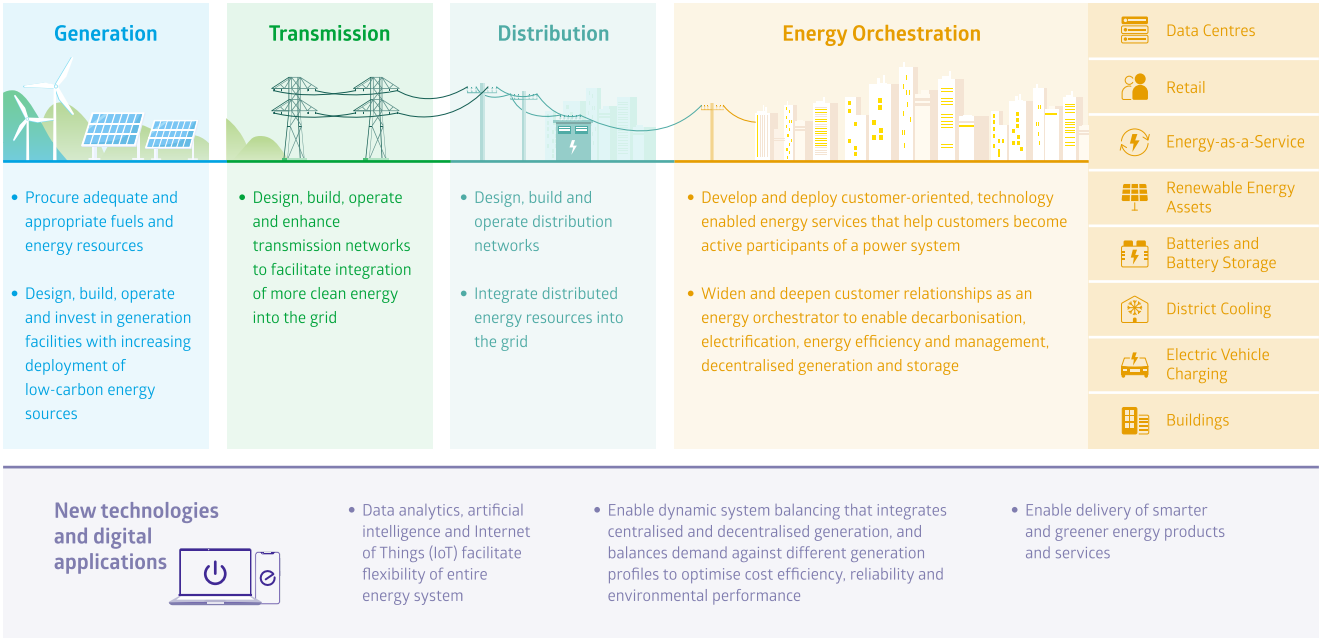
Our business

Headquartered in Hong Kong, the CLP Group is one of the largest investor-owned power businesses in Asia Pacific with investments in Hong Kong, Mainland China, Australia, India, Taiwan Region and Thailand. Its business spans every major segment of the electricity value chain, from power generation, transmission and distribution to retail and smart energy services. CLP is striving to embrace new opportunities and accelerate the provision of a wide range of energy services that meet the evolving needs of energy users in a world being reshaped by decarbonisation and digitalisation.

GRI reference: 2-1, 2-6

CLP's business



CLP's diversified portfolio of electricity generation assets includes coal, gas, nuclear, wind, hydro and solar power facilities. With decarbonisation as a principal business priority, CLP is progressively phasing out its coal-fired power generation assets, and utilising gas as a transition fuel. The Group also operates flexible generation assets and storage solutions to help it manage intermittent and peak demand efficiently.

Generation and energy storage capacity by asset type - On an equity plus long-term capacity and energy purchase basis

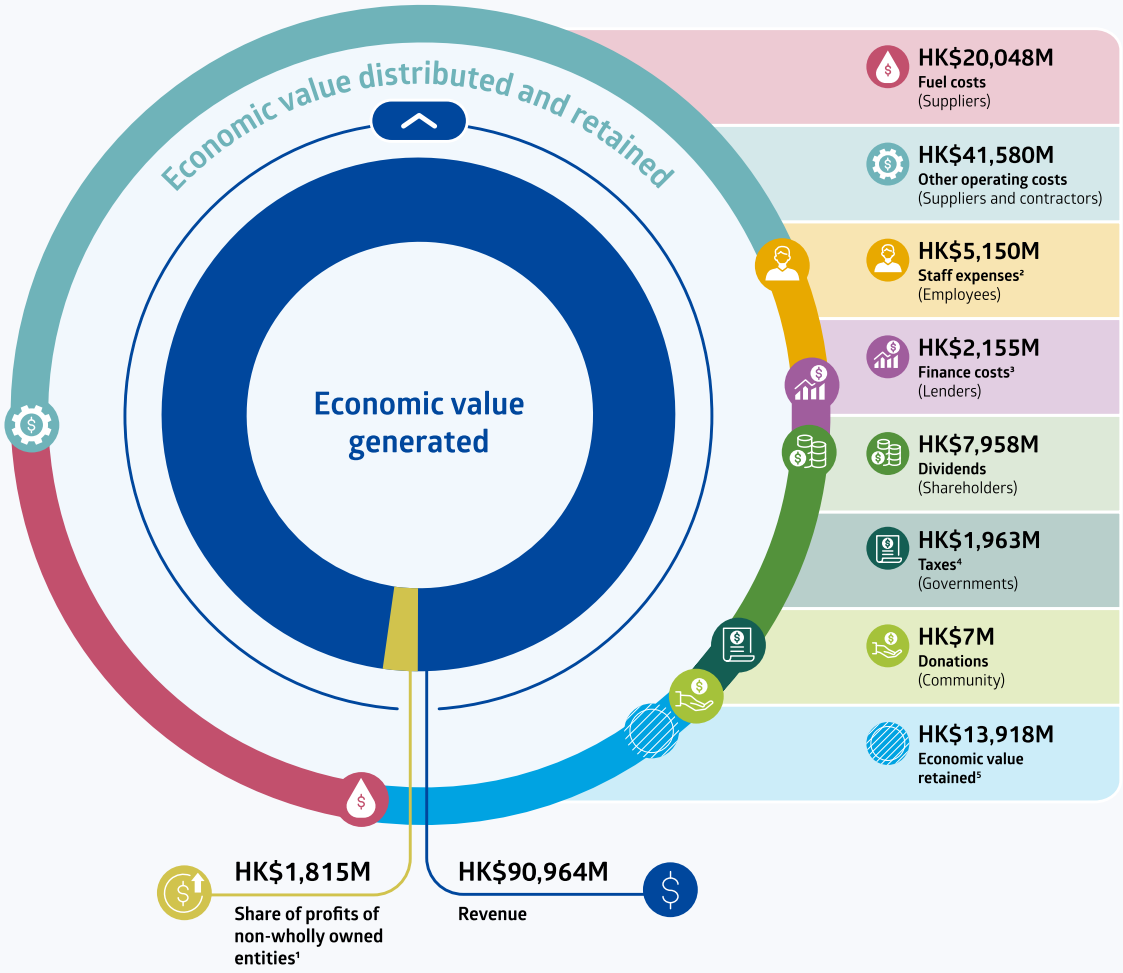
Wind	2,625MW	Nuclear	2,685MW	Energy Storage	892MW
Solar	1,307MW	Gas	6,131MW	Waste-to-energy	14MW
Hydro	489MW	Coal	8,140MW	Others	300MW
Total					**22,582MW**

Economic value generated and distributed

Taking into account different stakeholder interests, CLP's emphasis is on value creation over the long term, which includes value created by serving the communities in which it operates.

GRI reference: 201-1

One way to understand this emphasis is through the value created and distributed by CLP to different stakeholders. In 2024, 85% of the economic value generated by CLP was distributed to its stakeholders, including employees, partners, capital providers and the community at large.



1 Includes share of results (net of income tax) from joint ventures and associates netted with earnings attributable to other non-controlling interests, which represented CLP's share of economic value created together with its business partners.
2 Another HK$1,736 million of staff costs incurred were capitalised.
3 Finance costs are netted with finance income and include payments made to perpetual capital securities holders. In addition, finance costs of HK$554 million were capitalised.
4 Represents current income tax but excludes deferred tax for the year.
5 Represents earnings attributable to shareholders (before depreciation, amortisation and deferred tax) for the year retained.

Reporting frameworks and content indices

Globally, different methodologies are used to measure organisations' sustainability performance. CLP's sustainability-related disclosures reference several reporting guidelines and frameworks to ensure comparability, an approach aligned with international best practice.

HKFRS Sustainability Disclosure Standards of the Hong Kong Institute of Certified Public Accountants (HKICPA)

In May 2022, the Financial Services and the Treasury Bureau (FSTB) confirmed that the extant Professional Accountants Ordinance (Cap. 50) provides the statutory authority for the HKICPA to issue sustainability disclosure standards concerning the practice of accounting to be applied by certified public accountants.

The HKICPA has developed the Hong Kong Sustainability Disclosure Standards ("the Hong Kong Standards") on a full alignment basis with the ISSB Standards. The Exposure Draft of HKFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information and HKFRS S2 Climate-related Disclosures were published on 16 September 2024.

Following a public consultation on the Exposure Drafts, the HKICPA issued the final Hong Kong Standards at the end of 2024 with an effective date of 1 August 2025. CLP prepared its 2024 Annual Report in accordance with HKFRS S1 and HKFRS S2.

In response to the launch of the Hong Kong Roadmap on Sustainability Disclosure and the HKFRS Sustainability Disclosure Standards, CLP's Annual Report has continued to disclose information about sustainability-related and climate-related risks and opportunities that could reasonably be expected to affect the Company's prospects. CLP is further making sustainability a core part of its corporate thinking and business strategy by integrating the materiality assessment process into its governance and risk management procedures, as well as disclosing its strategies and metrics in relation to significant sustainability matters. In addition, it published a comprehensive climate transition plan titled *CLP's Climate Vision 2050: Powering an orderly transition* in March 2024.

Read more on the Hong Kong Roadmap on Sustainability Disclosure

Download the HKFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information Content Index

Download the HKFRS S2 Climate-related Disclosure Content Index

The International Sustainability Standards Board (ISSB)'s International Financial Reporting Standards (IFRS) S1 General Requirements for Disclosure of Sustainability-related Financial Information and IFRS S2 Climate-related Disclosures

In June 2023, the ISSB under IFRS issued two inaugural Sustainability Disclosure Standards, IFRS S1 – General Requirements for Disclosure of Sustainability-related Financial Information and IFRS S2 – Climate-related Disclosures. IFRS S2 was developed with reference to the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD). These standards have already been endorsed by the International Organisation of Securities Commissions (IOSCO) and have received strong support from a number of jurisdictions, including Australia, Mainland China, Canada, Japan, Hong Kong, Malaysia, New Zealand, Nigeria, Singapore and the UK. They are expected to inform and accelerate the development of sustainability-related regulatory initiatives globally.

In Australia, the Treasury Laws Amendment (Financial Market Infrastructure and Other Measures) Act 2024 became effective in early September 2024. This requires relevant entities to disclose their climate-related plans, financial risks and opportunities, in accordance with the Australian Sustainability Reporting Standards (ASRS) published by the Australian Accounting Standards Board (AASB). Entities shall make climate-related disclosures for the annual financial reporting periods beginning on or after 1 January 2025. Energy Australia has developed a detailed plan in preparation for making the required climate-related disclosures.

CLP has also referenced the Integrated Thinking Principles and the SASB Standards for Electric Utilities & Power Generators in its report preparation.

Download the HKFRS S2/SASB Electric Utilities & Power Generators Content Index

The Stock Exchange of Hong Kong's Environmental, Social and Governance (ESG) Reporting Code

The Stock Exchange of Hong Kong (the Exchange) aligned Hong Kong's climate-related reporting requirements with those of the ISSB in April 2024, updating the Main Board Listing rules under the Appendix C2 ESG Reporting Code. As an early adopter, CLP continues to improve its climate-related disclosure in Annual Reports, with further insights on CLP's climate transition plan being published in *CLP's Climate Vision 2025: Powering an orderly transition*.

The Exchange has established a clear timeline for implementing the climate-related disclosure requirements. Starting from 1 January 2025, all Main Board issuers are required to disclose against the Climate-related Disclosures modelling on IFRS S2 on a "comply or explain" basis. Large Cap issuers are mandated to disclose against the New Climate Requirements starting from 1 January 2026. In 2027, the Exchange plans to conduct a review, and launch a market consultation on mandating reporting for all listed companies, in accordance with the Hong Kong Standards which are fully aligned with both IFRS S1 and IFRS S2, with an expected effective date of 1 January 2028.

Download the HKEX ESG Reporting Code Content Index

Read more on the Implementation Guidance for Climate Disclosures under HKEX ESG reporting framework

The Global Reporting Initiative (GRI) Standards

The GRI is an international independent organisation that provides a set of widely used standards for sustainability reporting. CLP's reports have made reference to the GRI Standards since 2007.

This report has been prepared in accordance with the GRI Universal Standards. It also reports on matters relevant to the GRI G4 Electric Utilities Sector Disclosures, which cover aspects of sustainability performance that are meaningful and relevant to the electric utility sector.

Download the GRI Standards Content Index

Task Force on Nature-related Financial Disclosures (TNFD)

The TNFD develops voluntary, consistent nature-related financial risk disclosure recommendations for use by companies when providing information to investors, lenders, insurers and other stakeholders. It has issued 14 recommendations for assessing nature-related risks and opportunities in an organisation's governance, strategy, risk and impact management, metrics and targets. Its recommendations include 10 core global disclosure indicators and metrics related to dependencies and impacts on nature, as well as core disclosure metrics for organisation-level risk and opportunity assessment. CLP has made reference to the TNFD's recommendations in disclosing its assessment of nature-based risk and of its impact on nature in the chapter Respecting Nature.

Respecting Nature

Other guidance documents developed for the TNFD have also been referenced, including the sector-specific guidance for the power and utilities sector for determining the potential financial impact of nature-related risks. Another document used has been the *Roadmap to Nature Positive: Foundations for the Energy System*, published by the World Business Council for Sustainable Development (WBCSD) in September 2023. CLP participated in the WBCSD's Roadmap to Nature Positive for the Energy System working group, contributing to the guidance development.

Reporting scope and data verification

This report covers the CLP Group's sustainability performance for the calendar year ending 31 December 2024. It is published at the same time as the CLP 2024 Annual Report. The CLP 2024 Sustainability and Annual Reports were published in March 2025

GRI reference: 2-2, 2-3, 2-4, 2-5

CLP reviews its reporting scope regularly to ensure that the material impact of the Group's overall portfolio is covered. Any assets that were operating and later sold during the year have been included in the reporting scope. In 2024, assets added to the reporting scope included the Sandu II Wind Farm and its battery storage facilities, Huai'an Nanzha Solar Power Station and its battery storage facilities, Yixing I Solar Power Station and its battery storage facilities, Guanxian battery storage facilities, Juancheng Wind Farm, West New Territories Landfill Phase II and Karera Power Transmission Limited. A1, A2 and A3 units of Castle Peak Power Station were retired in April 2024. CLP executed an early exit from Shandong Zhonghua Power Company Limited, an operator of coal-fired Heze II and Liaocheng I power stations in Mainland China. The power purchase agreement for the Gullen Range Wind Farm ended on 22 December 2024.

In 2024, the following changes have been made to data points:

- New inclusion of percentage of training hours dedicated to upskilling and reskilling; and
- New inclusion of five-year total planned capital investment by asset type (as percentage).

KPMG has provided limited assurance on a selected set of ESG data in this report, in accordance with:

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

Download 2024 Independent Assurance Statement

Approach to Sustainability

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Governance

Good corporate governance and risk management form the bedrock of a sustainable business and underpin its long-term success. The Group is continuously striving to embed good corporate governance practices in its day-to-day operations through the full implementation of CLP's Value Framework.

Corporate governance framework and code

GRI reference: 2-9, 2-12, 2-15, 2-23, 2-24, 3-3

A robust corporate governance framework promotes and safeguards the interests of shareholders and other stakeholders. CLP is committed to maintaining a rigorous framework of corporate governance to uphold the Group's credibility and reputation.

Corporate governance is a matter of culture, driving CLP to continually make conscious decisions around correct behaviours. Over the years, the Company has developed and put in place a CLP Code on Corporate Governance, a Corporate Governance Framework and a comprehensive set of procedures, systems, policies and guidelines that make up the unique CLP corporate governance structure. The CLP Code embraces the terms set out in the Corporate Governance Code, Appendix C1 of the Rules Governing the Listing of Securities of the Hong Kong Stock Exchange, but it goes beyond this by advancing a structure that builds on CLP's own standards and experience.

Download the CLP Code on Corporate Governance

The Board is CLP's highest governance body, responsible for directing and supervising its affairs responsibly and effectively. Some of these responsibilities are delegated to five Board Committees. The two committees most involved in sustainability-related matters are the Sustainability Committee and the Audit & Risk Committee.

Find out more about Sustainability Governance in this report

The Corporate Governance Report in the Annual Report discloses the Company's governance performance in detail. Below are the highlights from 2024.

- **Board Refresh and Succession -** As part of the Board's gradual refresh of its composition, three Directors in different capacities retired from the Board and the Board appointed two new Directors in 2024;
- **Corporate Strategy Review -** The Board approved the corporate strategy in November 2024, following a series of dedicated briefing and discussion sessions that included a two-day offsite event for our Board Members. Board Members spent a considerable amount of time formulating the strategy with management;

How CLP Holdings approaches corporate governance

CLP Code on Corporate Governance	· Commitment of the Board and Senior Management to good standards of corporate governance · Sets out common principles that must be adhered to across the Group
Corporate Governance Framework	· Identifies all key participants in good governance · Guides CLP to uphold the Company's values and conduct affairs with different stakeholders in an ethical, transparent and accountable manner · Defines the framework and process for monitoring the management of the Group · Sets out common principles that must be adhered to across the Group
Specific policies at Group or business unit level	· Provides guidance on appropriate conduct in day-to-day work · Must meet local regulatory requirements or local stakeholder expectations
Systems and Standards, supported by procedures and manuals	· Internal mandatory requirements that guide day-to-day operations and practices
Standard Practices and Guidelines	· Provides details for system/standard implementation, or voluntary guidance on managing emerging issues and risks · The voluntary guideline adopts a precautionary approach, particularly for environmental aspects, helping CLP to prepare for new regulations

- **ERP Panel -** The Board established a project focus Panel with dedicated oversight of the enterprise resource planning (ERP) system project. The project to implement the ERP system is a significant project as it will improve CLP's digital capabilities and optimise our business processes across our Hong Kong-based operations. As the implementation of the project is subject to the purview of the CLP Power Board, CLP Holdings Audit & Risk Committee and the CLP Holdings Finance & General Committee, the establishment of the ERP Panel consolidates the oversight of this project at the CLP Holdings Board level; and
- **Corporate Governance Regulatory Developments -** CLP Holdings welcomes the series of corporate governance-related changes being introduced by the Hong Kong Stock Exchange with the Listing Rules changes that will come into effect on 1 July 2025. CLP Holdings' corporate governance practices already adhere to most of these new requirements. Those that have not been implemented, specifically the designation of a lead independent non-executive director and the introduction of a workforce diversity policy, will be considered by the CLP Holdings Board in due course with regard to the implementation timetable for the new changes.

Read the Corporate Governance Report in the 2024 Annual Report

The Human Resources and Remuneration Committee Report covers CLP's Remuneration Policy, including the non-financial metrics considered for executives' remuneration.

Sustainability governance

GRI reference: 2-9, 2-12, 2-13, 2-14, 2-23

The CLP Board has overall responsibility over sustainability as well as business strategy. Sustainability governance has been institutionalised in the Group's corporate governance structure, from Board-level committees to management-level Group functions and business units.

Two of the Board Committees, the Sustainability Committee and the Audit & Risk Committee, have separate but complementary roles in sustainability management. They are supported by the Sustainability Executive Committee and coordinated by the Group Sustainability Department.

Sustainability Committee

The CLP Board-level Sustainability Committee (SusCom) primarily oversees the management of the Group's sustainability matters.

The Sustainability Committee is chaired by an Independent Non-executive Director and comprises seven Non-executive Directors, five of whom, including the Chair, are Independent Non-executive Directors. Members of the Sustainability Committee are appointed by CLP Holdings' Board of Directors to oversee CLP's sustainability matters.

Download the Terms of Reference of the Sustainability Committee

Overview of work conducted by the Sustainability Committee between 2024 and the date of this Report

	2024				2025
	Jan	Feb	Sep	Nov	Feb
Climate Change-related Matters	✓	✓	✓	✓	✓
Other Sustainability Matters – risks, opportunities and emerging issues	✓		✓	✓	
Sustainability Reporting/Indices performance		✓	✓	✓	✓
Sustainability Governance	✓			✓	✓
Health, Safety, Security and Environment	✓			✓	✓
Community, Charitable and Environmental Partnerships and Initiatives		✓			✓

There has been considerable expectation and anticipation from CLP's stakeholders on how CLP would approach its corporate disclosures under the new Hong Kong Financial Reporting Standard (HKFRS) S1 and S2. With the guidance from the Committee, management devoted considerable time to preparing for the Group's disclosures in this regard.

Read the full Sustainability Committee Report in the 2024 Annual Report

Audit & Risk Committee

The Audit & Risk Committee (ARC) is responsible for maintaining oversight of CLP's financial control, risk management and internal control processes, and ensuring that adequate systems are in place and are being followed.

Download the Terms of Reference of the Audit & Risk Committee

Risks are managed at both the strategic and operational levels, in ways that support the long-term sustainability of CLP's growth objectives and the operational needs of the current business.

The ARC is also responsible for ensuring appropriate data assurance of the ESG (non-financial) data in the Sustainability Report. In addition to its robust internal control system, CLP maintains independent oversight through an independent non-financial auditor, who assures the accuracy of key ESG data and of metrics and reporting based on appropriate accounting principles and reporting practices. Findings and observations are presented to management and the Board through the ARC.

Read the full Audit & Risk Committee Report in the 2024 Annual Report

Sustainability Executive Committee

The Sustainability Executive Committee (SEC), established in 2016, is responsible for assessing and managing sustainability matters. The SEC is chaired by the Chief Executive Officer (CEO) as part of the role's executive-level responsibility for environmental, social and governance matters. As of the end of 2024, the SEC comprises the following senior corporate management team:

- Mr T. K. Chiang (CEO);
- Mr Alex Keisser (Chief Financial Officer);
- Mr Derek Parkin (Chief Operating Officer);
- Mr David Simmonds (Chief Strategy, Sustainability and Governance Officer);
- Ms Quince Chong (Chief Corporate Development Officer);
- Ms Eileen Burnett-Kant (Chief Human Resources Officer); and
- Mr Hendrik Rosenthal (Director – Group Sustainability).

Given the importance of sustainability in CLP's long-term growth and the fact that the management of sustainability matters involves different group functions and business units across CLP's markets, membership of the SEC has been expanded since early 2025 to include all Members of, and senior executives with standing invitations to join meetings of, the Group Executive Committee (GEC).

Full biographies of GEC Members are set out on the Group's website

The SEC steers the sustainability strategy of the Group and approves relevant deliverables. The CEO and CFO also hold management responsibilities for the assurance of ESG data and jointly sign off the General Representation Letter connected with the assurance process.

In 2024, the SEC convened six times and served as a platform for the executive team to initiate or develop strategic sustainability projects, receive updates on ongoing initiatives and engage in strategic discussions on emerging topics.

Key actions in 2024 are summarised below:

- Reviewed and endorsed CLP's Climate Vision 2050 (2024 edition) and approved proposal to increase frequency of reviewing CLP's climate transition plans and target to at least once every three years;
- Monitored feedback received on EnergyAustralia's Climate Transition Action Plan published in August 2024;
- Monitored the evolving international and local ESG reporting standards, including the IFRS S1/HKFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information and the IFRS S2/HKFRS S2 Climate-related Disclosures and the Task Force on Nature-related Financial Disclosures (TNFD) and assessed their implications for the Company's own disclosures;
- Provided direction for the Company's response to various ESG disclosure standards, including the changes made by the Stock Exchange of Hong Kong with enhanced climate-related disclosure expectations under the ESG Code;
- Reviewed the material topics identified in the materiality assessment and determined the impact material topics and financially material topics to be featured in the Sustainability Report and the Annual Report respectively;
- Reviewed and endorsed changes to the Sustainability Report, separating the report into an online only section and a core version to ensure effective communication to readers and maintaining transparency as well as introducing a standalone ESG databook and online interactive data hub;
- Reviewed and endorsed the sustainability-related target benchmarking exercise and proposed targets, aligning them with the latest sustainability material topics;
- Monitored investors' feedback and identified areas for improvement in light of investors' expectations relating to ESG performance and reporting;
- Reviewed the performance of ESG indices results, endorsed the participation of new index (Women Workplace Index), and noted a growing demand for robust management of social matters and disclosure of the financial impact of ESG matters;
- Endorsed the roll-out of greenhouse gases accounting platform for internal data collection and calculation;
- Reviewed and provided feedback to the Hong Kong Management Association (HKMA)'s Taxonomy for Sustainable Finance in Hong Kong;
- Reviewed and endorsed the Supply Chain Sustainability Management Framework, including the three-year Sustainable Procurement Plan. The Plan systematically assess the sustainability risks of our suppliers to enhance our understanding, as well as to help manage these risks better; and
- Reviewed and endorsed the updated CLP's Nature and Biodiversity Action Plan, specifically the nature-related risk assessment.

Group Sustainability Department

The Director-led Group Sustainability Department regularly reports to and seeks guidance from the Sustainability Committee and the SEC.

The Department is responsible for developing and managing the implementation of the Group's climate change strategy. This includes reviewing and reporting progress on the implementation of CLP's Climate Vision 2050, IFRS/HKFRS standards and the ESG regulatory requirements of the Stock Exchange of Hong Kong. The Department is also responsible for overseeing the development of carbon markets across CLP's markets and the Group's involvement in these markets, as well as monitoring changes in stakeholder expectations such as human rights and procurement, and assessing their implications for the Company.

The Department works to embed sustainability into existing operational practices and to provide sustainability input relating to the development of CLP's business strategy and planning processes. It monitors sustainability matters and updates the Sustainability Committee and the SEC on emerging risks and opportunities. It also leads corporate sustainability reporting and identifies areas for improving operational performance.

The Department is committed to deliving ESG (non-financial) data reporting, performance management, as well as sharing insights and experience both internally and across organisations, sectors and countries. It supports and organises sustainability-related events and works closely with different stakeholder groups. For instance, the Department hosts Sustainability Forums and conducts regular meetings with Group functions and business units across regions to facilitate the sharing of sustainability experience and insights.

Risk management

An effective risk management framework steers the Company in pursuit of its purpose, values, strategy and culture, empowering the business to capitalise on opportunities and secure long-term growth and success.

Risk management framework

GRI reference: 2-23, 205-1

In line with international standards and best practices, CLP defines risk as the effect of uncertainty on objectives. The effect can be positive, negative, or both, and can result in opportunities and threats. CLP aims to identify risks early so threats can be understood, managed, mitigated, transferred or avoided while opportunities can be captured where appropriate. This demands a proactive approach and an effective Group-wide risk management framework.

CLP's risk management framework comprises four key elements:

1. Risk management philosophy;
2. Risk appetite;
3. Risk governance structure; and
4. Risk management process.

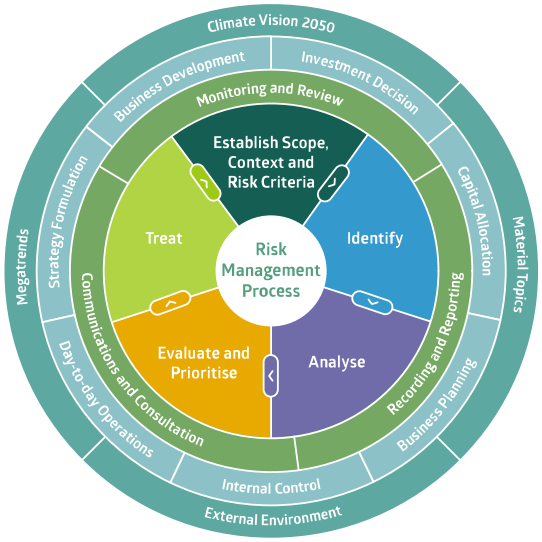
Risk management process

Based on these four key elements, CLP's risk management process is integrated into its business and decision-making processes across the organisation, including strategy formulation, business development, business planning, capital allocation, investment decisions, internal control and day-to-day operations. This is achieved through various means including communication and consultation, monitoring and review, as well as recording and reporting to ensure a holistic view of both risks and opportunities. The Board oversees this process through the Audit & Risk Committee.

Underpinned by its robust risk management process, CLP maintains a vigilant approach in monitoring the evolving external environment and megatrends which may have significant implications for CLP's business and markets. For more detailed information, please refer to the Materiality assessment process section.

Furthermore, CLP's risk management process takes into account the identified **material topics** which are identified, revalidated and updated through the three-year double materiality assessments cycle. CLP undertook a comprehensive assessment in 2024 to identify the megatrends, material topics and sustainability-related risks and opportunities most likely to impact CLP's business and stakeholders. In addition, **Climate Vision 2050** is also an integral part of CLP's broader climate strategy, which covers key considerations around scenario analysis and long-term climate risks and opportunities identification, among other factors. It guides CLP in managing these topics.

CLP's risk management process



CLP reviews how sustainability topics are impacting the business and its stakeholders through an annual materiality assessment process, which uncovers emerging sustainability risks and opportunities for consideration in the risk review and business planning processes. Below is a list of selected top tier risks identified:

	Related Material Topics					
Group Top Tier Risks	Net-zero transition	Energy growth opportunities	Digital innovation and cyber security	Future-ready workforce	Operational and supply chain resilience	Community stewardship
Major HSE incidents				●		
Cyber security attack – OT systems			●			
Cyber security attack – IT systems			●			
Major projects delay/cost overrun					●	
Major failure – generation assets			●		●	
Climate-related physical risk	●					
Adoption of Artificial Intelligence (AI) Solutions			●			
Coal supply shortage – Australia					●	
Wholesale price volatility – Australia		●				
Tariff adjustment challenge – Hong Kong		●				●
Gas supply security – Hong Kong		●			●	
Regulatory changes – Hong Kong	●	●	●			
Regulatory changes – Mainland China	●	●	●			
Regulatory changes – Australia	●	●	●			
Regulatory compliance – Australia			●			●
Geopolitical and sanctions risk					●	
Climate-related transition risk	●	●				●
Availability of competitive funding	●					
Digital transformation			●	●	●	
Organisation capability development				●		

Stakeholder management

CLP is dedicated to fostering open, transparent, regular and timely communication with its stakeholders, building trust and confidence. It seeks to understand their needs and expectations, listen to their inputs, questions and concerns, and encourage continuous improvement and collaboration. This commitment is delivered through the implementation of the CLP Stakeholder Engagement Framework grounded on its Core Values.

Strategies and procedures

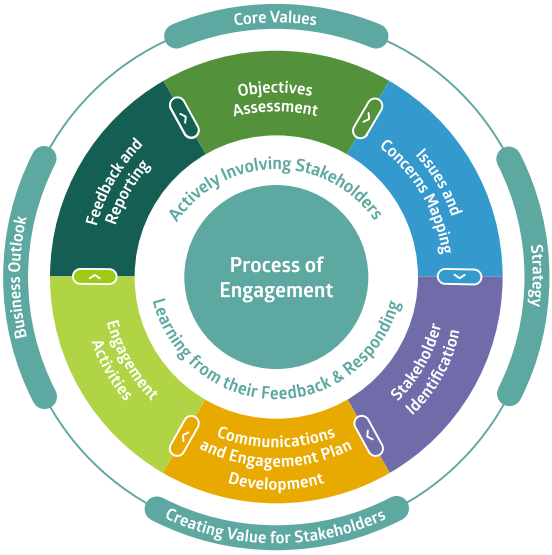
GRI reference: 2-12, 2-16, 2-25, 2-29, 3-3, 207-3, 413-1

CLP's Stakeholder Engagement Framework provides for open and transparent channels for stakeholder input, along with a review and consideration process for responding to concerns about CLP's business in a timely manner.

Each business unit has developed its own project-specific stakeholder engagement plan, based on the framework steps below.

1. **Establish engagement scope and align with business objectives**
2. **Map issues and concerns**
3. **Identify relevant stakeholders:** CLP engages with a diverse range of stakeholders, each with distinct attributes, concerns and interests. Key stakeholder groups for each project are identified and prioritised based on the issues mapped, how stakeholders will be impacted and the nature of their influence on the business.
4. **Develop a communications and engagement plan:** CLP uses a wide range of easily accessible public engagement channels, both formal and informal. These channels include surveys, focus groups, briefings, visits, events, roadshows and online channels, where stakeholders can express their concerns, interests or provide feedback throughout the year. Drawing on past experience, the channels for each project are selected based on the project's nature and the most effective means of reaching the identified stakeholders.
5. **Conduct engagement activities**
6. **Capture feedback and report on outcomes:** CLP seeks to address stakeholders' views and concerns while identifying areas for improvement. It uses various measures to do this, including capturing stakeholder feedback, assessing the outcomes of CLP's stakeholder engagement efforts, monitoring and analysing media coverage, tracking brand perception ratings, and evaluating public and industry recognition and awards.

CLP's stakeholder engagement framework



CLP's stakeholder engagement channels

As one of the largest investor-owned power businesses in Asia, CLP serves a very diverse range of stakeholders.

GRI reference: 2-12, 2-25, 2-29

The Company is committed to responding to stakeholder concerns about the business in a timely manner. These concerns vary depending on location and context and therefore require different actions or responses. General complaints about the Company are typically handled by the customer relations team. The Company ensures transparency by disclosing its financial and non-financial performance through the Group website, the Annual and Interim Reports and the Sustainability Report.

The following table lists out our key stakeholders and how they were engaged with.

Stakeholders	Key Engagement Channels
Capital providers **Download the annual report** *(including lenders, investors and shareholders)*	• Annual General Meeting • Annual and Interim Results Analyst Briefings and webcasts • Corporate reports including Climate Action Finance Report • CLP Investor Relations App and mailbox • Announcements, circulars, presentations and media releases • Direct engagement in the form of bank and investor meetings, conferences, site visits, briefing calls and investor roadshows
Customers **Read more** *(including residential, C&I customers, electricity boards and grid companies)*	• Working groups, e.g. the Customer Consultative Group and small and medium enterprise (SME) consultative groups • Customer Service Centres, Customer Interaction Centre and online service portals • Customer satisfaction surveys, feedback forms and personalised communications through account managers • Participation in government schemes
Our people **Read more** *(including employees and contractors)*	• Employee engagement and safety culture surveys • Employee participation forum (e.g. self-led affinity group Gender Equity Group on diversity & inclusion, culture development working groups) and other trainings, workshops and development programmes. • Feedback channels (including online forms, suggestion boxes, townhall meetings, focus groups, regular roadshows) • Employee newsletters, broadcasts, intranet, internal webinars • Discussion forum with trade union representatives in locations where collective bargaining is recognised
Partners **Read more** *(including governments, regulators, suppliers and contractors)*	• Regular working group meetings, communications and performance reporting • Written responses to public consultations and direct liaison with governments, regulators and relevant parties • Engagements and site visits • Meetings and visits by top management to deepen strategic long-term partnerships for mutual growth and development
	• Regular supplier management meetings and engagements • Safety workshops, jointly engaging contractors working towards a common goal to raise safety awareness and capability through mutual collaboration and shared expertise • Periodical supplier performance evaluations • Regular risk and resilience reviews of key suppliers' supply chain risks
Community **Read more** *(including community groups, legislators, NGOs, industry and professional organisations and academia)*	• Working committees, advisory committees, panels and meetings, including local customer advisory committees • Active participation in professional organisations through corporate memberships to enhance industry networking and exchanges • Public/community events and programmes • Community investment programmes and volunteering services • Awards and scholarships • Seminars, lectures, workshops and online classes • Promotion through mass media and social media (including educational videos) • One-on-one meetings and visitations • Senior management's participation in speaking forums, briefings and engagement events to articulate CLP's thought leadership on its climate vision

Materiality assessment process

The materiality assessment process is the foundation of CLP's best practice sustainability management and reporting, enabling it to integrate sustainability into its business strategy and create long-term value for stakeholders.

Overview of the assessment approach

GRI reference: 2-12, 3-1

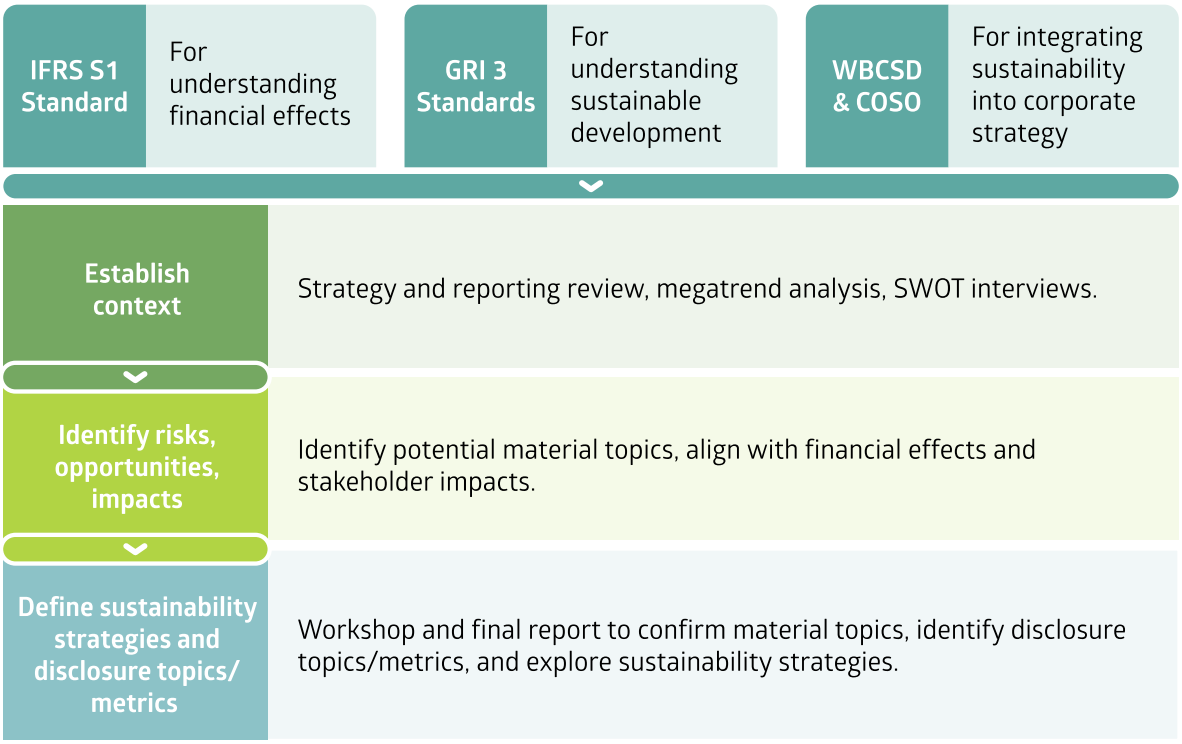
CLP's materiality assessment helps to contextualise its sustainability-related impacts, risks and opportunities and determine how these should be disclosed in CLP reports. By combining both internal and external stakeholder views with extensive megatrend analysis, CLP is able to determines the sustainability material topics that are most financially material to its business and to stakeholders from an impact perspective.

Global standards for best practice in assessing materiality have continued to evolve in line with broader changes in sustainability disclosure standards.

Most notable are the new standards, IFRS S1 and IFRS S2, published by the International Sustainability Standards Board (ISSB) in June 2023, which provide additional clarity on how to assess financial materiality. The GRI Sustainability Reporting Standards also upgraded the materiality assessment methodology in 2021.

In 2024, CLP considered the latest best practice advice from standard setters, including the following, amongst others:

- The ISSB's IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information, published in June 2023;
- GRI 3: Material Topics 2021; and
- *Enterprise Risk Management - Applying enterprise risk management to environmental, social and governance-related risks guidance*, published by the Committee of Sponsoring Organisations of the Treadway Commission (COSO) and the WBCSD in October 2018.



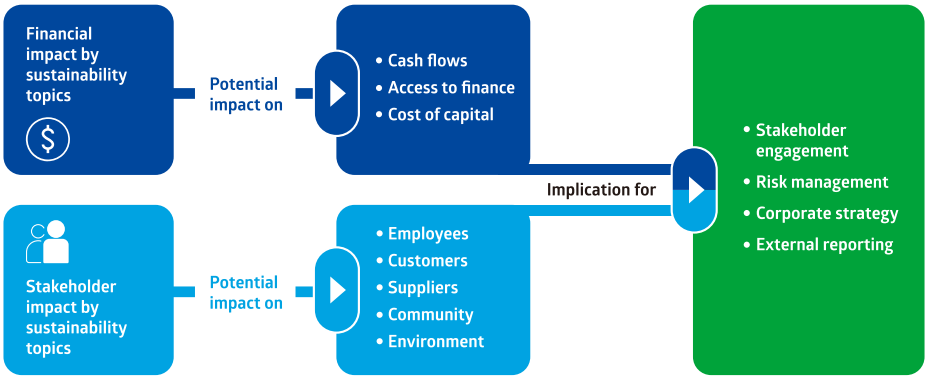
The double materiality assessment approach

Since 2018, CLP's materiality assessments consider how megatrends could impact the sustainability of the Company's business strategy in the medium- to long- term.

In 2021, CLP embraced the concept of double materiality to support its sustainability risk management and to inform the sustainability-related content of its annual suite of reports.

This approach means that CLP's Annual Report covers financially material sustainability topics that could reasonably be expected to affect the Company's prospects, while the Sustainability Report includes sustainability topics that have a material impact on people, the environment and the economy.

Double materiality approach



In 2024, CLP continued to identify and assess actual and potential sustainability impacts, risks and opportunities and further align its reporting with the IFRS S1 standard. Its assessment process enables CLP to identify material topics and to understand how sustainability-related risks and opportunities can be integrated into the Group's strategic planning and risk management processes.

While CLP's methodology has continuously evolved to reflect changes in best practices, the materiality assessment has taken into account topics that are material to the Group in the short-, medium- and long-term.

Therefore, the material topics identified since 2018 have remained relatively consistent, with only minor updates over the period. CLP implements the double materiality assessment process based on a three-year cycle.

Each year, there are variations in the breadth and scope of the assessment process, with Year 1 involving a comprehensive assessment and Years 2 and 3 focusing on re-validation and the incorporation of incremental changes with reduced time requirements.

CLP's three-year double materiality assessment cycle

Year 1

Comprehensive materiality assessment

Research and extensive stakeholder engagement to identify key sustainability-related impacts, risks and opportunities.

Year 2

Assessment and review of Year 1 findings

Research to identify and re-assess impacts, risks, and opportunities. Amend sustainability priorities if required and validate with key stakeholders.

Year 3

Assessment and review of Years 1 and 2 findings

Limited stakeholder engagement with senior management and sustainability-specific SWOT analyses. Identify and re-assess impacts, risks, and opportunities. Amend priorities if required and validate with key stakeholders.

The assessment process in 2024

GRI reference: 2-12, 3-1

In 2024, CLP undertook the Year 1 assessment approach. This is a comprehensive assessment that includes megatrend analysis, peer review, research and stakeholder engagement to identify key sustainability-related impacts, risks and opportunities.

As an industry pioneer, CLP has appointed a non-financial auditor to provide limited assurance over its materiality assessment process in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised), Assurance Engagements Other Than Audits or Reviews of Historical Financial Information. CLP is demonstrating its commitment to transparency and accountability in its materiality assessment process and ensuring the integrity and credibility of its sustainability reporting.

Conduct stakeholder interviews

Megatrends are large, transformative global forces that define the future and have a far-reaching impact on business, economies, industries, societies and individuals. In 2024, CLP conducted a comprehensive review of megatrends and presented the results in a megatrends paper. CLP also conducted interviews with the Group Executive Committee members and senior executives to assess which megatrends were most important to CLP's prospects. A SWOT analysis for each megatrend has been undertaken. In addition, CLP reviewed its risk registers, internal strategy papers, company policies and international reporting standards to help it identify impacts, risk and opportunities conceivably material to CLP's current and future prospects.

Identify, assess and validate impacts, risks and opportunities

To identify sustainability-related impacts, risks and opportunities (IROs), CLP undertook interviews to collate the views of a broad range of internal stakeholders from CLP's middle and senior management, a review on megatrends to reflect CLP's current operating context and a review of the latest reporting standards. It identified a total of 89 IROs and grouped them under the nine megatrends most likely to affect CLP's business and operating environment.

The Double materiality process in 2024

1 Megatrends white paper

Based on: Desktop research.

2 Stakeholder engagement

Interviews with CLP's Group Executive Committee members and senior executives to conduct SWOT analyses on megatrends.

3 Value chain mapping

Based on: CLP internal documentation reporting standards review and megatrend analysis.

4 Identify potential sustainability-related impacts, risks and opportunities

Based on: Comprehensive data table with relevant impacts, risks and opportunities identified and references to supporting evidence.

5 Access for double materiality

Based on: Verifiable and repeatable methods aligned with reporting standards and CLP's own risk framework.

6 Peer review

Based on: Review of material environmental, social and governance topics identified by peers.

7 Validate material topics

Based on: Validation workshop with Sustainability Executive Committee members.

CLP continued to apply the assessment methodology by considering the severity and likelihood of risk and the benefit magnitude and likelihood of opportunities. Each impact, risk and opportunity was assessed as either negative or positive, actual or potential (based on the latest GRI 3: Material Topics 2021 guidance). In 2024, CLP continued to assess with considerations such as time horizon (short-term, medium-term and long-term) and position in the value chain (upstream, own operation and downstream) consistent with the IFRS S1 standard.

To finalise the assessment phase, the **significance** of each negative impact or financial risk was evaluated for its severity and likelihood. The methodology incorporated the latest GRI Standards, the ISO 31000 Risk Management Standard and CLP's existing Group Risk Management Framework. A similar methodology was devised to assess the **significance** of each positive impact and financial opportunity, considering the benefit magnitude and likelihood of each opportunity.

After evaluating for magnitude/severity and likelihood, 57 IROs were assessed as 'High' or 'Extreme' and therefore material. Of these, 35 were sustainability-related financial risks (24) and opportunities (11) and 22 were stakeholder impacts (14 negative, 8 positive). Five out of six material topics had a stakeholder impact and/or financial implications for the Group. The prioritised sustainability-related impacts, risks and opportunities have been summarised in CLP's Sustainability Report and Annual Report respectively. The assessment outcomes have been refined and validated by the CLP Holding's Sustainability Executive Committee and endorsed by the Sustainability Committee.

CLP's methodology for assessing sustainability-related materiality aligns with and informs future sustainability-related strategy and reporting. In addition, this materiality assessment and the risk management processes have been more closely integrated. CLP's risk management process takes into account the identified material topics which are determined through comprehensive annual materiality assessments.

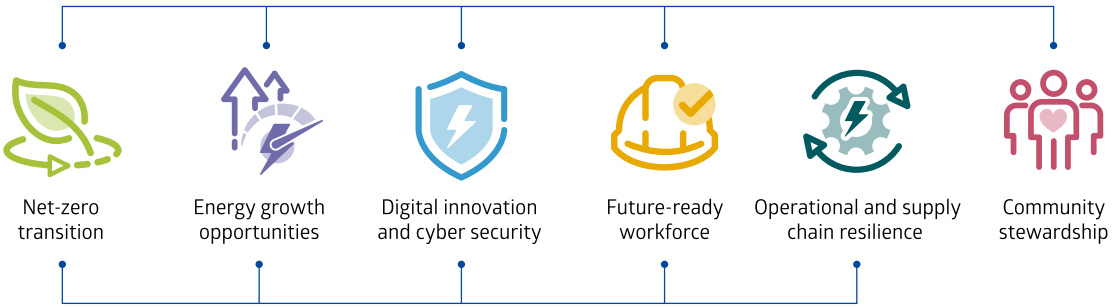
The materiality matrix

The materiality assessment findings have been consolidated into six key material topics, with five identified as financially material and five as impact material.

GRI reference: 3-2

Impact material

refers to significant positive or negative impacts on people, the economy and the environment, including impacts on human rights, based on the GRI definition.



Financially material

refers to sustainability-related risks or opportunities that could reasonably be expected to affect the Group's cash flows, access to finance or cost of capital in the short, medium and long term, as per the IFRS S1 standard.

How to navigate sustainability-related disclosures for investors and other stakeholders

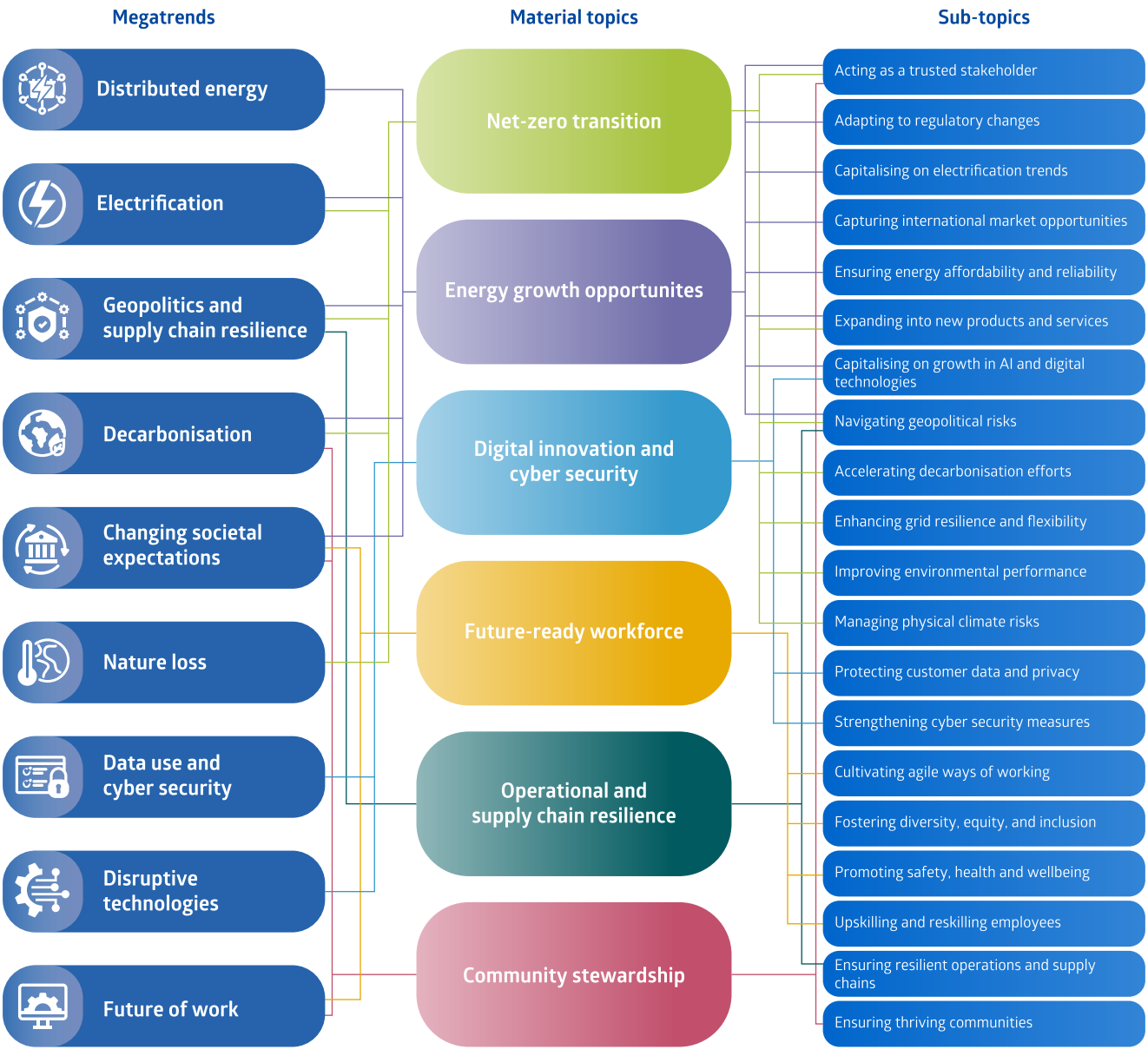
Financial Impact		Stakeholder Impact
Sustainability-related risks or opportunities which may reasonably be expected to affect the business's cash flows, access to finance or cost of capital in the short, medium and long term.	What does it mean to CLP?	Significant positive or negative impacts on people, the environment and the economy. These affect the business's contribution to sustainable development.
Provides sustainability specific inputs into strategic decision-making to mitigate risks and maximise returns for shareholders.	How does it help?	Sets priority areas for managing CLP's impacts and approach to sustainability.
Capital providers investors, lenders and creditors who expect CLP to generate sustainable returns.	Who is it for?	A diverse range of stakeholders who want to understand CLP impacts and contributions to sustainable development.
Sustainability-related financial disclosure including material information about these risks and opportunities to investors. Information is material if omitting. Misstating or obscuring it could reasonably be expected to influence investment decisions.	What to disclose?	Multi-stakeholder disclosure including its contribution to sustainable development objectives and any other impacts of interest to key stakeholder groups.
CLP's 2024 Annual Report Managing What Matters to Our Business Chapter	Where to look for information?	CLP's 2024 Sustainability Report Our Sustainability Agenda Chapter

The double materiality approach streamlines the disclosures in the Annual Report and Sustainability Report. The material topics and associated CLP responses are summarised in the *Materiality Matrix* section of this report and the *Managing What Matters to Our Business* chapter of the Annual Report.

Read more in the Summary of prioritised sustainability-related impacts, risks and opportunities

The materiality assessment results are summarised in the materiality matrix below, which shows the relationships between megatrends, material topics and sub-topics. The IFRS S1 disclosure requirements, including time horizon and position of the value chain, have been incorporated in the results.

GRI reference: 3-2



For optimal user experience in navigating CLP's financially and impact material topics and sub-topics, please view the interactive materiality matrix online

Read more in the Managing What Matters to Our Business chapter in CLP's 2024 Annual Report

Summary of prioritised sustainability-related impacts, risks and opportunities

CLP actively manages and responds to the sustainability-related impacts, risks and opportunities summarised in the table below. The latest materiality assessment results also inform the Group's business strategy and integrate into the broader risk management process.

Material Topic	Sub-topic	Megatrend	Impacts, risks and opportunity
Net zero transition	Accelerating decarbonisation efforts		**Positive impact:** Leverage growing public support (in Hong Kong and overseas) for nuclear energy as part of a sustainable energy mix. This would include promoting more use of nuclear energy to provide a larger share of zero-carbon power to consumers.
			**Negative impact:** A delay in CLP's phase-out of its coal-fired plants will result in ongoing carbon emissions and air pollution.
	Acting as a trusted stakeholder		**Financial risk:** Missing greenhouse gas emissions intensity reduction targets and failing to deliver on Climate Vision 2050 could erode investor confidence in CLP's ability to profitably manage the energy transition, potentially resulting in a lower share price, higher capital costs and reduced access to funding.
			**Negative impact:** Failing to meet greenhouse gas emissions intensity reduction targets (by 2030) could erode CLP's trust with customers, investors and governments, and jeopardise efforts to position the Company as a leader in the energy transition.
	Enhancing grid resilience and flexibility		**Financial risk:** Ageing and insufficient power grid infrastructure may constrain ability to accommodate distributed energy resources and renewable connections, potentially compromising supply reliability and hindering the low-carbon transition.
	Expanding into new products and services		**Financial opportunity:** Increasing use of battery storage enables CLP to enhance energy dispatch and strengthen energy reliability. Improved flexibility to respond to demand fluctuations helps stabilise the power grid and enhance supply resilience.
			**Financial opportunity:** Developing expertise in low-carbon energy technologies such as green hydrogen will help CLP attract investors and customers eager to participate in the energy transition.
			**Positive impact:** As renewable energy infrastructure comes to the end of its lifecycle, there will be opportunities for remanufacturing of industry machinery, reducing waste and conserving resources.

1 Time horizon is defined as 0-1 year as short-term; 1-5 years as medium-term; and 5+ years as long-term.

Upstream | Own operations | Downstream | Short-term | Medium-term | Long-term

Value chain	Time horizon[1]	CLP's Response	Relevant stakeholders
		For the past 30 years, CLP has been an investor and off-taker of nuclear energy. In 2024, nuclear energy constituted 31% of CLP's fuel mix in Hong Kong, with natural gas accounting for 52% and coal for 16%. CLP Power will continue to give full support to the Hong Kong SAR Government's Climate Action Plan 2050 by introducing more non-carbon energy, including nuclear energy, through regional cooperation.	Customers, Partners
		CLP remains committed to ceasing investment into new coal-fired generation capacity, and phasing out coal before 2040. In Hong Kong, three of the oldest generation units at Castle Peak Power Station have been retired and coal is not expected to be used for regular electricity generation beyond 2035. Meanwhile, EnergyAustralia's planned closure of Yallourn Power Station in 2028 is progressing as scheduled.	Customers, Partners, Community
		CLP is dedicated to decarbonising its business in line with targets set in Climate Vision 2050, which has guided the Group's strategy since 2007. The Company also commits to reviewing its transition plan and targets at least every three years to ensure its delivery. It is on track to meet its 2030 target considering its 2024 greenhouse gas emissions intensity performance.	Capital providers
		In 2019, CLP's baseline year for science-based targets, coal-fired generation capacity was 11,997MW on an equity plus long-term capacity and energy purchase basis, representing 50.0% of our portfolio. This share decreased to 36.0% by the end of 2024, while the share of renewable energy increased from 13.7% in 2019 to 19.6% by the end of 2024, demonstrating progress toward the target of 50% reduction by 2030.	Capital providers, Customers, Partners
		CLP has continued to invest in power grid infrastructure in Hong Kong and India, as transmission networks are key to supporting the integration of more non-carbon energy into electricity systems.	Capital providers, Customers
		CLP is investing in new battery energy storage systems (BESS) in Hong Kong, Mainland China and Australia to firm up the electricity supply as power systems transition to lower-carbon energy sources.	Capital providers, Customers
		CLP emphasises capability building through tailored trainings and development programmes to equip employees with the skills needed for a low-carbon future. Throughout 2024, CLP focused on non-carbon energy investments while exploring emerging technologies, including green hydrogen. For example, Tallawarra B Power Station in Australia is capable of using a blend of natural gas and green hydrogen for its operations.	Capital providers, Customers, Our People
		CLP has instituted a dedicated steering committee to oversee its Circular Economy (CE) approach, including strategy development and guideline implementation. In Mainland China, CLP's wind power operations are adopting circular principles, with Laiwu Wind Farm collaborating with leading manufacturers to recover and repurpose retired wind turbine blades.	Partners

CLP actively manages and responds to the sustainability-related impacts, risks and opportunities summarised in the table below. The latest materiality assessment results also inform the Group's business strategy and integrate into the broader risk management process.

Material Topic	Sub-topic	Megatrend	Impacts, risks and opportunity
Net zero transition *(continued)*	Improving environmental performance		**Negative impact:** Excessive water and/or air pollution as a consequence of CLP's operations could lead to environmental damage, especially in regions with water stress.
			**Negative impact:** Potential seepage from ash repositories leading to surface/ground water contamination.
	Managing physical climate risks		**Financial risk:** Climate-related extreme weather events such as wildfires, windstorms and heatwaves may damage CLP's energy infrastructure and impact business operations.
			**Financial risk:** Repairs and maintenance of energy infrastructure will increase operational costs as extreme weather events become more common.
			**Financial risk:** Increased risks of extreme weather events may result in higher insurance premiums and affect profitability.
	Navigating geopolitical risks		**Financial risk:** Trade policies aimed at limiting dominance of materials and technologies from countries where CLP sources its equipment and properties may increase CLP's cost of acquisition and project execution.
Energy growth opportunities	Acting as a trusted stakeholder		**Financial risk:** Public sensitivity to any potential electricity tariff adjustments may affect progress of government-approved electricity infrastructure investments/service lines.
	Adapting to regulatory changes		**Financial risk:** Uncertainty in Australian energy and decarbonisation policies could affect EnergyAustralia's operations and energy transition plans.
			**Financial risk:** Evolving net-zero policies internationally may push CLP to accelerate its coal-fired power plant closures, forcing it to bear the transition costs (such as revenue loss, decommissioning costs) ahead of schedule.

1 Time horizon is defined as 0-1 year as short-term; 1-5 years as medium-term; and 5+ years as long-term.

Upstream | Own operations | Downstream | Short-term | Medium-term | Long-term

Value chain	Time horizon[1]	CLP's Response	Relevant stakeholders
	S	CLP assesses environmental risks through systematic Environmental Due Diligence (EDD) for new projects, while conducting environmental impact assessment at the project design and construction stage. The associated environmental risks and impacts during operation are managed by a robust Environmental Management System (EMS). For continuous improvement, CLP also tracks progress towards medium- and long-term targets for air emissions, water use and waste produced.	Community
	M	Under CLP's EMS, the adverse impacts of water discharges are identified, monitored and controlled through regularly reviewed programmes. Emergency response plans address potential spillage or leakage of pollutants, while engineered solutions help prevent water contamination. At Mount Piper Power Station, EnergyAustralia has installed a leachate barrier management system to direct contaminated water for treatment and reuse.	Community
	S	CLP has continued to strengthen its resilience planning and infrastructure adaptation measures to protect critical energy infrastructure against increasing risks from extreme weather events.	Capital providers, Customers
	S	CLP is committed to maintaining the strong operational performance of its energy infrastructure in the face of rising extreme weather risks and exercising effective cost controls. CLP has assessed the physical risk exposures of different asset types and their associated infrastructure and put in place appropriate mitigation and adaptation of technologies.	Capital providers, Customers
	S	CLP holds comprehensive insurance coverage for its investment as a cost-effective way of managing the financial risks associated with its operations and ensuring stability of service.	Capital providers, Customers
	M	CLP continued to enhance its supply chain management to secure the materials and technologies needed to maintain robust operations and drive business growth. It harnesses the resources and capabilities of preferred suppliers around the world to supports its evolving business needs through long-term, commercially viable partnerships, guided by international best practices for procurement.	Capital providers, Partners
	S	CLP Power's electricity tariff adjustments have been relatively stable over the years by adopting prudent cost management, diversifying its fuel mix and utilising innovative technologies to ensure electricity tariffs remain competitive in Hong Kong despite increasing operating expenses.	Capital providers, Customers, Partners
	M	EnergyAustralia has continued to work closely with partners, including governments at federal and state levels, on investments to enable the energy transition in Australia.	Capital providers, Customers
	L	Under Climate Vision 2050, CLP is committed to phasing out coal before 2040. CLP carefully reviewed all possible exit strategies for coal-fired power plants to ensure continued power supply reliability in the community as well as an efficient and orderly transition in line with national decarbonisation policy.	Capital providers, Partners

CLP actively manages and responds to the sustainability-related impacts, risks and opportunities summarised in the table below. The latest materiality assessment results also inform the Group's business strategy and integrate into the broader risk management process.

Material Topic	Sub-topic	Megatrend	Impacts, risks and opportunity
Energy growth opportunities *(continued)*	Adapting to regulatory changes		**Financial risk:** Potential adverse changes in energy regulations in the markets where CLP operates may affect its operating environment and business model in the long term.
	Capitalising on electrification trends		**Financial opportunity:** Supporting the electrification of various transportation segments including commercial vehicles, taxis, ferries and private cars can generate diverse business opportunities for energy suppliers.
			**Financial opportunity:** CLP can leverage its EV charging expertise in Hong Kong and Mainland China in other markets to develop potential new opportunities from transport electrification.
			**Financial opportunity:** Electrification needs to quadruple by 2050 globally, offering CLP opportunities to diversify into new lines of business and establish joint ventures with potential partners.
	Capturing international market opportunities		**Financial opportunity:** CLP can capitalise on potential gaps in Asian energy markets left by the withdrawal of some companies due to geopolitical concerns.
			**Financial opportunity:** CLP can leverage its strong supply chain relationships in Mainland China to seek potential energy investment opportunities in Asian markets in China's Belt and Road Initiative.
	Ensuring energy affordaability and reliability		**Financial risk:** Potential volatility in natural gas supply may affect gas-fired power generation in Hong Kong and increase costs, leading to possible pressure to adjust electricity tariffs.
			**Financial risk:** With energy affordability a growing concern for Hong Kong customers and the Government, CLP is expected to continue delivering reliable, sustainable energy at reasonable cost.
			**Financial opportunity:** Ageing populations, rising incomes and urbanisation in Asian markets have continued to support growth in electricity demand, presenting opportunities for CLP and other energy suppliers.
			**Negative impact:** High energy bills and an associated increase in customer disconnections due to non-payment could result in a loss of customers and increased customer dissatisfaction.
	Expanding into new products and services		**Financial opportunity:** Utilities should meet growing customer demand for low-carbon energy with a diversified range of distributed energy solutions including solar energy, home batteries and EV charging.

1 Time horizon is defined as 0-1 year as short-term; 1-5 years as medium-term; and 5+ years as long-term.

Upstream | Own operations | Downstream | Short-term | Medium-term | Long-term

Value chain	Time horizon[1]	CLP's Response	Relevant stakeholders
		CLP is committed to serving the markets where it operates while abiding by local regulations. In Hong Kong, for example, it is investing in electricity supply systems to serve growing energy needs under the 2024-2028 Development Plan – the second five-year programme in the current SoC Agreement with the Hong Kong Government.	Capital providers, Partners
		CLP has continued to utilise its power expertise to enable the development of high-quality charging infrastructure and services to support the needs of private and commercial EV users.	Capital providers, Customers
		EnergyAustralia is stepping up efforts to capture opportunities from the electrification of Australia's transportation sector, including an EV charging infrastructure project for a leading bus operator in Queensland.	Capital providers, Customers
		The eMobility Network strengthened efforts to promote the wider use of electric commercial vehicles in Hong Kong through enhanced technology exchange and collaboration. In 2024, an agreement was signed to expand the EV charging partnership with TELD New Energy Company Limited to introduce TELD's cutting-edge EV charging technologies to Hong Kong.	Capital providers, Partners
		As part of CLP's latest strategy, CLP will pursue further business growth as it seeks to build new operations with stable earnings outside our core markets such as renewable business in high growth Asian countries.	Capital providers
		In July 2024, a CLP subsidiary entered into an agreement with partners to jointly explore the export of clean energy from Laos to neighbouring countries.	Capital providers, Partners
		In 2024, the new offshore LNG terminal in Hong Kong completed its first full year of operations, further strengthening the city's access to supplies of competitively priced natural gas in international markets.	Capital providers, Customers
		CLP has continued to ensure customers have access to reasonably priced energy through using a diversified fuel mix for power generation and maintaining prudent cost controls. As a result, CLP Power has maintained relatively stable tariff adjustments over the years.	Capital providers, Customers, Partners
		CLP has continued to invest in electricity supply systems and broadened partnerships to meet energy demand in its markets in Asia Pacific.	Capital providers, Partners
		CLP Power's tariff adjustments have been relatively stable over the years by adopting prudent cost management, a diversified fuel mix and utilising innovative technologies to ensure electricity tariffs remain competitive in Hong Kong despite increasing operating expenses. The number of disconnections due to non-payment has also been monitored to ensure there is no abnormal trend.	Capital providers, Customers
		CLP is providing a growing range of low-carbon energy services and solutions for customers including corporate power purchase agreements for renewable energy, EV charging and battery storage systems.	Capital providers, Customers

CLP actively manages and responds to the sustainability-related impacts, risks and opportunities summarised in the table below. The latest materiality assessment results also inform the Group's business strategy and integrate into the broader risk management process.

Material Topic	Sub-topic	Megatrend	Impacts, risks and opportunity
Energy growth opportunities *(continued)*	Capitalising on growth in AI and digital technologies		**Financial opportunity:** CLP can capitalise on AI's growing energy demands by investing in energy infrastructure to deliver reliable and scalable energy solutions to data centres.
	Navigating geopolitical risks		**Financial risk:** Regulatory changes in Hong Kong, Mainland China, Australia and India could increase operational costs and complexity for utilities.
Digital innovation and cyber security	Capitalising on growth in AI and digital technologies		**Financial risk:** CLP's digitalisation agenda could be derailed by cost and time over-runs, an inability to scale, disruptions caused by imperfect implementation and/or failing to meet customer expectations.
			**Financial opportunity:** Leveraging AI to improve network diagnostics and realise cost efficiencies in maintenance operations.
			**Positive impact:** Providing consumers with smart meters and other 'front-of-meter' innovations, giving them an opportunity to participate as partners in the energy transition and realise energy bill savings.
			**Negative impact:** Failure to assess and manage the potential implications of generative AI on CLP's workforce could lead to job displacement, skill gaps and job insecurity for employees.
	Protecting customer data and privacy		**Financial risk:** Tightening data privacy regulations could increase operational complexity and compliance costs.
	Strengthening cyber security measures		**Financial risk:** The increased vulnerability of smart grid technology to cyberattacks on critical infrastructure poses a significant risk of operational disruptions, regulatory penalties and reputational damage.
			**Financial risk:** Insufficient investment in advanced cyber security systems and digitisation could leave CLP vulnerable to cyberattacks and data breaches. As AI integrates more deeply with operational technology, these vulnerabilities could intensify.
			**Financial risk:** A major cyber security breach would present a serious risk to CLP's financial position and reputation, causing a loss of market share.
			**Negative impact:** A successful cyberattack on one of CLP's Operational Technologies (OT) systems, or to a lesser extent its IT systems, could affect the operationality of power plants or grid infrastructure, causing outages and disruption that adversely impact customers.

1 Time horizon is defined as 0-1 year as short-term; 1-5 years as medium-term; and 5+ years as long-term.

Upstream | Own operations | Downstream | Short-term | Medium-term | Long-term

Value chain	Time horizon[1]	CLP's Response	Relevant stakeholders
		CLP provides reliable electricity supply to the data centre industry while promoting the use of lower-carbon energy and improvements in energy efficiency to reduce environmental impact.	Capital providers, Customers
		Across its markets in Asia Pacific, CLP has continued to closely monitor regulatory developments and work constructively with policymakers to contribute towards stable regulatory environments to support ongoing investments in the energy sector.	Capital providers, Partners
		CLP remains focused on the digitalisation and transformation of the utility sector and is seeking to implement the latest digital technologies to optimise its business processes and accelerate innovation.	Capital providers, Customers
		AI has continued to offer new opportunities for CLP to reshape internal operations, innovate and engage with customers. In 2024, CLP successfully deployed 26 use cases of innovative technologies including AI across the Group.	Capital providers
		CLP Power is on track to connect more than 2.8 million smart meters for its residential as well as small and medium enterprise customers by 2025 to promote low-carbon living and further improve the safety and dependability of the power supply.	Customers
		CLP integrates AI principles into its governance approach, ensuring ethical and secure AI development aligned with its core values. CLP also organises various events to encourage employees to innovate and leverage AI capabilities.	Our people
		CLP is committed to protecting data privacy and ensuring compliance with all relevant laws and regulations. In 2024, CLP Power and EnergyAustralia both reported zero cases of customer data loss.	Capital providers, Partners
		CLP has continued to adopt a cautious approach to developing governance controls before scaling AI solutions in its businesses, in consideration of the risks that AI presents.	Capital providers, Partners
		CLP has continued to strengthen its cyber security protection with upgrades of security operations centres for CLP China and EnergyAustralia in 2024.	Capital providers
		CLP has continued to regularly update data protection practices in line with the latest regulatory requirements and to meet the expectations of stakeholders.	Capital providers, Partners
		CLP's Security Operations Centre (SOC) has expanded beyond Hong Kong's 24/7 security monitoring, reporting and response capabilities, with facilities in CLP China, Energy Australia and Apraava Energy maturing during 2024. The Incident Response Process and Business Continuity Planning have also been enhanced to help speed up the reaction to both IT and OT cyber security events. Group Security implements a Cyber Security Governance and Risk Management framework which enables business asset owners and project managers to identify, assess and manage cyber security risks in line with overall business objectives.	Customers

CLP actively manages and responds to the sustainability-related impacts, risks and opportunities summarised in the table below. The latest materiality assessment results also inform the Group's business strategy and integrate into the broader risk management process.

Material Topic	Sub-topic	Megatrend	Impacts, risks and opportunity
Future-ready workforce	Cultivating agile ways of working		**Financial risk:** CLP is required to strike a balance between operating a regulated business in Hong Kong and being agile to business uncertainties and unforeseen risks. This may affect responsiveness to industry megatrends and market dynamics, potentially limiting the company's capacity to capture emerging opportunities and resulting in reduced operational efficiency, lost revenue opportunities and diminished competitiveness in a rapidly evolving energy market.
			**Positive impact:** CLP can continue to embrace new ways of working decentralised decision-making and encourage employees to take calculated risks and try new things.
			**Negative impact:** Younger employees, equipped with digital and the energy transition skills, may have different expectations compared to previous generations. This shift requires CLP to hire and train executives with the contemporary leadership skills to manage them effectively.
	Fostering diversity, equity, and inclusion		**Positive impact:** People policies that acknowledge different life stages and offer employees greater flexibility can increase social mobility, remove barriers to career progression and enhance productivity and morale.
			**Negative impact:** Lack of progress on diversity, equity and inclusion could hurt CLP's employee value proposition, especially with younger workers.
	Promoting safety, health and wellbeing		**Negative impact:** Failing to provide a safe working environment could undermine the physical and mental health, safety and wellbeing of employees and contractors.
			**Negative impact:** Failure to identify and act on poor labour standards and human rights practices in CLP's operations and supply chain could result in physical and psychological harm to workers and violation of labour rights.
	Upskilling and reskilling employees		**Financial risk:** Failure to attract and develop the talent required for a digitally-enabled, low-carbon future will hamper CLP's ability to meet its strategic objectives and expand capabilities in new areas.
			**Negative impact:** Failure to reskill employees for the age of renewables, digitisation and decentralised energy systems may lead to job losses or changes in job requirements, negatively affecting employee wellbeing, satisfaction and job security.
			**Negative impact:** CLP's decarbonisation, digitalisation and non-Scheme of Control expansion in Hong Kong and Mainland China could create significant challenges in succession management, talent acquisition and cultural adaptation.

1 Time horizon is defined as 0-1 year as short-term; 1-5 years as medium-term; and 5+ years as long-term.

Upstream | Own operations | Downstream | Short-term | Medium-term | Long-term

Value chain	Time horizon[1]	CLP's Response	Relevant stakeholders
		CLP has been enhancing its organisational agility and refreshed its Value Framework in 2024, engaging employees extensively on how workplace values, behaviours and mindsets should evolve. Governance processes were streamlined and in Hong Kong, employees moved to new work environments that encourage flexible working.	Capital providers, Our people
		Cultivating a 'safe to speak up' culture is core to embedding new ways of working. This open dialogue enables diversity of thinking and driving for innovation.	Our people
		CLP supports employee development through various learning resources and programmes. The Company places resources in developing all-round future leaders, including providing learning opportunities with key strategic partnerships with prestigious institutions like International Institute for Management Development (IMD), Tsinghua School of Economics and Management, Chatham House, and L'École Polytechnique Fédérale de Lausanne (EPFL).	Our people
		CLP supports employees through family-friendly leave policies, including flexible working arrangements and various leave options. These encompass parental leave, adoption leave, volunteering leave and study leave, enabling employees to balance their professional and personal commitments.	Our people
		CLP refreshed its DEI strategy to enhance workplace inclusivity and culture. Built on three pillars, Diversity, Equity, and Inclusion, the strategy emphasises diversity of thinking, fairness and 'safe to speak up' culture.	Our people
		Group HSE Strategy was refreshed. The CLP Group 2025-27 HSE Strategy sets out the key opportunities and a framework for working together to make CLP healthier, safer and more sustainable.	Our people, Partners
		CLP prioritises human rights management across key areas such as occupational health and safety, prevention of child labour, forced labour, working conditions and freedom of association. In 2024, the company strengthened its commitment by conducting comprehensive due diligence to assess human rights risks across CLP's supply chain, construction projects and own operation, aligned with United Nations Guiding Principles.	Our people, Partners
		CLP has continued to strengthen its investment in attracting and developing talents. A rapid pace of hiring was sustained in 2024 with increasing number of new hires recruited in Hong Kong and Mainland China. Time spent on upskilling and reskilling made up around 15.4% of training for employees in 2024.	Capital providers, Our people
		CLP encourages training resources specifically to upskilling and reskilling initiatives. This ensures employees are equipped to excel in their current roles while preparing for future career opportunities and challenges.	Our people
		CLP seeks to attract, retain and develop a diverse and multi-generational workforce, to develop new skills and share talents effectively across its portfolio of businesses. In 2024, CLP hired and transferred around 900 employees across Hong Kong and Mainland China to support business growth amid energy transition and digital transformation.	Our people

CLP actively manages and responds to the sustainability-related impacts, risks and opportunities summarised in the table below. The latest materiality assessment results also inform the Group's business strategy and integrate into the broader risk management process.

Material Topic	Sub-topic	Megatrend	Impacts, risks and opportunity
Operational and supply chain resilience	Navigating geopolitical risks		**Financial risk:** Escalation of geopolitical conflict in the Middle East, Europe or Asia may threaten energy security, shipping and prices. Even a temporary lapse in the security and affordability of fossil fuel supply could force CLP to pass on costs, leading to a loss of customers and/or significant tariff implications.
			**Financial risk:** While CLP is a regional business, its strong presence in Hong Kong and proximity to Mainland China may create complications for its operations in other markets amid geopolitical tension.
	Ensuring resilient operations and supply chains		**Financial risk:** Operational resilience is foundational to CLP's position as an essential service provider and maintaining reliability is core to the business. Many nations are moving towards increased geopolitical competition and away from free trade. CLP's technological dependencies may compromise its innovation capacity and access to critical platforms and tools.
			**Financial risk:** Intensifying US-China tensions may complicate efforts to secure advanced US technologies such as semiconductors.
Community stewardship	Ensuring thriving communities		**Positive impact:** CLP's capabilities in building high-quality energy infrastructure could help communities adapt to a hotter climate and support a more climate-resilient energy system.
			**Positive impact:** CLP continues to serve local communities through long-standing engagement and investment programmes related to education, empowerment of women, healthcare access, poverty alleviation, social inclusion, diversity and eliminating energy poverty.
			**Positive impact:** CLP provides assistance to people and different community sectors to support the provision of affordable energy, including a HK$100 million Fuel Cost Subsidy programme to subsidise the energy costs of 150,000 families in need.
	Acting as a trusted stakeholder		**Negative impact:** Failing to provide a 'just transition' from coal to low-emissions energy may result in negative economic, health and social impacts for workers, their families and communities.

1 Time horizon is defined as 0-1 year as short-term; 1-5 years as medium-term; and 5+ years as long-term.

For details of CLP's response to financial opportunities and risks, please read the Managing What Matters to Our Business chapter of the Annual Report 2024

Upstream | Own operations | Downstream | Short-term | Medium-term | Long-term

Value chain	Time horizon[1]	CLP's Response	Relevant stakeholders
		CLP continued to enhance its supply chain management to secure the materials and technologies needed to maintain robust operations and drive business growth.	Capital providers, Partners
		In late 2024, Apraava Energy renewed its registration issued under the General Financial Rules 2017, a key license that enables the business to continue to participate in project bids issued by any government agency.	Capital providers, Partners
		CLP has continued to strengthen the resilience of its power supply systems, including reinforcing transmission towers and installing anti-flood defences for substations, as climate change led to higher frequency and intensity of extreme weather events. In 2024, CLP Power maintained a world-class reliability of 99.999%.	Capital providers, Customers
		CLP maintained the resilience of its supply chains through a three-pronged approach: ensuring access to multiple supply sources, creating closer partnerships with suppliers, and maintaining a sufficient inventory level for materials.	Capital providers, Partners
		CLP strives to ensure a stable power supply to the communities. In preparation for more frequent extreme weather events, CLP has enhanced inspections of its power supply equipment prior to typhoons, installed flood gates at substations prone to flooding and pruned trees that could potentially interfere with overhead lines. Emergency drills are conducted to ensure staff's readiness to respond swiftly and effectively to typhoon and storm impacts.	Community
		CLP has a long tradition of serving its local communities through wide-ranging engagement and funding programmes. CLP Power launched the Home Electrical Safety Enhancement for the Underprivileged Programme to arrange qualified electricians to inspect and repair the electrical installations of underprivileged families, elderly households and ethnic minorities for free to improve their home safety.	Community
		CLP Power allocated over HK$200 million from the CLP Community Energy Saving Fund in 2024 for a series of programmes to support underprivileged households and promote energy conservation. Among the programme, HK$50 million was allocated for the CLP Electricity Subsidies for the Underprivileged Families Programme to provide electricity subsidies of HK$600 to 50,000 single elderly people and elderly couples aged 65 or above, low-income families and people with disabilities, as well as electricity subsidies of HK$1,000 to 20,000 tenants of subdivided units.	Community
		CLP provides comprehensive support to employees whose jobs are affected by business change or restructuring. Support is tailored to individual needs and includes training and skills development, career planning, assistance in redeployment and financial counselling. Also, CLP has actively engaged with local stakeholders from employee representative organisations and local educational institutions to ensure that study opportunities are available to help meet the needs of its people and the region's new and emerging industries.	Our people, Community

For details of CLP's responses to positive and negative impacts, please read the Our Sustainability Agenda chapter of this report

Our Sustainability Agenda

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Net-zero transition

CLP is transitioning to low-carbon energy by phasing out coal, investing in non-carbon energy infrastructure, managing climate-related risks and meeting environmental responsibilities. The transition creates opportunities in renewable energy, transmission, distribution and energy storage. In line with Climate Vision 2050, CLP is committed to reducing carbon emissions to meet business and government targets while ensuring energy reliability and affordability, and addressing potential risks including grid instability, stranded coal assets and geopolitical uncertainties.

68%
of operating earnings from non-carbon generation assets, transmissions, distribution and retail operations

0.53 kg CO_2e/kWh
CLP's GHG emissions intensity
vs 0.54 kg CO_2e/kWh in 2023

CLP Power's Fuel Mix in 2024
52% Natural Gas
31% Nuclear
16% Coal
1% Others

CLP remains committed to ceasing investment in new coal-fired generation capacity and to phasing out coal before 2040. This strategy aims to balance the need for reliable, low-carbon electricity with the challenges of reducing emissions and air pollution from existing fossil fuel assets. The new D2 generation units at Black Point Power Station went into service in April 2024 to increase CLP Power's natural gas generation capacity. In addition, CLP is leveraging growing support for nuclear energy to increase its share of non-carbon power through regional cooperation.

CLP China is expanding its renewable energy portfolio, with 1,380MW of wind and solar projects under construction to add to the 2,400MW already operating. The business aims to double its renewable assets within the next three to four years. Meanwhile, EnergyAustralia has committed for 3GW of renewables by 2030, with both regions advancing developments in battery energy storage systems.

Since its first edition in 2007, CLP's Climate Vision 2050 has been guiding the Company's investment decisions and setting a pathway for its decarbonisation actions. In March 2024, Climate Vision 2050 was updated to include a strengthened decarbonisation target for 2030. In December 2024, EnergyAustralia also released its second Climate Transition Action Plan, which provides an update on decarbonisation progress and outlines a pathway to achieving its ambition of Net-Zero Scope 3 emissions by 2050.

Why is this topic material to stakeholders?

By investing in non-carbon energy infrastructure and phasing out coal, CLP can reduce emissions from its portfolio. This will enhance its air and water quality management, thereby protecting community health and ecosystems, especially in water-stressed regions. CLP's expansion into sustainable energy solutions, including solar power installations, nuclear energy and electric vehicle charging, is delivering more zero-carbon power to consumers and supporting the long-term resilience of the wider economy. These efforts are collectively strengthening CLP's reputation, building trust with stakeholders and contributing to social equity and economic progress in the regions served by CLP.

Respecting Nature →

Energy growth opportunities

CLP is focused on providing reliable, sustainable energy at a reasonable cost. As electrification and digitalisation raise demand for low-carbon energy, it is well-positioned to capture new energy growth opportunities through investing in lower-carbon electricity infrastructure and providing decarbonisation solutions to customers.

Maintained a world-class supply reliability of 99.999%
in Hong Kong

Continued to support its customers such as **Link REIT, City University of Hong Kong,** and **MTR Corporation (Shenzhen) Limited** in expanding their renewable energy portfolios

Approved the connection of 404MW of distributed renewable energy (RE) systems to CLP's grid via the Feed-in Tariff Scheme,
with rates ranging from HK$2.5 to HK$4 per unit of electricity

CLP*e* supports the net-zero transition through investments in electrification and renewable energy projects, such as its Build-Own-Operate-Transfer agreements for solar systems with Link Properties Limited, the installation of nearly 2,000 bifacial solar panels at City University of Hong Kong, the expansion of the floating PV system at San Tin Polder and the completion of a distributed solar photovoltaics system at MTR (Shenzhen). In addition, in Hong Kong, CLP has approved the connection of 404MW of distributed renewable energy systems to CLP's grid via the Feed-in Tariff Scheme, with rates ranging from HK$2.5 to HK$4 per unit of electricity, highlighting its commitment to sustainable energy solutions.

CLP Power promotes green transport by providing professional support to accelerate the development of the electric vehicle (EV) charging network, which includes supporting the development of fast charging hubs and converting petrol stations into quick-charging facilities. CLP*e* has also signed EV Charging-as-a-Service contracts with electric minibus suppliers, corporate fleet operators and electric taxi providers. Additionally, EnergyAustralia is launching a commercial green transport package for business and industrial customers.

To further support customers in decarbonising their energy use, CLP Power continues to offer a comprehensive range of services and solutions, including Renewable Energy Certificates (RECs), energy audits, retro-commissioning and retrofitting trainings and subsidies for installing energy-efficient appliances.

Why is this topic material to stakeholders?

By improving energy affordability and reliability, CLP is contributing to community wellbeing and economic stability. Adapting to regulatory changes is essential for maintaining a strong market position and ensuring reliable energy services. CLP's efforts in building a closed-loop EV ecosystem, one that includes land and marine transportation, is advancing cleaner transportation solutions that promote community health and align with national decarbonisation goals. Expanding into new markets is fostering economic growth by creating jobs.

Customers → | Partners →

Digital innovation and cyber security

CLP is prioritising digital innovation to improve operations and provide smarter energy services while ensuring cyber security. It is continuously enhancing its digital capabilities to become a data-driven and secure utility. Digitalisation is crucial for transforming the energy sector, enabling CLP to create a more efficient, connected and customer-centric business.

In 2024, CLP successfully **deployed 26 use cases of innovative technologies** including AI across the Group, against a target of 19

Organised an **Innovation Carnival competition** to inspire employees' innovative attitudes and behaviours

Connected **over 2.68 million smart meters for CLP Power's residential and Small and Medium Enterprises (SME) customers since 2018**

By investing in Artificial Intelligence (AI) and smart grid solutions, CLP is optimising energy management, improving network resilience and improving energy affordability. The Company is also advancing smart meter installations to provide real-time data insights, helping customers manage their energy usage more effectively. Balancing digital transformation with robust cyber security measures and regulatory compliance is crucial to safeguarding operations.

CLP operates in an ever-evolving cyber security threat landscape, necessitating robust measures to address these threats. CLP's security policy safeguards the operation by minimising risks and managing business threats, regularly updating standards to keep pace with technological advancements. To ensure that our cyber defences remain resilient and effective, CLP has conducted comprehensive internal and external validation of its security measures, and carried out a cyberattack simulation exercise ("Red Team") to identify areas that need further strengthening. At the same time, CLP is integrating Artificial Intelligence (AI) principles into its governance approach, ensuring ethical and secure AI development aligned with its core values. This approach is promoting responsible innovation, mitigating risks such as data breaches and algorithmic bias, and enhancing transparency, accountability and trust. Overall, CLP's comprehensive security and AI strategy is supporting its sustainable growth, and helping it to maintain its reputation as a forward-thinking industry leader.

Why is this topic material to stakeholders?

By investing in cyber security, CLP is protecting its infrastructure and its customer data, protection which is essential for maintaining trust and a reputation for reliability among consumers and regulators. Through the integration of AI and digital technologies, CLP is enhancing its grid efficiency and empowering customers by offering improved energy management tools providing greater control over energy use as well as cost savings. Investments in smart grid infrastructure and energy storage are providing scalable solutions that can accommodate emerging technologies and support the integration of renewable energy sources, benefiting both the environment and customers. Alongside these advances, CLP is carefully managing their potential to lead to job displacements or skill gaps.

Customers →

Future-ready workforce

CLP is dedicated to making its workforce safe and future ready by attracting, developing and retaining diverse talent; upskilling and reskilling employees; embedding new, more agile operating models and ways of working; and ensuring its workplaces are safe and welcoming for all. Continuous investment in training and development and in process and policy improvements, enables CLP to attract top talent, innovate to seize opportunities and enhance employee satisfaction.

Training & Development

42.7 training hours/employee (in line with 2023)

15.4% were dedicated to upskilling & reskilling

New Ways of Working

CLP's Value Framework simplified & translated into everyday behaviours

Refreshed performance management system rolled out

Streamlined processes and digitalisation

Diversity & Inclusion

Group D&I strategy refreshed

1st D&I Awareness Week held with >4,000 staff attendances

Female representation maintained in key metrics

As the energy sector transforms, CLP is committed to ensuring that its workforce is safe and future-ready in terms of talent, skills and competencies, operating models and processes, and welcoming workplaces that enable everyone to perform at their best.

CLP invests in training and development to address both short- and longer-term needs, including reskilling and upskilling our workforce to build and operate an increased number of low- and non-carbon projects supported by digitalized networks and processes. CLP also invests in equipping managers and leaders with the skills needed to lead a diverse workforce into a non-carbon future.

Embedding new ways of working that are more flexible and commercial is critical to ensuring that CLP remains competitive. CLP's operating model ensures day-to-day decision are made closest to customers and local stakeholders. Streamlined processes and digitalization support swifter decision-making and greater business efficiency. These are underpinned by CLP's refreshed Value Framework which sets behaviour expectations and is reinforced by performance management.

Attracting and retaining diverse talent; fair policies and ethical labour standards that safeguard the rights and wellbeing of everyone who works at CLP; offering flexible work arrangements and family-friendly practices; and encouraging everyone to speak up are imperative to a sustainable business and positioning CLP as an employer of choice.

Why is this topic material to stakeholders?

Ensuring workplace safety and upholding high labour standards are essential for the wellbeing and sustained high performance of employees, contractors and service providers. CLP's upskilling and reskilling initiatives and ensure that team members are equipped with the skills necessary to run the business today and in the future and supported as CLP's asset portfolio evolves. New ways of working ensure CLP is competitive today and agile to face the challenges and opportunities ahead. By promoting diversity, equity and inclusion, CLP is attracting diverse talent, supporting social mobility and ensuring that everyone contributes to improving how we work, and is supported to succeed.

Our people →

Community stewardship

CLP recognises its obligations to meet evolving stakeholder expectations around the positive role businesses should play in society. This includes demonstrating leadership in its decarbonisation ambitions, investing in green energy solutions that support the electrification of society and transparently reporting on its ESG performance. Environmental stewardship extends to actively managing CLP's dependencies and impacts on nature. Employee and supplier wellbeing is another priority. The Group recognises the importance of ensuring ethical human rights practices in its value chain, as well as of supporting employees and communities impacted by the energy transition.

CLP Power allocated **over HK$200 million** to support underprivileged households and **promote energy conservation** via the CLP Community Energy Saving Fund

Approximately A$1.5 million contributed to local non-profit initiatives **since 2016**

In 2024, CLP Power allocated over HK$200 million from the CLP Community Energy Saving Fund for a series of programmes that support underprivileged people, promote the development of renewable energy, and encourage the community to save energy and reduce carbon emissions. Approximately HK$70 million was used for programmes that provide electricity subsidies to underprivileged households including tenants of subdivided units, and improve their home electrical safety. CLP Power launched the Home Electrical Safety Enhancement for the Underprivileged Programme to arrange qualified electricians to inspect and repair the electrical installations of underprivileged families, elderly households and ethnic minorities for free to improve their home safety.

The CLP Group's commitment to community has also been demonstrated by EnergyAustralia. Since 2016, EnergyAustralia has invested around A$1.5 million in grassroots initiatives through its Community Grants programme. These funds have helped local organisations make significant impacts through various education, sustainability and community resilience initiatives undertaken in areas near CLP's operations.

Why is this topic material to stakeholders?

Business activities which meet the expectations of stakeholders benefit customers, suppliers and local communities. By addressing education, women's empowerment, social inclusion, diversity and energy poverty, CLP is enhancing the wellbeing of local communities and supporting socio-economic development. The Group's expertise in building resilient energy infrastructure is helping communities adapt to climate change, ensuring reliable and sustainable energy access to energy. Conversely, failing to provide a just transition for employees affected by the closure of coal-fired power plants could result in negative economic, health and social impacts for workers, their families and communities.

Community →

Respecting Nature

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Overview

Highlights

Nature-related areas of interests

- How Nature is governed at CLP
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- How we manage impacts and performance
  - Biodiversity and ecosystem
  - Air emissions
  - Waste management and material use
  - Water

Relevant sustainability agenda

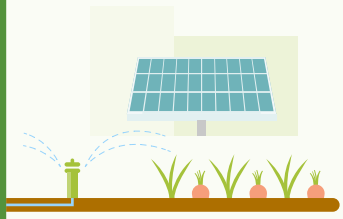
- Net-zero transition

Outcomes for Nature

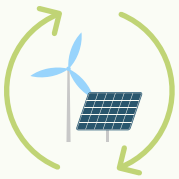
Capitalise on nature taskforce

to review, implement and communicate nature-related initiatives across the CLP Group

Advanced the management of nature-related matters with the iterative LEAP approach



Integrating advanced solar technology with smart farming systems for **nature conservation** at the Xicun Solar Power Station



Integrating Circular Economy (CE) principles into operations including solar farms and wind farms in Mainland China

Background

CLP is committed to managing and minimising the environmental impacts of its operations. Given the increasing global recognition of nature loss as a source of risks to businesses and financial systems, CLP is working to advance its management of nature-related matters by actively seeking deeper understanding of the interconnectedness of biodiversity and climate change, the potential risks and opportunities arising from dependencies on natural systems that provide ecosystem services, and the impacts and implications of the loss of natural environment on its operations.

The importance of addressing global sustainability challenges through nature-based solutions was emphasised at the 2024 United Nations Climate Change Conference (COP29), while the need to adopt a comprehensive approach to tackling biodiversity loss and managing natural resources was highlighted at the 2024 United Nations Biodiversity Conference (CBD COP16). These events also brought into focus the opportunities arising for businesses that proactively take action to mitigate their negative impacts and identify opportunities to create positive impacts on nature.

By disclosing nature-related matters with reference to the Taskforce on Nature-related Financial Disclosures (TNFD), CLP is reinforcing its commitment to responsible practices in biodiversity, the circular economy and the mitigation of environmental discharges. CLP is refining its focus areas and the relevant metrics to more effectively manage its interactions with nature. CLP discloses how it assesses nature-related risks and opportunities in its governance, strategy, risk and impact management, as well as in relevant metrics and targets.

How Nature is governed at CLP

Under CLP's robust governance structure, top management are committed to managing nature-related impacts, risks and opportunities effectively. The Group clearly defines the relevant roles and responsibilities and has informed decision-making processes in place, all designed to uphold accountability and transparency. These allow CLP to proactively identify, assess and manage the risks and opportunities related to biodiversity conservation, the circular economy and environmental discharges.

Nature-related commitments

CLP strives to preserve and enhance natural resources and foster biodiversity.

CLP recognises the responsibility it has to minimise the environmental impacts of its operations. Its care for the environment is clearly laid out in the Group's Health, Safety and Environment (HSE) Policy, which requires CLP to:

- Protect the environment including the prevention of pollution and minimise the risk of environmental incidents;
- Strive to use resources including water and energy efficiently and minimise emissions, discharges and waste; and
- Minimise any adverse impacts of its operations on biodiversity by protecting endangered fauna and flora and promoting ecological conservation.

Learn more about the CLP Group HSE Policy

CLP is committed to conserving biodiversity as part of its environmental responsibilities. Recognising increasing global biodiversity loss, CLP is refining its approach to achieve the goal of "no net loss of biodiversity" to accomodate the evolving nature-related landscape. The Group has undertaken a range of initiatives that are demonstrating its commitment to safeguarding habitat quality and preserving the biodiversity of specific ecosystems in the regions where it operates.

Governance of nature-related matters

The sustainability principles that are integrated into CLP's business strategy and corporate governance cover the oversight and governance of nature-related matters, and a commitment to protecting the environment.

This approach ensures that nature-related and sustainability matters are an integral part of the Group's corporate agenda. As part of the Group's overall sustainability management, the Board-level Sustainability Committee (SusCom) maintains oversight of nature-related impacts, risks and opportunities and has a role in evaluating the adequacy and effectiveness of CLP's Health, Safety and Environment (HSE) Governance Framework and HSE Management System, supported by the CLP Group Health, Safety, Security and Environment (HSSE) Executive Committee.

Board and management oversight

SusCom and the Sustainability Executive Committee (SEC) hold the primary responsibility for overseeing the management of the Group's sustainability performance, including nature-related matters. For their roles and responsibilities as well as details of the key nature-related agenda discussed in 2024, please refer to the Sustainability Governance section.

Under the Board's oversight, the CLP Group CEO has ultimate accountability for reporting the performance and governance of HSE management to SusCom, while the authority for day-to-day decision-making on HSE governance and assurance matters across CLP is delegated to the Group COO. The CLP Group HSSE Executive Committee, also chaired by the CEO, appoints senior executives to review and evaluate CLP's overall governance, strategy, performance and assurance in Health, Safety, Security & Environment. In 2024, this committee endorsed the CLP Group 2025-2027 HSE Strategy, which reaffirms CLP's nature-related agenda, including the refinement of its risk management process with reference to the TNFD.

Development and implementation of nature-related strategies, policies and goals

The Group HSE Department is responsible for providing expert advice on environmental matters, ensuring timely reporting and coordinating the implementation of the environmental aspects within the CLP Group HSE Strategy.

It is also responsible for defining appropriate environmental standards for the Group's operations and driving continuous improvement. In implementing these goals, it works closely with different business units to ensure that relevant environmental standards and policies are properly applied and that improvement strategies are being effectively implemented across and embedded in CLP. In coordinating with different business units, it is driving continual improvement of the ISO 14001 environmental management system in ways that go beyond compliance, and enhancing existing environmental evaluation criteria throughout the value chain for procurement and tender specifications.

Various cross-functional working groups have also been established to manage environmental and nature-related initiatives. Their work includes reviewing and refining nature-related frameworks, undertaking the first stage of corporate-level nature-related assessments, developing and implementing circular economy strategies and plans and setting out medium- and long-term environmental targets.

Monitoring and compliance of emissions and other nature-related regulations

HKFRS S2/SASB reference: IF-EU-140a.2; GRI reference: 2-27, 201-1, 306-3 (2016)

CLP's business processes and practices support its endeavours to maintain full compliance with applicable emissions and other nature-related laws and regulations in the jurisdictions in which it operates.

Established processes are in place to ensure CLP understands the relevant emissions and other nature-related laws and regulations relating to its new investments, and also stays abreast of any updates to existing regulations and emerging legislation in this field. Where compliance with new laws and regulations requires a transitional period, CLP will work transparently with regulators where appropriate as it establishes its business practices and makes the investments necessary to satisfy the new requirements.

CLP closely monitors developments in emissions and other nature-related regulatory requirements. New and/or amended laws and regulations that emerged in 2024 that had or may have a significant impact on CLP's business units are listed below.

Hong Kong	• The emission allowances for CLP's power plants have been progressively tightened over time through the Technical Memorandums (TM) of the Air Pollution Control Ordinance. In 2024, a new set of emission caps mandated CLP Power Hong Kong Limited (CLP Power) to further reduce the emissions of sulphur dioxide (SO_2), nitrogen oxides (NO_x) and respiratory suspended particulates (RSP) by 26% to 49% compared with 2022 levels. CLP Power successfully achieved full compliance in 2024. Discussion with the Hong Kong SAR Government on the review of the latest TM is underway, with the new 2030 emissions caps expected to be announced in 2025.
India	• On 1 January 2024, the Ministry of Environment, Forest and Climate Change (MOEF&CC) issued an amendment to the 2021 Notification on Ash Utilisation, mandating coal and lignite-based thermal power plants in India to allocate a portion of their ash supply to micro and small enterprises involved in ash-based product manufacturing. Following this, the Ministry of Power released a revised Procedure for Disposal of Ash on 15 March 2024. These changes aim to enhance ash utilisation and support small enterprises. For Jhajjar Power Limited (JPL), this amendment requires entering into agreements for the sale of fly ash through competitive bidding, adhering to specific pricing requirements and annually appointing a panel of transportation agencies via a competitive bidding process. • In 2024, a phasing plan was notified by the Authority for the implementation of the Central Electricity Authority (Flexible Operation of Coal based Thermal Power Generating Units) Regulations issued in 2023. These Regulations are applicable to Jhajjar Power Station, and involve different requirements having to be met by 2024, 2028 and 2029. Jhajjar Power Station is capable of operating at the power level required by the regulations by 2024 although it must also follow the schedule of the Haryana State Load Despatch Centre (SLDC). Apraava Energy has communicated challenges it is facing as a result of these regulations to the Central Electricity Regulatory Commission (CERC), specifically concerning the schedule set by the SLDC. Apraava Energy will further determine the necessary modifications and investments required for Jhajjar Power Station to achieve compliance by 2028 and 2029. • On 29 November 2024, CERC issued a revision to the Flue Gas De-sulphurisation (FGD) Compensation Order which updated the applicable norms for determining the compensation towards Operations and Maintenance (O&M) expenses incurred towards running FGD units by coal-based thermal power plants. The revision will have a financial impact on the compensation to be received by JPL towards its O&M costs for running of the FGD unit.
Taiwan	• Further to the Climate Change Response Act promulgated in 2023, the Ministry of Environment announced three more regulations in relation to the carbon fee mechanism in August 2024, including the Regulations Governing the Collection of Carbon Fees, the Designated Greenhouse Gas Reduction Goals for Entities Subject to Carbon Fees and the Regulations for Administration of Self-Determined Reduction Plans. Additionally, the Ministry announced the carbon fee charging rates in October 2024. These rates will come into effect on 1 January 2025, with fee collection commencing in 2026. The anticipated financial impact on Ho-Ping is currently estimated at NT$200 million annually, with approximately HK$10 million per year falling under CLP's share.

Emissions and other nature-related regulatory non-compliance and licence exceedances

	2024	2023	2022	2021	2020
Environmental regulatory non-compliances resulting in fines or prosecutions (number)[1]	**0**	0	0	0	0
Environmental licence limit exceedances & other non-compliances (number)[1]	**5**	5	6	5	4

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

In 2024, all five emissions and other nature-related breaches, none of which resulted in any prosecution or fines, were recorded by EnergyAustralia:

- One related to a short-term carbon monoxide (CO) licence limit exceedance at Jeeralang Power Station during low-load operations. It was reported to the local Authority and no further regulatory action was taken.
- Another breach related to an administrative licence breach by the Yallourn Coal Mine due to the delayed publication of the Yallourn Mine Offset Management Plan online. This was reported to the local Authority, and no further regulatory action was taken.
- The third breach related to a failure to fulfil the licence requirement regarding emissions calculation methodology at Tallawarra B Power Station as the data collected for emissions calculation was invalid due to a defect in the measurement equipment. This was reported to the Environmental Protection Agency (EPA) and its consent was obtained to apply alternative methodologies for emissions calculation until the issue is rectified. No further regulatory action was taken.
- The fourth breach related to a Total Organic Carbon (TOC) licence limit exceedance at Newport Power Station's drain. The TOC exceedance at the drain was suspected to be caused by algae in the sample, which was not related to discharges from Newport Power Station. It was reported to the local Authority, and no further regulatory action was taken.
- The final breach related to a technical non-compliance caused by a contractor undertaking depositional dust monitoring at PineDale mine for Mount Piper Power Station. It was reported to the regulatory authority, and no further regulatory action was taken.

Our Nature strategy

CLP's nature-related strategy is an integral part of the environmental aspects within the CLP Group 2025-2027 HSE Strategy. This strategy aims to establish a more holistic approach to the management of nature-related matters, one that goes beyond mere compliance with existing environmental regulations. Incremental steps have been taken to advance the understanding of the relationship between nature and the Group's business, and to continue to evolve corresponding management measures and create a roadmap. By embracing this enhanced approach to nature, CLP is aims to effectively address the increasing interest from investors and other stakeholders in how businesses are integrating nature into their corporate strategy.

Focus areas for the nature-related strategy

CLP's nature-related strategy encompasses three focus areas, namely biodiversity conservation, circular economy transition and the reduction of environmental discharges. It aims at ensuring an understanding of these critical nature-related matters is well incorporated into CLP's governance, risk management and decision-making processes.

Biodiversity	Biodiversity conservation creates positive impacts on ecosystem services that benefit local economies amongst other areas. CLP strives to preserve natural resources by integrating the latest external guidance and findings from ongoing internal assessments. The insights will then help CLP to refine its approach to achieve the goal of "no net loss of biodiversity" and develop a suitable strategy and roadmap. To manage this matter holistically, CLP is in the transitional phase of adopting and refining nature-related frameworks, making reference to the recent sectoral guidance from the TNFD. Read more in the Biodiversity and ecosystem section.
Circular Economy	CLP is dedicated to driving the transition towards a circular economy, recognising its ability to address resources and pollution challenges from a life cycle perspective, outcomes which are also highly relevant to climate change and biodiversity conservation. As part of its transitional plan, CLP is actively engaging and partnering with stakeholders to integrate circular economy principles throughout its operations and value chain. Read more in the Waste management and material use section.
Reducing Pollution	CLP strives not only to comply with regulatory requirements but to go beyond compliance in minimising its environmental impacts by the careful management of its air emissions, water use and waste generated during its operations. Read more in the Air emissions, Waste management and material use and Water sections.

Commencing nature-related assessment

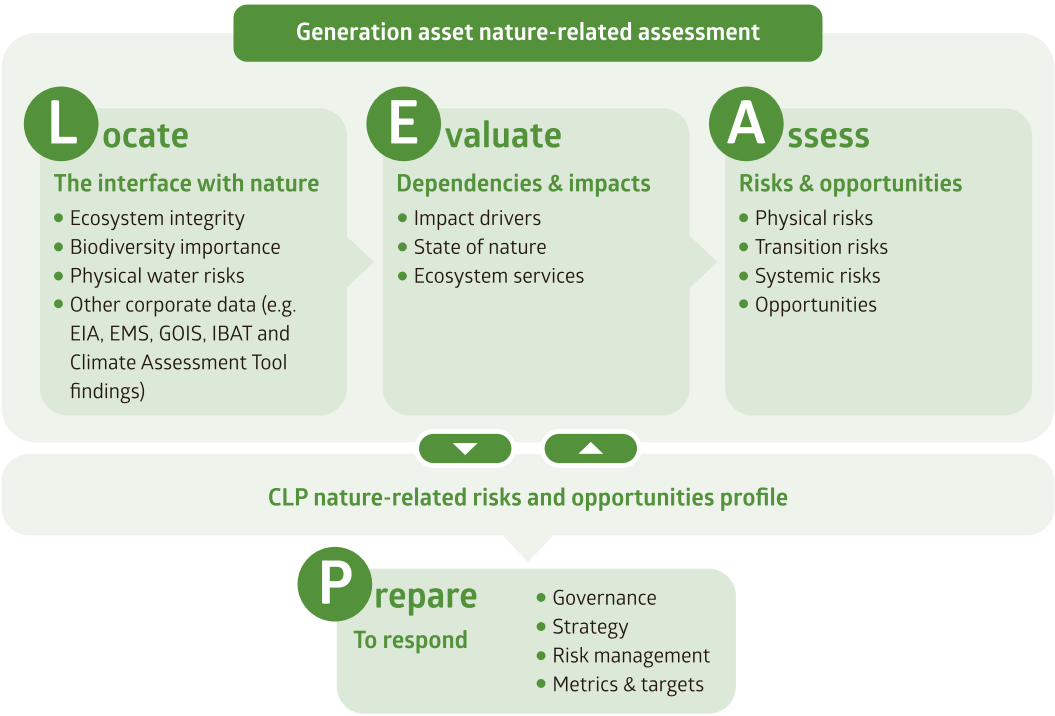
The initial biodiversity sensitive area analysis, which leveraged the IBAT and Exploring Natural Capital Opportunities, Risks and Exposure (ENCORE) tools and referenced the Roadmaps to Nature Positive by World Business Council for Sustainable Development ("WBCSD"), was conducted in 2023.

In 2024, the SEC endorsed the Nature Plan 2024, which included the establishment of an internal taskforce to implement pilot nature-related assessments.

The 2024 pilot nature-related assessments focused on pilot programmes that adopt the iterative LEAP approach, referencing the sector-specific guidance for electric utilities and power generators issued by TNFD in June 2024. The results of these pilot programmes support the development of the CLP nature-related risks and opportunities profile.

Assets selected for the pilot programmes in 2024 were based on findings from initial biodiversity sensitive area analysis in 2023. These assets were either located in close proximity of the key biodiversity-sensitive areas or potentially had nature dependencies or impacts. These pilot programmes followed the LEAP approach below:

CLP's approach to nature-related assessment



At the "Locate" stage, location-specific information was consolidated to analyse the condition of CLP's assets. This included results from Integrated Biodiversity Assessment Tool (IBAT), Climate Assessment Tool, Environmental Impact Assessment (EIA) reports, Environmental Management Systems (EMS), Group Operations Information System (GOIS) and meteorological data as well as observations from CLP's assets.

Moving to the "Evaluate" stage, a list of ecosystem services dependencies and impact drivers on nature for the respective assets were compiled. Each was assigned a materiality rating, making reference to the ENCORE database and the findings from the "Locate" stage.

Subsequently, at the "Assess" stage, asset-specific risks were further derived based on associated dependencies and impact drivers with a higher materiality rating, which were then categorised into physical, transition and systemic risks. Each risk category was rated for prioritisation, and efforts made to identify opportunities where possible and applicable. Through applying asset-specific information during the iterative LEAP process, insights were gained to support the development of the LEAP process specific to CLP.

Outcome and way forward

The findings of these pilots are serving as a reference for validating the methodologies being used in the nature-related assessments of other assets. While it is a time-consuming process to comprehensively assess nature-related dependencies, impacts, risks and opportunities, the findings from these asset-level nature-related assessments will be consolidated into CLP's corporate-level nature-related risk profile, and the associated risks and opportunities reviewed. This will help CLP to prioritise the actions needed to avoid or reduce negative impacts, and to promote opportunities to restore the natural environment.

The insights derived from the pilot programmes have also been integrated into the CLP Group 2025-27 HSE Strategy, strengthening CLP's readiness to address nature-related risks and opportunities. Following the pilot assessments, the use of IBAT during the project inception stage became an established practice in 2024 to avoid biodiversity-sensitive investment projects and minimise nature-related risks. A review of the environmental management systems of CLP's operationally controlled assets has begun which includes its nature-related issues. The significant environmental aspect registers of CLP Power's Generation Business Unit for operation and maintenance activities were reviewed to include nature-related impact drivers and dependencies, along with associated mitigation measures, in 2024. Additionally, in 2024, EnergyAustralia announced that it will be an adopter of TNFD.

Developing a framework for integrating circular economy principles into operations

CLP is striving to transit towards a Circular Economy (CE) to minimise materials use and waste disposal, as well as to address waste and pollution matters.

Following the formation of the CLP Group Circular Economy Steering Committee in 2023, a comprehensive CE Strategy was developed, encompassing the three pillars of Circular Design and Input, Circular Use and Value Recovery.

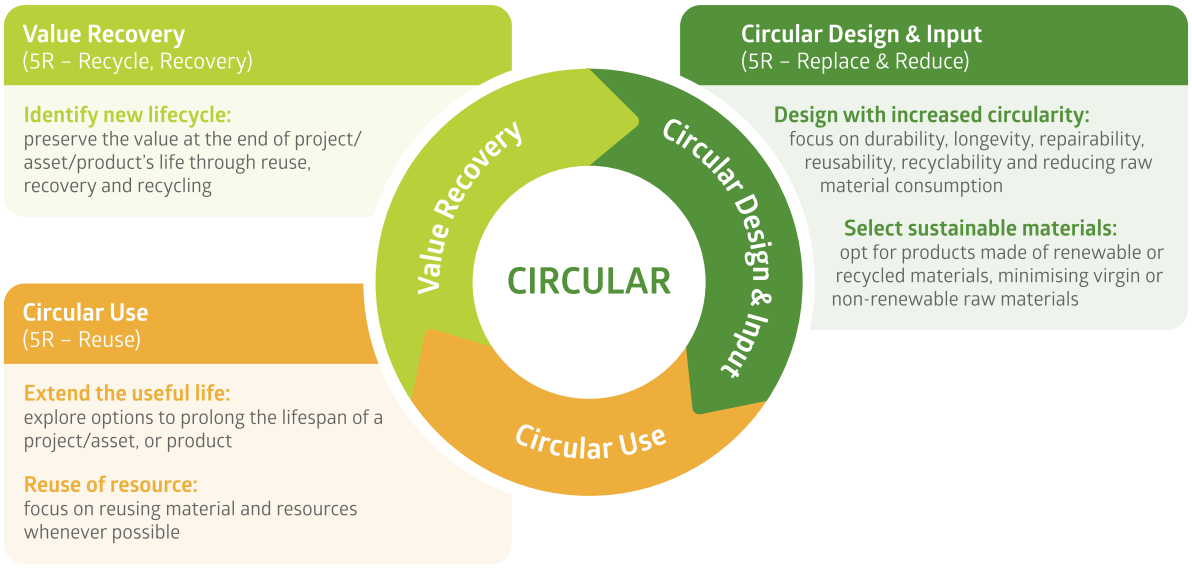
The three pillars of CLP's CE strategy represent a comprehensive framework under which CE concepts can be integrated into CLP's operations. The CE Strategy is also applicable at every stage of the project and asset lifecycle, presenting opportunities to enhance circularity throughout all phases of operations.

A CE baseline survey has been conducted across CLP's operationally controlled assets to identify CE-related initiatives and programmes currently being implemented. At the end of 2024, a CLP Group implementation guideline was also issued to support the execution of the CE strategy within its operations, and to foster further CE initiatives.

CE-related knowledge and messages are communicated through internal broadcasts and via the business communication platform on a monthly basis, to help foster a CE-centric culture and enhance CLP staff engagement.

For details on CE-related initiatives and programmes in 2024, please refer to the Waste management and material use section.

Circular Economy (CE) framework



Going beyond compliance goals to reduce environmental discharges

To achieve an environmental performance that goes beyond regulatory compliance, CLP tracks its progress towards medium- and long-term improvement goals by setting environmental targets for 2025 and 2030.

These targets cover air emissions (sulphur dioxide, nitrogen oxides and total particulate matter), freshwater consumption and waste generation for all its operationally controlled assets.

The current targets were formulated based on the environmental target-setting methodology reviewed in 2023, and are focused on analysing performance in terms of reducing environmental discharges. For details, please refer to the Air emissions, Water and Waste management and material use sections.

How we manage impacts and performance

Our approach

To effectively manage nature-related impacts, risks and performance, CLP utilises various environmental management tools and processes from a life cycle perspective to ensure that nature-related issues are considered at each stage of every project.

The following sections provide details of how CLP manages individual nature-related matters that are deemed material. CLP has developed goals and targets that go beyond regulatory compliance to drive continual improvement, and performance indicators that are monitoring the progress and effectiveness of its nature-related strategies, plans and programmes.

Biodiversity and ecosystem

CLP plays an active role in nature preservation and habitat restoration activities while seeking to mitigate its impacts on nature, including biodiversity and ecosystem services in the vicinity of its operations, contributing to "no net loss of biodiversity". CLP's efforts are based on regulatory biodiversity controls, but it also implements site-specific initiatives and initiates ecological compensation programmes where necessary.

There is no one-size-fits-all approach to managing nature and biodiversity impacts. CLP considers varying factors (such as the location and the level of development in the vicinity of a project) as part of its ongoing efforts in nature and biodiversity conservation and land remediation.

Biodiversity and nature-related enhancement programmes in 2024 included:

- **Aquaculture and fisheries conservation**
  CLP Power supports marine conservation and fisheries enhancement projects through the Marine Conservation Enhancement Fund (MCEF) and the Fisheries Enhancement Fund (FEF) set up by the Hong Kong Offshore LNG Terminal Project in Hong Kong in 2020. By 2024, total funding of HK$100 million had been allocated to support 44 projects under the MCEF and 28 projects under the FEF. Projects funded by the MCEF focus on marine conservation, habitat restoration, rehabilitation, education and ecotourism, while the initiatives supported by the FEF include fisheries education and tourism, enhancement of fisheries resources and sustainable fishery development. A series of project highlights will be published on CLP's social media channel to showcase the achievements of these funded projects, with the aim of raising public awareness and knowledge of marine and fisheries conservation-related issues.
- **Nature-based solution at the Yuen Long Industrial Estate Substation in Hong Kong**
  In Hong Kong, the new Yuen Long Industrial Estate Substation features urban greenery as a nature-based solution to help address climate change. Over 20% of the building area is covered by greenery, with plant species such as Sapium discolor and Millettia pinnata specifically selected for their climate resilience and aesthetic appeal. Situated between the renowned wetland area of Nam Sang Wai and Yuen Long Industrial Estate, the substation was designed with Building Information Modelling (BIM) technologies to provide better integration with the natural landscape. This project was awarded a Provisional Platinum Rating in BEAM Plus New Buildings Version 2.0 certification, and was a winner at the Autodesk Hong Kong BIM Awards 2024.
- **Local vegetation management in Hong Kong**
  CLP Power continues to monitor the growth and condition of trees and other vegetation that may affect overhead line operations using the Predictive Vegetation Management System (PVMS) developed in 2022. At around 210 locations, the PVMS and CLP Power's existing tree inventory have helped CLP Power identify tall trees near its transmission and distribution overhead lines for replacement with native short trees as part of its Tree Replacement Programme. This approach aligns with the Hong Kong Government's 'Right Tree & Right Place' Policy and its Nature Conservation Policy. In 2024, about 85 tonnes of timber logs were delivered to Hong Kong Y-Park for recycling under the Tree Replacement Programme.
- **Habitat restoration programme in Australia**
  EnergyAustralia is committed to nature preservation and habitat restoration in its operation. All its large-scale projects will include a Flora and Fauna Management Plan to maintain local species populations and enhance biodiversity. The Tallawarra B gas-fired Power Station, which began commercial operations in June, developed a detailed Fauna and Flora Management Plan with local ecologists and indigenous community groups. This plan includes an offset programme for minor clearing, serving as an example of no net loss of biodiversity. In preparation for the retirement of Yallourn Power Station and its coal mine, a transformation project was initiated involving rehabilitation and remediation. In 2024, the focus was on assessing potential remediation sites within the boundary to identify associated nature-related risks and opportunities.
- **Biodiversity conservation in the Jiangbian Hydro Power Station**
  At the Jiangbian Hydro Power Station, various fish species are released annually to maintain the ecological balance of the river. The fish release activity for 2024 was completed in November. Furthermore, CLP China restricts ecological discharges at its hydro power stations during both construction and operation phases, adhering to local environmental protection authority requirements and the mitigation measures stipulated in the EIA report. This practice supports the healthy growth and reproduction of aquatic organisms downstream of the dams.
- **Promotion of awareness of nature and biodiversity**
  CLP is dedicated to promoting environmental protection and nature conservation across its locations of operation. CLP China engages with communities and local governments in different regions during World

Environment Day and other national environmental events. In 2024, a series of planting activities were organised across different CLP China sub-regions, in which thousands of diversified trees and flowering plants, such as fruit trees, willows and bamboos, were planted. Planting within the power stations is also encouraged.

In Hong Kong, eco-tours are arranged annually to enhance the awareness of nature and biodiversity conservation of local staff. For example, a guided tour of the Fung Yuen Butterfly Reserve is held each year to increase staff's understanding of butterfly ecology and the related conservation efforts in Hong Kong. CLP also sponsors a forest restoration programme conducted by Kadoorie Farm and Botanic Garden (KFBG), and supported staff to participate in the KFBG "Nature Walk & Treasure Hunt" 2024 event, where they learned about nature and biodiversity conservation.

In Australia, EnergyAustralia created a video on the natural aspects of the Lake Lyell project, including the protection of the platypus and its habitat, to raise awareness of nature conservation.

Case Study

Nature conservation and improvement initiatives at CLP China's Xicun Solar Power Station

CLP China is diligently promoting nature conservation, and its teams are working hard to enhance the natural surroundings of their plants.

Located in CLP China's west sub-region, the Xicun Solar Power Station integrates advanced solar technology with smart farming systems, in a unique model where solar panels generate power above while honeysuckle and rose bushes grow below. While generating 160 million kWh annually, the facility also runs a nature conservation programme that improves wild animal habitats, reduces soil erosion and increases farmers' income. The planting programme has been successfully in increasing the number of bird species, such as Lady Amherst's Pheasant, visiting the site over the past three years.

Lady Amherst's Pheasant at Xicun Solar Farm

Honeysuckle and rose bushes grow under the photovoltaic panels

Air emissions

CLP is striving to reduce the air pollutants emitted from its operations while expanding its renewable and nuclear energy portfolio. Achieving further emission reductions from existing fossil fuel power stations remains a high priority.

SASB reference: If-EU-120a.1; GRI reference: 305-7

CLP strives to manage its fuel mix and to apply various mitigation measures to combat climate change and improve the air quality of the regions where it operates.

Coal-fired power plants, such as Yallourn, Mount Piper and Castle Peak Power Stations, are the main contributors to the Group's air emissions and the emissions metrics are largely influenced by these plants' performance. CLP uses a combination of a managed fuel mix and advanced technologies to limit its air emissions.

CLP had set Group-wide medium- and long-term emissions targets for the years 2025 and 2030 to guide further improvements in reducing air emissions of NO_x, SO_2 and PM. The emission targets scope covers all power plants under its operational control.

The 2024 results related to the emission targets and progress are presented in the following table:

Nature metrics	Pollution Reduction	2024 Results	2024 Progress	Target Range by end 2025	Target by end 2030
Emissions (Impact driver)	NO_x emissions	-26%	In line	-20% to -30%	-50%
	SO_2 emissions	-18%	In line	-15% to -20%	-55%
	PM emissions	-16%	In line	-10% to -15%	-90%

In 2024, CLP cut emissions of NO_x, SO_2 and PM by 26%, 18% and 16% respectively compared with the baseline year of 2021, in line with its emission targets and is slightly ahead of the PM emissions target set for 2025.

Following the divestment of a majority stake in the Fangchenggeng coal-fired Power Station in Mainland China, and excluding assets in India, particularly the coal-fired Jhajjar Power Station, overall emissions were significantly reduced. By implementing a strategy of fuel diversification and consistently maintaining the effectiveness of emission control facilities, emissions can be further reduced.

Key initiatives and programmes in 2024 included:

- **Advanced air emission control systems**
  In Hong Kong, the new 600MW Unit D2 combined-cycle gas turbine generation unit went into service at Black Point Power Station in April, further lowering air emissions and providing a lower-carbon electricity supply. This follows the retirement of three of the four coal-fired units at Castle Peak A Power Station, which had a combined capacity of 1,050MW, in 2024.

  In Australia, the new 320MW Tallawarra B gas turbine generation unit went into service at Tallawarra Power Station in June. This plant is designed to run on a mixture of natural gas and hydrogen, thereby lowering emissions and providing a lower-carbon electricity supply. It is also a fast-start peaking generator that provides dispatchable capacity and can respond quickly to changes in power demand, bolstering supply reliability as more renewable energy enters the grid.

- **Upgrade of emissions monitoring systems**
  EnergyAustralia has installed an ambient air monitoring network consisting of three real-time dust monitors placed near the sensitive receivers around the Yallourn Power Station and its mine. The data provided by these monitors enables early detection and proactive management of the point source ambient emissions from both the power station and the mine, thereby improving overall air quality. Besides, installation of the Particulate Matter Continuous Emissions Monitoring System (PM-CEMS) at Mount Piper Power Station is delivering accurate real-time data for better management of the filter bag-house and a reduction in stack dust emissions.

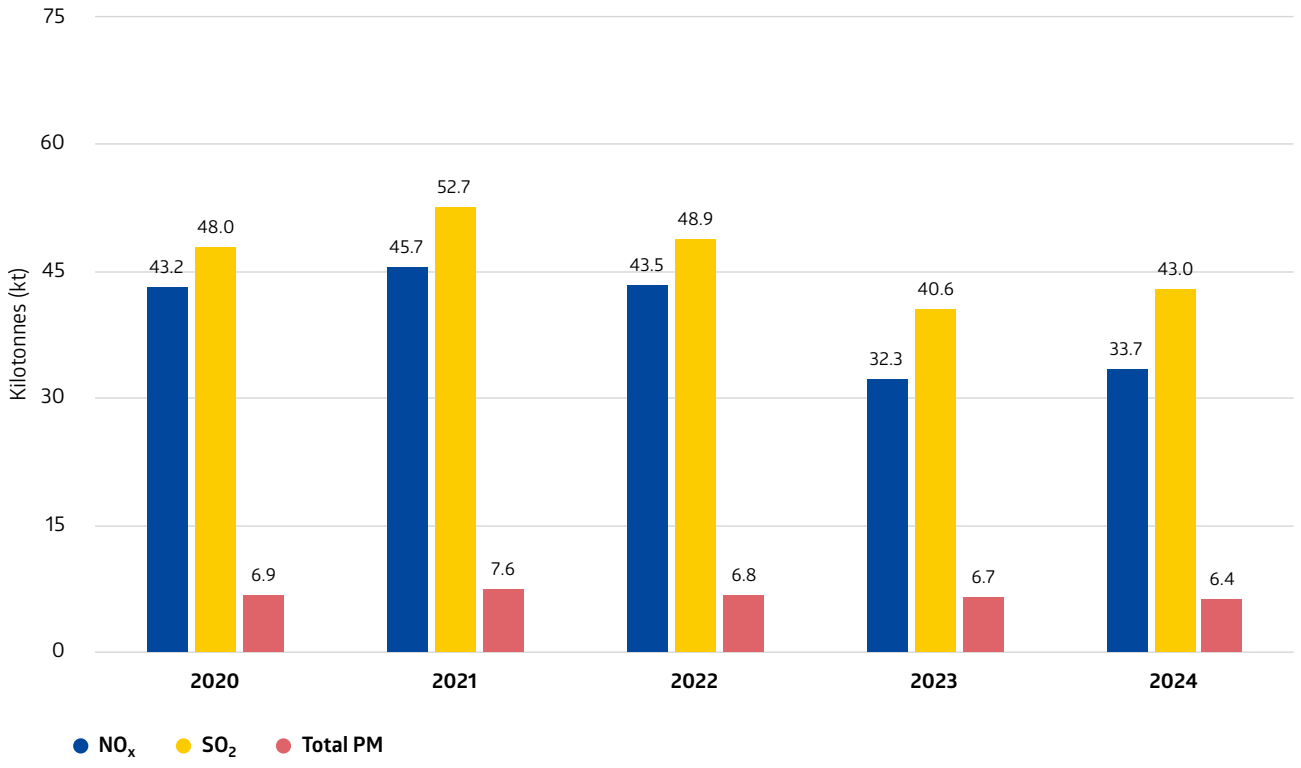
- **Optimisation of Castle Peak Power Station's Selective Catalytic Reduction (SCR) and minimisation of unreacted ammonia slip**
  In 2024, CLP Power conducted a review of Selective Catalytic Reduction (SCR) optimisation at Castle Peak B Station. Based on the review and NO_x removal efficiency test results, ammonia injection was optimised to maximise NO_x reduction efficiency. Following this review, SCR operations were further optimised to maximise NO_x reduction while minimising unreacted ammonia slip. The optimised usage of the SCR catalyst is extending its life and reducing the chemical usage of urea, as well as the generation and disposal of chemical waste.

- **Educating and empowering operators on emissions monitoring and control**
  In 2024, EnergyAustralia introduced a new mandatory environmental awareness training programme for all its employees and major contractors. Customised for each EnergyAustralia site, the training highlights key environmental risks and control measures for staff and contractors. Given air emissions is a key matter for EnergyAustralia's operations, the training aims to enhance the awareness and capabilities of staff and relevant contractors in emissions control, prevent emission exceedances and improve ambient air quality.

- **Control of fugitive GHG emissions from electrical equipment**
  CLP is striving to reduce its SF_6 emissions from high voltage equipment by enhancing operational efficiency, performing maintenance on SF_6 equipment and taking immediate corrective actions against SF_6 leakage due to equipment defects. Following a trial of non-SF_6 gas switchgears at the distribution level in 2023, the first non-SF_6 132kV transmission transformer with bio-degradable insulation fluid was commissioned at a Hong Kong substation in October 2024. The performance of non-SF_6 gas switchgears at both distribution and transmission levels will be reviewed, and CLP will continue to explore measures to reduce SF_6 emissions from electrical equipment and introduce sustainable alternatives.

Group-level air emissions

NO_x and SO_2 emissions increased slightly in 2024 compared to 2023, primarily due to increased generation at Mount Piper Power Station to meet power demand. Particulate matter (PM) emissions decreased slightly due to improved management of PM emission control facilities, supported by the newly installed PM Continuous Emissions Monitoring System (PM-CEMS) at Mount Piper Power Station.



Waste management and material use

CLP is striving to integrate circular economy (CE) principles across its project lifecycles and explore opportunities for minimising materials use and waste disposal. In addition to following a waste management hierarchy (i.e. prevent, reduce, reuse, replace, recycle, treat and dispose) which prioritises preferred actions for minimising waste generation in its daily operations, CLP has continued to promote the implementation of CE concepts in its operations to address waste and pollution matters.

SASB reference: IF-EU-150a.1; GRI reference: 301-2, 306-3, 306-4, 306-5

Guided by its CE strategy, CLP encourages any CE improvement opportunities and promotes the increase of circularity in its operations.

CLP has implemented various measures and initiatives to reduce waste and increase reuse and recycling during electricity generation and other operations.

It recycles its hazardous and non-hazardous solid and liquid waste where feasible and sells by-products such as ash and gypsum for reuse in other industries.

Different assets generate varying types of waste. Fossil fuel plants are the main contributors of waste generated. The amount of waste produced and recycled is not directly related to the amount of electricity sent out, but can be affected by maintenance and construction activities as well as local waste facilities and treatment practices.

CLP set Group-wide medium- and long-term waste targets for the years 2025 and 2030 in terms of a percentage reduction of total waste produced, including by-products produced by the coal-fired power plants, against the base year of 2021. In addition, waste targets for the year 2025 of 100% were set for the recycling of Waste Electrical & Electronic Equipment (WEEE), scrap rechargeable batteries, scrap metals and inert construction waste and for the removal of single-use plastics in catering facilities.

In 2024, total waste products from the Group's operations were reduced by 68% compared with the target-setting baseline year of 2021, slightly ahead of the waste target set for 2025.

The decrease was mainly contributed by the divestment of a majority stake in Fangchenggeng coal-fired power station in Mainland China, the exclusion of India's assets, particularly the coal-fired Jhajjar Power Station, and various waste management initiatives at certain assets.

Coal ash from coal combustion and gypsum from the flue gas desulphurisation process remain CLP's main waste products.

All Waste Electrical and Electronic Equipment (WEEE), scrap rechargeable batteries, scrap metal and inert construction waste were fully recycled in 2024 and single-use plastics in catering facilities were also removed in 2024, based on local regulatory policies and infrastructure available for recycling. Looking ahead, CLP will continue to refine the waste management process and promote the implementation of CE principles as well as explore CE improvement opportunities throughout the project cycle.

The waste target scope covers all operating assets under CLP's operational control. The 2024 results relating to the waste targets and their progress are shown in the following table:

Nature metrics	Pollution Reduction	2024 Results	2024 Progress	Target by end 2025	Target by end 2030
Waste (Impact driver)	Waste products[1]	-68%	In line	-65%	-70%
	Recycling of Waste Electrical & Electronic Equipment (WEEE)	100%	In line	100%	--
	Recycling of rechargeable batteries	100%	In line	100%	--
	Recycling of scrap metal	100%	In line	100%	--
	Recycling of inert construction waste	100%	In line	100%	--
	Removal of single-use plastics in catering facilities	100%	In line	100%	--

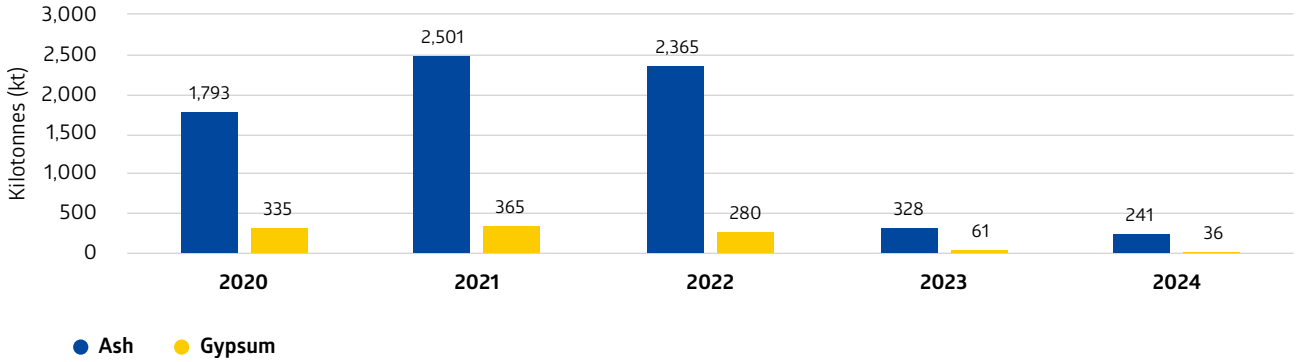
1 Waste products include total waste produced from operation and maintenance activities and by-products produced by the coal-fired power plants

Key programmes and initiatives in 2024 included:

- **Circular use of bottom ash from Mount Piper Power Station**
  Ash is typically the largest waste stream from coal-fired power stations. EnergyAustralia's Mount Piper Power Station is collaborating with an Australian building products company by utilising its bottom ashes to make bricks.
- **Extending the useful life of equipment in solar and wind farms in Mainland China**
  CLP China is embracing circular economy principles in several initiatives aimed at prolonging the lifespan of assets at its solar and wind farms. At Lingyuan and Xicun Solar Farms, spent photovoltaic modules are repurposed for second-life applications, such as power supplies for lighting. At Sihong and Huai'an Solar Farms, enhanced repair approaches are used to maintain existing equipment for extended use, including replacing quick plugs and sockets for solar plant equipment repairs. At Laiwu Wind Farm, information supplied by the Original Equipment Manufacturer (OEM) is being used to identify repairable waste components, such as heaters, pitch electromagnetic brakes and relays, that can extend the equipment's useful life.
- **Providing new uses for end-of-life assets in Mainland China's solar and wind farms**
  CLP China is using circular economy concepts in the recycling of solar panel waste. In 2024, Jinchang, Sihong and Huai'an Solar Farms recycled over 2,500 solar panels. For wind farms, CLP China is collaborating with a leading wind turbine manufacturer and a certified materials company to recover and repurpose retired wind turbine blades in Shandong Region. The resulting fragments are being recycled into new products, including water pipes, manhole covers, park benches, railings, signage and other construction materials, as well as household items.
- **Enhancement of waste management in offices**
  In Hong Kong, a series of awareness campaigns, including promotion booths, green tours, DIY workshops, quizzes and seminars, were held throughout the year to educate staff about circular economy concepts and the importance of source reduction and recycling in Hong Kong. CLP Power also increased the recycling facilities at its offices and rolled out a web-based platform of recycling information for staff. In Australia, a training programme for all corporate office users was run to facilitate better waste management in corporate offices.
- **Local recycling of Waste Lead-Acid Battery (WLAB) in Hong Kong**
  The implementation of circular economy concepts for local Waste Lead-Acid Battery (WLAB) recycling marks a significant environmental advance for CLP Power. Lead-acid batteries are used extensively in vehicles and backup power systems. Previously, these batteries were exported overseas for recycling, generating substantial carbon emissions per tonne of shipped batteries. Collaboration with a local WLAB recycling supplier enabled local recycling in 2024, significantly reducing the related carbon footprint.
- **Adoption of sustainable development principles with circular economy concepts for substation projects**
  CLP Power is adopting circular economy concepts for the construction of transmission substations, to minimise materials use and waste disposal. During the substation construction period, several initiatives are implemented to eliminate, minimise, or reduce waste arising from construction activities. For example, used water is collected and treated for site cleaning, and waste generated at the construction site is sorted for recycling as far as practicable. The steel beams used for excavation and lateral support are also reused or recycled.

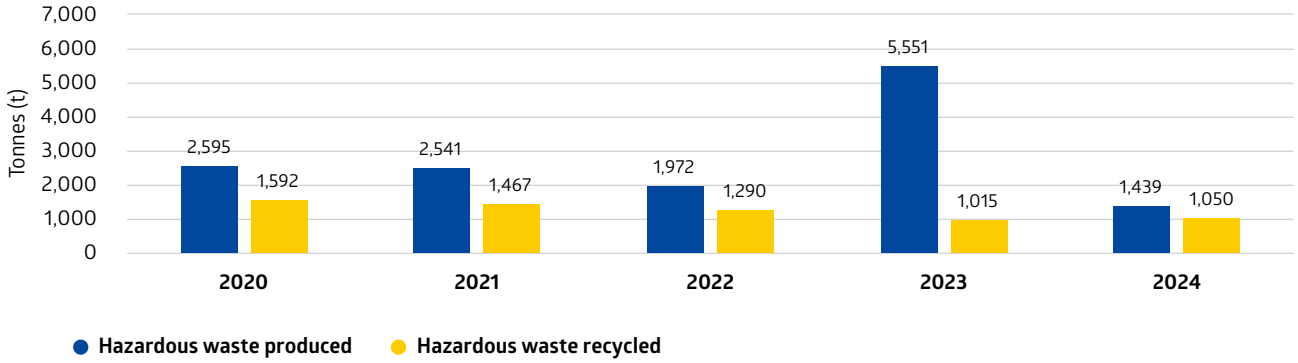
Ash and gypsum by-products recycled or sold

The total amount of ash and gypsum by-products recycled or sold in 2024 decreased compared to 2023. This decrease was due to reduced generation from the coal-fired Castle Peak Power Station, and some gypsum remained in site storage, pending sale for recycling.



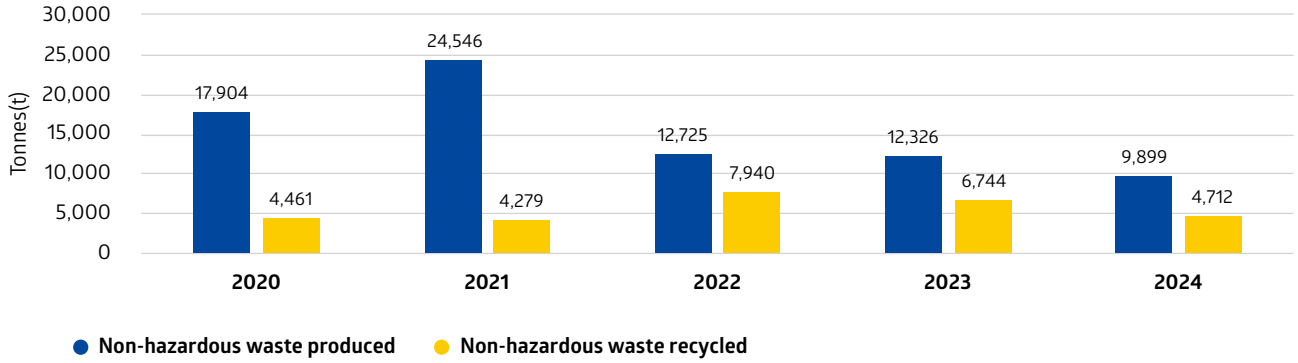
Hazardous waste produced and recycled

The total amount of hazardous waste produced in 2024 decreased compared to 2023, mainly due to a remediation project at Yallourn Power Station in 2023. The recycling amounts between 2023 and 2024 remained comparable.



Non-hazardous waste produced and recycled

The total amount of non-hazardous waste produced and recycled in 2024 decreased compared to 2023, primarily due to reduced waste from Hong Kong's transmission and distribution operations.



Case Study

Adoption of CE principles in Mainland China Wind Farms

CLP China is diligently championing the circular economy and nature conservation through various initiatives.

Reuse and recycling of replaced parts
At Laiwu Wind Farm, knowledge and skills acquired from the Original Equipment Manufacturer (OEM) are being used to identify repairable waste components such as heaters, pitch electromagnetic brakes and relays, extending the equipment's useful life.

Looking ahead, the team will continue to develop a strong technical foundation for unit maintenance to prolong the lifespan of equipment and components, while expanding recycling efforts and increasing the reuse of additional unit components.

Recovery and reuse of retired blades
Laiwu Wind Farm is collaborating with a leading wind turbine manufacturer and a certified materials company to recover and repurpose retired wind turbine blades. The decommissioned blades, along with components such as the blade root and body, will be processed through cutting or shredding and recycled into new products, including water pipes, manhole covers, park benches, railings, signage and other construction materials, as well as household items.

This initiative aligns with CLP's Environmental Policy and CE Strategy. Some research indicates that repurposing a single 24-meter blade can save the equivalent of six trees while simultaneously generating additional employment opportunities in the recycling and manufacturing sectors.

Process of cutting and shredding to recover and repurpose retired wind turbine blades

Water

Recognising the importance of addressing water matters, CLP has been strengthening its water management practices to reduce water usage and wastewater discharge, for example, by employing seawater cooling or water recirculation processes in its generation plants.

HKFRS S2/SASB reference: IF-EU-140a.1; GRI reference: 303-3, 303-4, 303-5

CLP has taken further steps to improve its water management and reduce water discharge-related impacts in its daily operations.

In 2023, CLP reviewed its environmental target-setting process and refined its water targets to reflect the upcoming retirement of CLP's fossil fuel plants. CLP has set Group-wide medium- and long-term freshwater consumption targets for the years 2025 and 2030 in terms of a percentage reduction of freshwater consumption quantities against the base year of 2021. It has set an ambitious freshwater consumption target comprising an absolute reduction of 45% to 55% by 2025, and a reduction of 85% by 2030, using 2021 as the baseline. The freshwater consumption target covers all CLP's operationally controlled assets.

The 2024 results against the Group-wide medium- and long-term freshwater consumption targets are shown in the following table:

Nature metrics	Pollution Reduction	2024 Results	2024 Progress	Target Range by end 2025	Target by end 2030
Water (Dependencies)	Freshwater consumption	-51%	In line	-45 to -55%	-85%

Against the group-wide targets in compared with the baseline year of 2021, CLP reduced the freshwater consumption by 51% in 2024 which was in line with the freshwater consumption target.

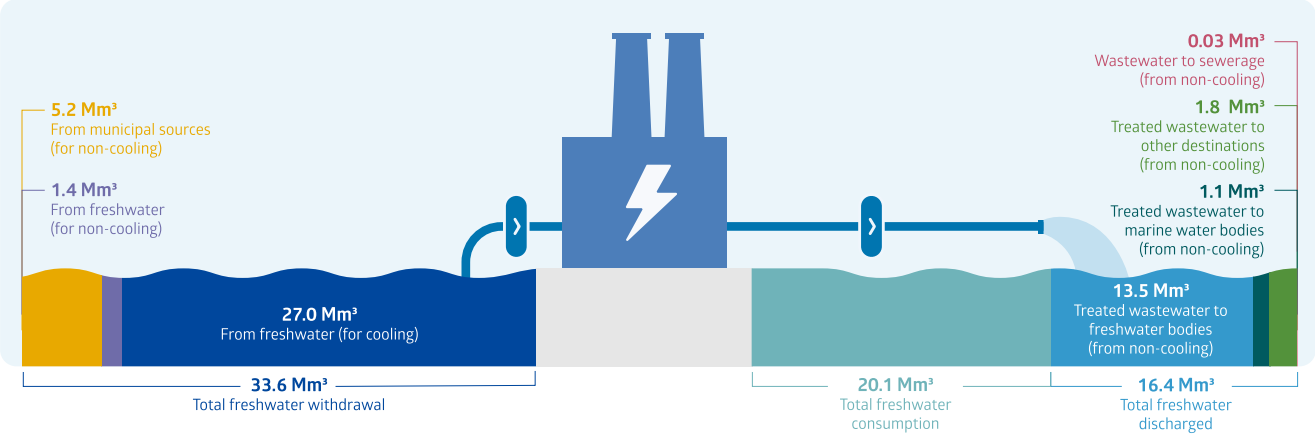
The decrease was mainly contributed by the divestment of a majority stake in Fangchenggeng coal-fired Power Station in Mainland China, the exclusion of India's assets, particularly the coal-fired Jhajjar Power Station and various water conservation initiatives at certain assets.

CLP will continue to track the volume of water recycling in its power stations for continual improvement and share good practices across the Group to maximise the benefit of individual power stations' efforts.

Examples of CLP's water management are summarised below:

- **Enhanced monitoring of process water discharge utilising innovative technology at Castle Peak Power Station**
  Castle Peak Power Station is a coal-fired power plant using once-through seawater cooling. During the cooling process, seawater is returned to the sea, often resulting in floating scum at the cooling water outfall. To control scum formation, the station doses anti-foaming agents, as required by regulation. To effectively monitor the cooling water outfall conditions, an Artificial Intelligence (AI) camera monitoring system has been installed at the station. This system delivers real-time monitoring with video analytics of environmental issues such as scum and floating and sends alerts to operators. This enables timely mitigation measures to be taken, ensuring regulatory compliance, and reduces nuisance for nearby residents.
- **Initiatives for minimising freshwater consumption in CLP's Mainland China renewable energy assets**
  To reduce freshwater use, CLP China has implemented robotic systems in its solar farms for the automatic cleaning of photovoltaic panels. In addition, robotic cleaning systems are also deployed for some wind farms for cleaning of wind turbine towers and blades. The freshwater at the solar and wind power stations is mainly for domestic use and in minimal quantities. Sewage treatment facilities have been set up at the sites, and the treated sewage used for irrigation or gardening. Additionally, water-saving awareness training has been conducted for site staff.
- **Reduction of freshwater consumption at Mount Piper Power Station**
  To avoid the flooding of the coal mine during heavy rains, Mount Piper Power Station receives significant volumes of mine water from the Springvale Mine for treatment. Besides managing the challenges posed by the increased intake of mine water, the Springvale Water Treatment Plant meets about 80% of the station's daily water needs, significantly reducing the need for freshwater intake.

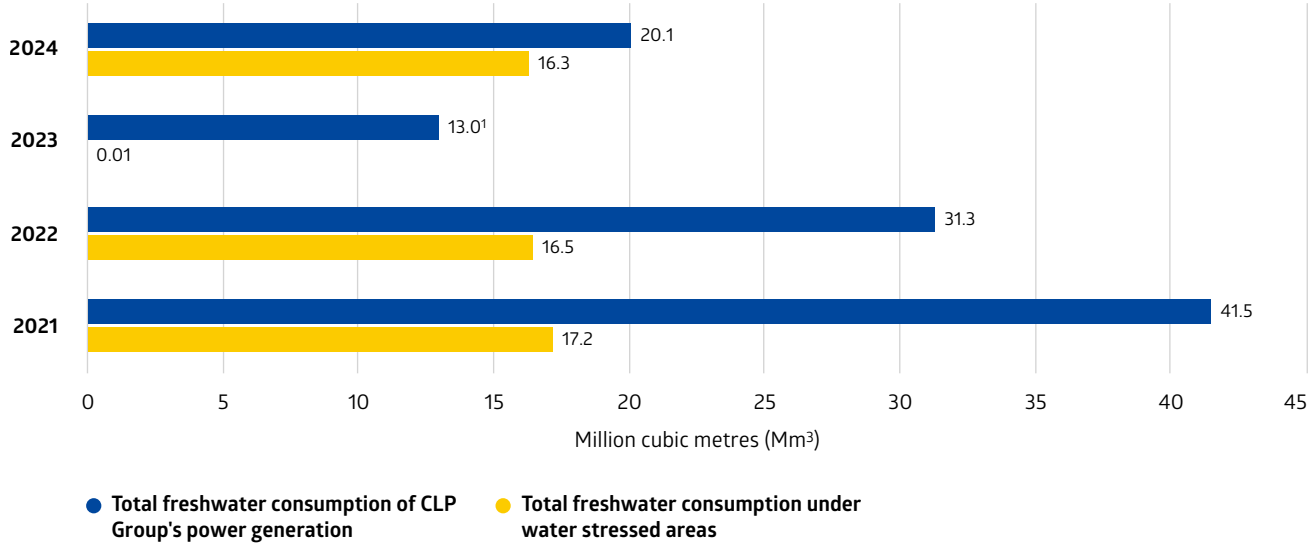
Freshwater balance



1. Freshwater discharged includes rainwater across the plants.

Freshwater consumption and consumption in water-stressed areas

Freshwater consumption increased in 2024 compared to 2023, mainly due to reduced rainfall at the Yallourn coal mine. Freshwater consumption in water-stressed areas increased in 2024 after five EnergyAustralia fossil fuel plants, including the coal-fired Yallourn and Mount Piper Power Stations in Australia, were identified as being in water-stressed areas year-round by updated WRI Aqueduct modeling.



1 Revised as per the updated water consumption data of December 2023 for Yallourn Power Station and Coal Mine.

Serving Our Stakeholders

Customers	70
Our people	95
Partners	110
Community	124

Customers

Highlights

Stakeholders' areas of interest

- Customer portfolio
- Access to reliable energy
- Asset management
- Energy services and solutions
- Customer privacy
- Customer satisfaction
- Artificial Intelligence
- Security management
- Cyber security
- Physical security *(online only)*
- Emergency and crisis management

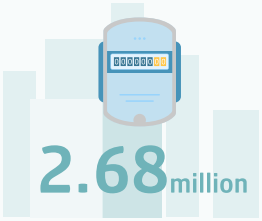
Relevant sustainability agenda

- Energy growth opportunities
- Digital innovation and cyber security

Outcomes for stakeholders

Maintained a world-class reliability of
99.999%
in Hong Kong

Signed a Memorandum of Understanding (MoU) with **Creative Property Services Consultants Limited** to strengthen its energy management capabilities



Connected smart meters for **over 2.68 million of CLP Power's residential and Small and Medium Enterprises (SME) customers** since 2018

EV charging infrastructure has been **installed in more than 9,000 residential parking bays** across Hong Kong by Smart Charge

CLP is committed to delivering reliable and affordable energy to its customers. By leveraging innovative technologies and customised services, CLP enhances customer satisfaction while promoting energy conservation and supporting renewable energy adoption. By actively engaging with customers and stakeholders, CLP is addressing their evolving energy needs and fostering strong relationships, as well as contributing to sustainability and community wellbeing.

Customer portfolio

HKFRS S2/SASB reference: IF-EU-000.A; GRI reference: EU3

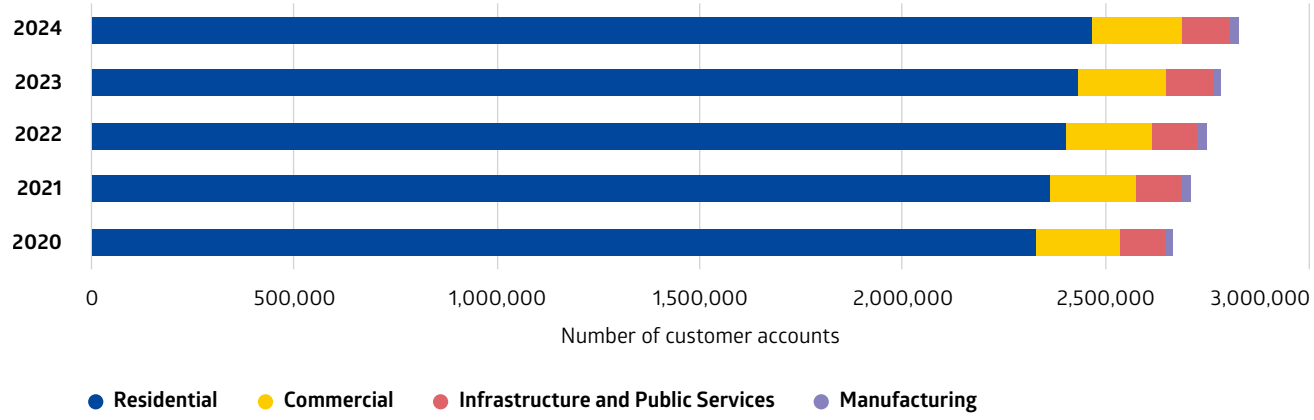
CLP operates retail businesses in Hong Kong and Australia, each characterised by distinct market structures, regulatory requirements, electricity demand, customer preferences and cultural norms. In 2024, the number of customer accounts in Hong Kong in residential, commercial and infrastructure and public service sectors increased but decreased in the manufacturing sector. However, there was an overall increase in the commercial and industrial (C&I) sectors.

CLP Power is the sole electricity provider for Kowloon, the New Territories and most of the outlying islands in Hong Kong. It serves about 2.83 million customers accoutning for over 80% of Hong Kong's households. Total electricity sold in 2024 was 36,125GWh.

Despite its status as a mature market, Hong Kong continues to experience growing demand for electricity. This is largely being driven by territory-wide development and infrastructure projects, as well as new local railway infrastructure projects. Due to Hong Kong's Northern Metropolis Development Strategy, it is essential to ensure highly reliable power supplies to support this ambitious transformation of the New Territories into a major urban centre and technology hub.

Hong Kong customer account breakdown

The number of customer accounts has continued to grow gradually over the last five years, mainly from the residential sector.

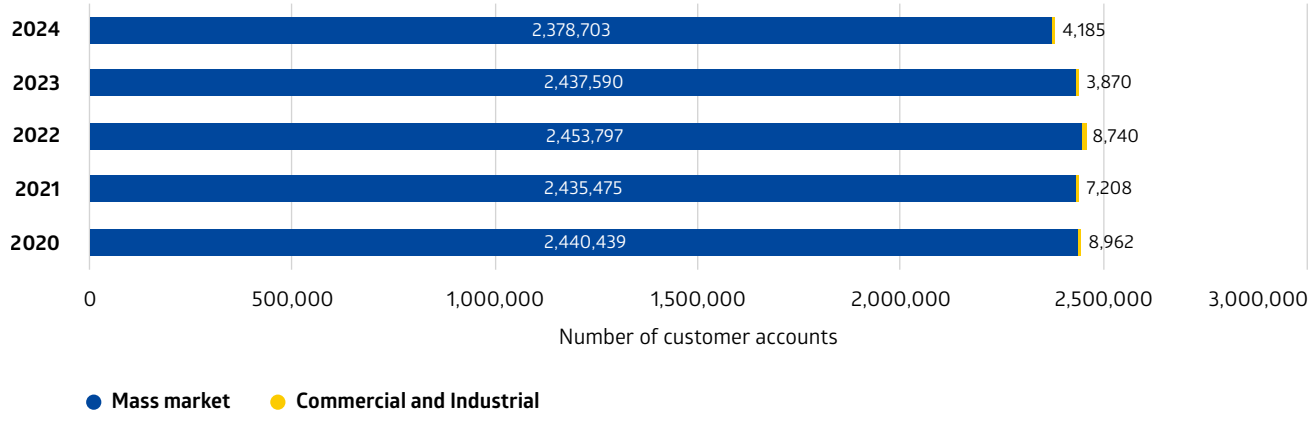


	2024	2023	2022	2021	2020
Residential	2,474,155	2,439,557	2,407,225	2,369,217	2,333,901
Commercial	218,266	214,616	212,251	210,821	208,150
Infrastructure and Public Services	121,479	118,548	115,404	113,956	112,245
Manufacturing	16,511	16,923	17,191	17,427	17,540

EnergyAustralia operates as a retail energy provider, selling electricity and gas to customers in New South Wales, Victoria, South Australia, the Australian Capital Territory and Queensland (electricity only). It is among approximately 30 retailers active in the key markets of New South Wales and Victoria.

Australian customer account breakdown

In 2024, total customer accounts declined by 2.4% or around 58,572 accounts. Intense retail competition has persisted and the rising cost of living has prompted more customers to explore the market in order to lower their energy costs. Other retailers have offered large upfront credits alongside deep discounting prompting some customers to switch retailers.



Access to reliable energy

HKFRS S2/SASB reference: IF-EU-550a.2, IF-EU-000.C; SASB reference: IF-EU-240a.3, IF-EU-240a.4; GRI reference: 203-1, EU4, EU12, EU26, EU27, EU28, EU29, EU30

CLP calculates the availability factor for its generation assets in terms of the amount of time that the asset is able to produce full load equivalent electricity over a period, divided by the amount of time in that period. Typical values range from 70% to 90%. CLP aims to maintain an availability range of 90% and above for its newer assets.

Targets for each asset are set annually and are included in the business plan. Performance is reported on a weekly basis to senior management. Any significant variances in performance are analysed and appropriate corrective actions taken.

Strategies and procedures

While CLP has generation businesses across the Asia-Pacific region, Hong Kong is the only location where its business is vertically integrated, so that it provides generation, transmission and distribution of power as well as retail services. CLP Power is regulated by the Hong Kong SAR Government under the Scheme of Control (SoC) Agreement, which requires the Company to provide a sufficient and reliable electricity supply at a reasonable price and in an environmentally responsible manner.

In Hong Kong, CLP Power employs various measures to maintain high supply availability and high reliability. These include:

- Regularly upgrading generation and network facilities to meet increasing electricity demand;
- Maintaining sufficient generating capacity to meet forecast demand as well as to cope with both planned and unforeseen outages;
- Strengthening energy security by providing access to competitive gas supplies from global markets using Floating Storage and Regasification Unit (FSRU) technology;
- Implementing the demand response programme in a selected distribution network to resolve temporary local peak demand, improving supply reliability while optimising the utilisation of existing assets. This programme is also helping CLP better prepare for the new demand arising from increasing Electric Vehicles and Renewable Energy systems penetration;
- Using cage drones equipped with a Light Detection And Ranging (LiDAR) system and sensors, as well as crawler robots, to undertake flexible and regular inspections of narrow and physically constrained areas of power stations, to enhance operational efficiency;

- Fully deploying a centralised digital Asset Health Monitoring System to monitor and assess the health condition of critical power supply equipment to formulate effective preventive maintenance plans;
- Installing appropriate lightning protection systems to safeguard outdoor power equipment against lightning strikes, thereby reducing the occurrence of voltage dips;
- Enhancing anti-flooding measures for high-risk substations;
- Accelerating the replacement of identified assets to improve power system performance;
- Deploying a smart management system (Grid-V) to enhance the real-time monitoring of critical power equipment and its operating environment;
- Enhancing collaboration with relevant government departments, community stakeholders and property management companies and manpower support in handling emergency events to support customers affected by power incidents;
- Developing a well-trained and competent workforce to operate and maintain the system.

In addition to recruiting professionals from the market, CLP also trains young engineering talents through systematic training schemes. It established the CLP Power Academy in 2017 to collaborate with overseas and local tertiary institutions to train electrical and mechanical engineering professionals, thus creating a healthy succession pipeline for the power industry.

To guarantee the availability and dependability of its power supply, CLP is working to strengthen its technological capabilities and enhance its organisational development across the Group. Departments collaborate to design for an integrated management framework by sharing insights gained from regional experiences. This procedure is lowering the Group's overall operations risk and contributing to improved portfolio management.

A number of innovative projects to promote energy availability and reliability are currently being pursued in the areas of robotics, asset health, video analytics, energy storage, building information modelling (BIM) and automation. These projects have been initiated both by third parties and CLP's own engineers, who are developing innovations based on their own operational experience.

Transmission network

To keep pace with the territorial development of Hong Kong, CLP conducts an annual review of future transmission network developments, assessing the latest system maximum demand forecast, as well as reviewing area load growth, infrastructure development and generation development for future planning.

Major transmission assets undergo annual maintenance and improvement programmes based on an analysis of current conditions, performance of the assets, levels of investment and risk.

CLP Power's reliability performance

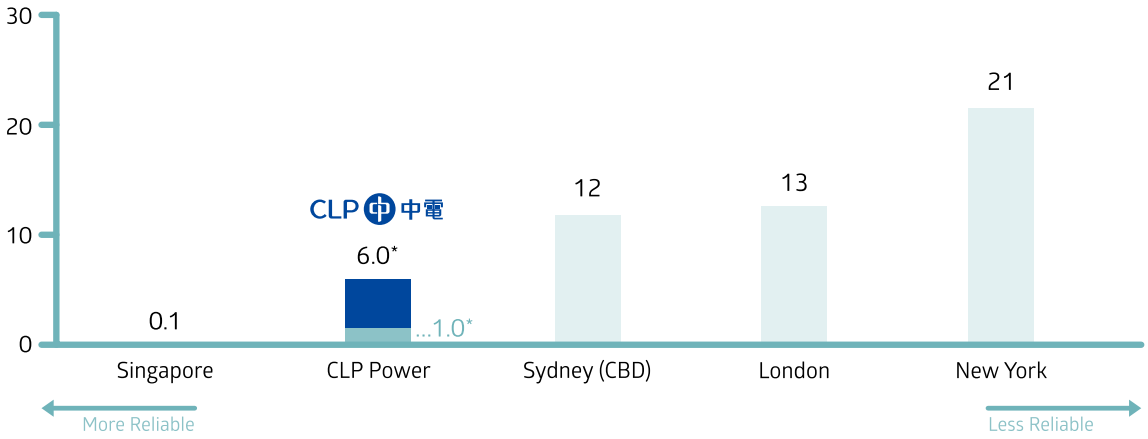
In Hong Kong, CLP has maintained its world-class supply reliability of 99.999%, surpassing the reliability performance of other major international cities such as London, New York and Sydney.

CLP's transmission and distribution network in Hong Kong serves approximately 80% of the city's overall population. At the end of 2024, CLP Power had approximately 17,123 km of circuits at medium or higher voltage. In addition, there were 250 primary and 15,759 secondary substations operating in Hong Kong. As of 2024, the average network loss for the past five years was 3.36%, slightly lower than the five-year average of 3.44% reported in 2023.

CLP uses a set of universally recognised supply reliability performance indicators from the Institute of Electrical and Electronics Engineers standard (IEEE 1366-2012) to monitor its system performance. It reports CLP's performance against these indicators quarterly to the Hong Kong SAR Government.

Comparison of reliability levels between cities

Unplanned customer minutes lost per year



Remarks:

1. *2022-2024 average for CLP Power was 6.0 minutes; Taking out the impact due to Major Event Day (such as cable bridge fire incident in Yuen Long in 2022, Typhoon Saola in 2023), the three-year average was 1.0 minute.
2. 2021-2023 average for all other cities.
3. There are no overhead lines in Singapore.

Supply reliability performance indicators and results for CLP Power

Indicator	Result
System Average Interruption Frequency Index (SAIFI)	
The average number of supply interruptions for each customer served. Both planned and unplanned interruptions are included.	• The three-year average SAIFI (2022–2024) was 0.26, meaning customers experienced a power interruption approximately once in four years during this period. This was slightly lower than last year's three-year rolling average of 0.27.
System Average Interruption Duration Index (SAIDI)	
The average duration of interruptions each customer may encounter in a given year.	• The three-year average SAIDI (2022–2024) was 0.30 hours, including both planned and unplanned interruptions. This was slightly higher than last year's three-year rolling average of 0.29.
Unplanned Customer Minutes Lost (Unplanned CML)	
The average duration of unplanned power interruptions per customer in a given year. These outages occur without prior notice and happen as a result of various factors such as weather events, third-party damage to the network and equipment faults.	• The three-year rolling average (2022–2024) of unplanned CML was about 6.0 minutes[1], which was the same as last year. CLP Power maintains a world-class supply reliability of over 99.999% in Hong Kong, which is higher than that of other major international cities as shown in the diagram above.

1 Taking out the impact due to Major Event Day (such as cable bridge fire incident in Yuen Long in 2022 and Typhoon Saola in 2023), the three year average was 1.0 minute.

Asset management

HKFRS S2/SASB Reference: IF-EU-000.D; GRI reference: 301-1, 302-1, 302-3, 302-4, 302-5, EU11

CLP is constantly looking for ways to improve the operational efficiency of its assets so that they remain compliant with the increasingly stringent regulations on emissions and fuel efficiency in certain jurisdictions. In addition, improvement opportunities continue to arise from innovation and optimisation, particularly through the leveraging of data analytics.

Energy efficiency for its asset operation

On the energy conservation and efficiency front, CLP continues to strengthen its electricity supply networks and infrastructure to offer high-quality, efficient and reliable electricity in its operating regions. The Company uses innovative technologies and has developed energy management programmes and initiatives through environmental management processes and tools. In CLP's major offices, building energy management systems with energy-efficient features have been deployed, with some upgraded with artificial intelligence algorithms to support smart energy control, particularly for air conditioning. Regular energy audits assess energy consumption efficiency and identify opportunities for improvement. CLP Power also sets energy-saving targets with a defined timeline for selected offices. An internal energy use target ensures energy utilisation remains below a reference Energy Utilisation Index (EUI).

Fuel use and energy sent out

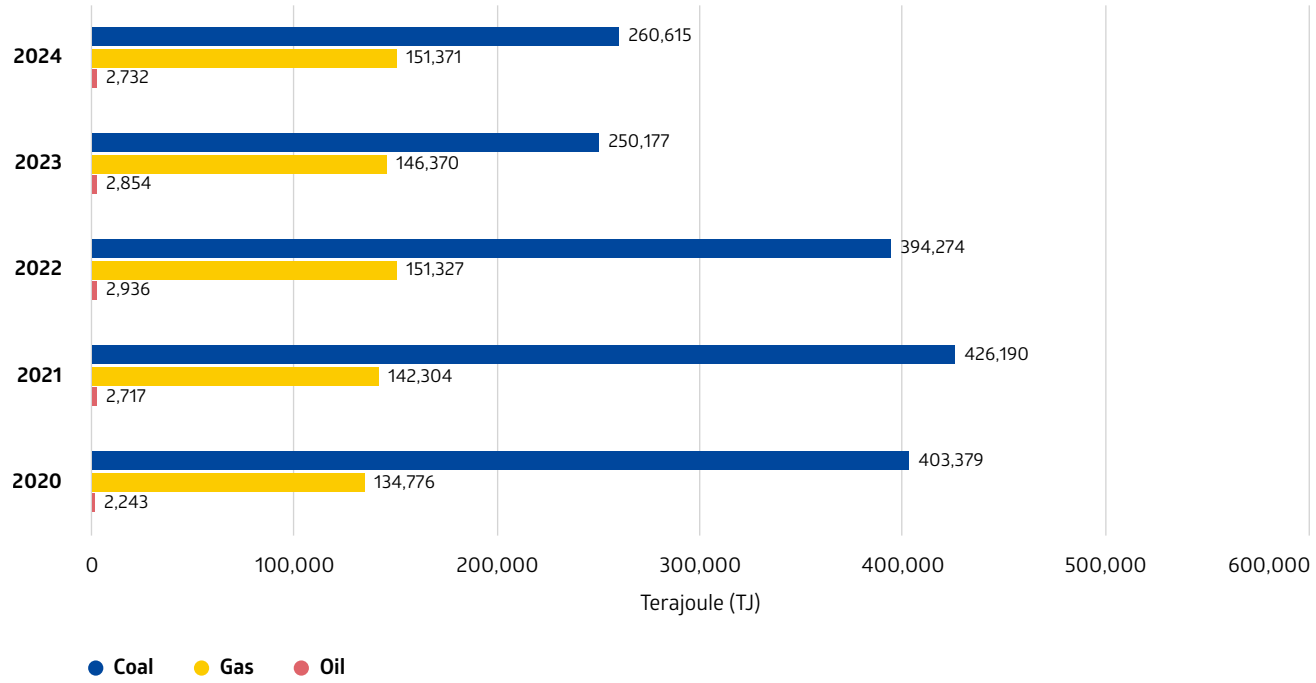
In 2024, the consumption of coal and gas for power generation increased by 4% and 3% respectively compared with 2023 (on an operational control basis). Accordingly, electricity sent out from coal assets decreased by 1%, while electricity sent out from gas assets increased by 3% (on an equity plus long-term capacity and energy purchase basis).

CLP reports the annual operating performance of those of its generation assets that fall within the reporting scope. The asset performance metrics include availability, generation sent out, thermal efficiency and energy intensity.

Download CLP's asset performance statistics

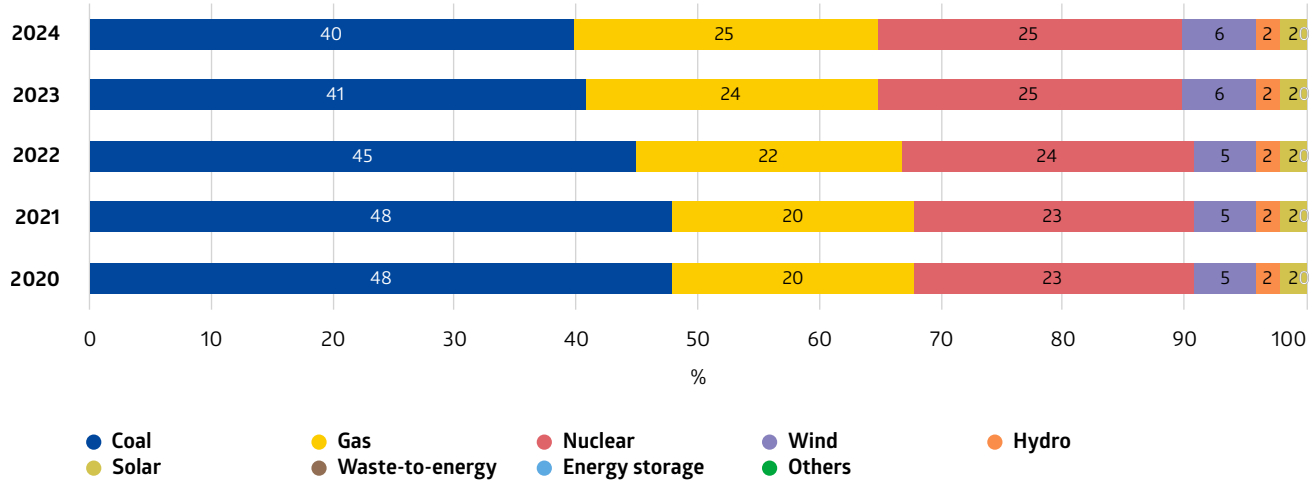
Annual fuel consumed for power generation

Following the successful commissioning of the new gas-fired unit at Black Point Power Station, Hong Kong advanced its decarbonisation efforts in 2024 by reducing coal reliance. Compared to 2023, coal usage in Hong Kong decreased by 10%, while gas consumption increased by 5%. In Australia, coal consumption increased by 10% due to higher availability and utilisation of Mount Piper Power Station. Conversely, gas usage dropped by 14%, attributed to reduced market demand and a scheduled major outage at Tallawarra Power Station in 2024. Overall, fossil fuel consumption for CLP's operational control thermal assets saw a slight increase, with coal and gas consumption for power generation rising by 4% and 3% respectively compared to 2023.



Energy sent out by asset type (on an equity plus long-term capacity and energy purchase basis)

CLP maintained a steady electricity output in 2024, generating 79,760 GWh on an equity plus long-term capacity and energy purchase basis, similar to the 79,512 GWh produced in 2023. The proportion of energy generated by each asset type showed minimal variation.



Energy services and solutions

GRI reference: 2-6, 302-5

The CLP Power Customer Service Quality Policy includes a commitment to support customers in using CLP products and services more efficiently and effectively.

In Hong Kong, CLP Power has worked closely with the Hong Kong SAR Government on the Scheme of Control (SoC) Agreement. The Plan includes:

1. **Performance targets:** Under the current SoC Agreement, targets have been set on supply restoration, energy saved annually, number of buildings or customers supported, the CLP Eco Building Fund, Electrical Equipment Upgrade Scheme and Energy Audit.
2. **Peak Demand Management programmes:** This enables commercial and industrial customers to help lower the overall system demand, reducing the need for investment in new generation units in the long term. The programme leverages artificial intelligence (AI) developed in partnership with Autogrid to help lower demand. The target is to achieve a reduction of up to 60MW from the demand peak.
3. **A new five-year energy-saving target:** CLP Power must achieve energy savings of at least 4% on the basis of average annual sales within a five-year period in order to earn incentives under the SoC Agreement. More incentives can be earned if energy savings reach 5%.

Investing in innovation

In addition to its SoC Agreement obligations, CLP has harnessed its innovation abilities and digital capability to develop a range of customer-facing solutions and energy services.

CLP has a dedicated venture capital team (Group Ventures & Investments) that invests in a range of early-stage companies focused on innovative, energy-related technologies and business models. In addition, CLP's Research & Ecosystems functions integrate the Company's research capabilities and ecosystem activities in a single team. This enables a more systematic and synergistic process of formulating strategic focus and long-term vision, extracting strategic knowledge and value, building up research networks and ecosystems worldwide and driving innovation delivery across the CLP Group.

CLP has established a global open innovation platform designed to identify solutions that address operational challenges, enhance efficiency and unlock new business opportunities. Committed to continuous innovation, CLP actively participates in accelerator programmes aimed at discovering novel solutions and promoting innovative practices. Through initiatives like Free Electrons and the Phoenix scouting programme, CLP collaborates with startups worldwide. These partnerships enable CLP to gain valuable market insights and enhance its solution offerings, strengthening its ability to meet customer needs and effectively navigate the energy transition.

CLP's research initiatives are dedicated to identifying emerging ideas and technologies that could have a significant long-term impact on CLP's business and the energy transition. CLP has established robust research networks and partnerships with local and international associations, research institutes and universities to collaborate on key projects. Notably, CLP is exploring transport decarbonisation through its Research Fellowship Scheme and studying the utilisation of urban flexible load resources to enhance power system flexibility. This includes potential joint research initiatives, which are being explored with universities in Hong Kong and Mainland China.

Summary of energy services and solutions

Improving energy efficiency	
Products and services	**Updates in 2024**
Cooling-as-a-Service (CaaS) Cooling systems are usually a building's largest source of power consumption. CLP*e* provides targeted solutions such as chiller retrofitting and replacement services, CaaS and district cooling solutions to enhance energy efficiency and reduce carbon emissions of building complexes. Under the Build-Own-Operate-Transfer model, CLP*e* will fund, design, construct, operate and maintain the new cooling system over a period of time at an agreed rate to enhance energy efficiency and reduce carbon emissions of building complexes.	• In May 2024, CLP*e* partnered with **Pacific Textiles Holdings Limited** to provide Cooling-as-a-Service to its subsidiary Pacific Panyu Textiles Limited in Nansha, Guangzhou. CLP*e* will build a new centralised electricity chiller plant system which is more energy-efficient and environmentally friendly to replace the existing distributed, aged absorption chiller plant system which is expected to reduce carbon emissions by about 42,700 tonnes of carbon dioxide annually. This aims to become an energy-saving benchmark project for the industrial segment in Nansha and Guangzhou. • CLP*e* signed a Memorandum of Understanding (MoU) with **Hysan Development Company Limited** to explore innovative energy efficiency solutions. This includes a distributed district cooling system in commercial properties in Causeway Bay, a major shopping district in Hong Kong.
Solar-as-a-Service (SaaS) CLP*e* offers seamless, one-stop services to help customers install and operate solar power systems over a period of time at an agreed rate. Solar photovoltaics (PV) systems convert solar energy into electricity to support energy demand and allow customers to feed electricity back into the grid.	• CLP*e* signed Build-Own-Operate-Transfer Service Agreements with **Link Properties Limited,** encompassing a total of 23 solar generating systems. • In June 2024, CLP*e* has teamed up with the **City University of Hong Kong** to install a solar power system across the campus. Nearly 2,000 high-efficiency bifacial solar panels will be fitted on the rooftops of more than 30 buildings on the campus by CLP*e*. The system is expected to generate approximately 1.15GWh of electricity per year. • CLP*e* is expanding the **floating PV system at San Tin Polder** in support of the Government's sustainable development plan. • In August 2024, a commissioning ceremony was held at MTR Corporation (Shenzhen) Limited (hereinafter referred to as **MTR (Shenzhen)**) to mark the completion of the distributed solar PV system and electric vehicle charging system. CLP*e* installed over 5,600 solar panels on the aluminium alloy roof of the car compartment inspection and washing depot, expected to generate 3,140MWh of clean energy and eliminate over 1,600 tonnes of carbon emissions annually.

Improving energy efficiency	
Products and services	**Updates in 2024**
Battery Energy Storage System (BESS) as-a-Service Tailor-made BESS solutions can greatly improve business performance by providing safe, efficient and secure energy storage. CLP*e* provides a one-stop design, build and implementation service, technical support and maintenance work and collaborates with its customers over a period of time at an agreed rate to develop fully integrated energy storage solutions that meet their specific needs.	• In 2024, CLP*e* deployed **94 Battery Energy Storage Systems** across construction sites operated by prominent construction companies in Hong Kong. The replacement of conventional diesel generators resulted in a reduction of over 2,500 tonnes or a 75% reduction in carbon emissions compared to those created by diesel generators. These BESS installations, powered by advanced lithium-ion batteries, minimise the risk of system instability during maintenance while operating at significantly lower noise levels. They exemplify CLP*e*'s commitment to sustainability and safer construction practices. • In September 2024, CLP*e* facilitated the launch by **Hip Hing Construction Co., Ltd** of Hong Kong's first mobile BIM CAVE system, providing the Company with a compact and mobile BESS as a stable and reliable power source.
Energy efficiency improvement for buildings • CLP Eco Building Fund: The fund provides subsidies for energy efficiency improvement works for residential, commercial and industrial buildings. • CLP Electrical Equipment Upgrade Scheme: The scheme for business customers provides subsidies to customers, especially SMEs, to replace or upgrade their lighting and air-conditioners to more energy-efficient models.	• The **CLP Eco Building Fund** provides HK$100 million a year to subsidise improvement works for a target number of 400 residential blocks and C&I buildings that will enhance the energy efficiency of their communal areas. The initiative aims to save 48GWh of energy annually. • In 2024, customers saved around 50GWh of electricity from over 600 buildings with the support of the **CLP Eco Building Fund**. • Since the launch of the **CLP Electrical Equipment Upgrade Scheme** in 2019, over HK$140 million in subsidies has been offered to C&I customers for replacing or upgrading their electrical equipment to more energy-efficient models.
Energy efficiency improvement for businesses CLP Power works in partnership with institutions to offer flexible and innovative financing solutions to businesses.	• CLP Power, Link Asset Management Limited (Link) and DBS Bank (Hong Kong) Limited launched the **Low Carbon Rewards Programme** in 2024 to support the transition of Link's small- and medium-sized enterprise tenants to low-carbon operations. This initiative combines the partners' expertise in asset management, banking and energy management, offering incentives such as subsidies for renewable energy certificates and banking privileges. The programme aims to foster a sustainable business environment, benefiting both merchants and consumers by promoting sustainable practices and enhancing revenue opportunities. • CLP Power, CLP*e* and **Gaw Capital Partners** have signed a Memorandum of Understanding (MoU) to enhance energy efficiency across various premises. This initiative aims to reduce carbon emissions and support a sustainability-linked loan of HK$14.4 billion, fostering more sustainable development within Gaw's portfolio.
Peak demand management • Demand Response programmes are offered to C&I and selected residential customers in Hong Kong to lower overall system demand, reducing the need to invest in new generation units. • EnergyAustralia's PowerResponse includes a residential demand response programme and a contracted demand response programme for commercial customers.	• In Hong Kong, CLP Power **achieved around 144MW and 93MW demand cut** from residential and C&I customers respectively in 2024. • EnergyAustralia's PowerResponse has **a current contracted capacity of 406MW** involving over 575,712 household customers and 626 business and large industrial customers.
Energy management technology • Launched in 2019, CLP's Smart Energy Connect (SEC)'s solutions cover the entire value chain from energy supply to energy consumption and include innovations for carbon-free energy, grid modernisation, power storage, EVs, building energy management and carbon offsetting.	• Since 2018, CLP Power has connected **over 2.68 million smart meters** for its residential and SME customers in an effort to promote low-carbon living and further improve the safety and dependability of the power supply. CLP Power expects to replace all its residential and SME customers' conventional electricity meters with smart meters by 2025. • As of 31 December 2024, EnergyAustralia had approximately **895,000 smart meters installed** for its customers across Australia. It is entering into the Legacy Meter Replacement Plan (LMRP) in December 2025, which aims to replace all basic meters by the end of 2030, increasing the total number of smart meters to over 2 million.

Improving energy efficiency	
Products and services	**Updates in 2024**
• A mass rollout of smart meters to all CLP Power customers, from 2018 to 2025, is supporting Hong Kong's Smart City transformation.	
Energy audits CLP Power provides free energy audits and various consulting services to C&I customers to help them understand their energy needs and identify opportunities to reduce their energy use and hence their operating costs.	• In 2024, CLP Power had exceeded the annual total electricity saving target of 48GWh, and helped its C&I customers save around 50GWh of electricity with **more than 600 energy audits completed**.
Energy data and analytics • At EnergyAustralia, PurchasePro is a self-service web portal which allows business customers to purchase an agreed load progressively rather than commit to a price at a single point in time. • Smart Energy Online is an online assessment and management tool for C&I customers in Hong Kong. Similarly, EnergyAustralia's InsightsPro allows its C&I customers to access real-time consumption and cost data to optimise their business's energy usage.	• Approximately one third of EnergyAustralia's C&I customer load is managed by PurchasePro and over 1,000 EnergyAustralia customers have access to InsightsPro. • Over 2,500 C&I customers in Hong Kong use Smart Energy Online to manage their energy consumption and improve their energy efficiency.
CLP Retro-Commissioning and Retrofitting Training Upgrade Programme CLP Power offers free retro-commissioning and retrofitting training courses comprising classroom trainings and field visits for energy management employees and engineers who already have a basic understanding of retro-commissioning and retrofitting. The training covers advanced topics and techniques such as data analysis, system diagnosis, measurement and verification.	• In 2024, CLP Power allocated HK$1.15 million to launch the **CLP Retro-Commissioning and Retrofitting Training Upgrade Programme**. The programme provides training courses covering a variety of energy-saving solutions including retro-commissioning and building services replacement projects for employees involved in energy management across different businesses. It aims to encourage C&I customers to retrofit and decarbonise their existing premises for greater energy efficiency and lower operating costs in the long run.

Using electricity more widely for transport industry	
Products and services	**Updates in 2024**
Electric Vehicle Charging-as-a-Service • Electric Vehicle Charging-as-a-Service is a one-stop fleet charging offering that enables fleet customers to enjoy flexibility in their fleet electrification journey while saving capital investments related to charging infrastructure and software. CLP*e* will invest, design, build, operate and maintain Electric Vehicle Charging-as-a-Service charging solutions in their own or other premises over a period of time at an agreed rate.	• In 2024 CLP*e* signed a number of Electric Vehicle Charging-as-a-Service contracts with target customer groups including electric minibus supplier, corporate fleet operator and electric taxi provider. This reinforces the proposition CLP*e* is building by providing convenient fast charging stations for commercial use. • In August 2024, CLP*e* launched the CLP*e* **Charging mobile app** for the use of CLP*e* public charging services. By the end of 2024, CLP*e* expanded its charging network to 6 different locations with more than 100 charging bays targeting both overnight and top-up fast charging needs of corporate fleet and taxi businesses. • In addition to pay-as-you-go charging service, customers can also sign subscription contracts with CLP*e* with committed usages over certain periods at agreed rates. During the contract period, customers will pay a monthly fee to CLP*e* which covers the EV charging service and software license fees, thus, minimising the investment costs, company assets, charging location constraints and manpower needed for electrification. Other benefits include 24-hour customer support services and cloud management platform. The cloud management platform and mobile app designed by CLP*e* enable customers to easily manage their fleet users, make adjustments according to their operational needs and get the real-time availability status of charging facilities and the charging status of EVs with electricity consumption data.
Electric vehicle infrastructure • CLP Power continues to support green motoring and the electrification of vehicles in Hong Kong – a long-term government policy objective set out in the *Hong Kong Roadmap on Popularisation of Electric Vehicles*. • In 2016, CLP formed Smart Charge (HK) Limited a joint venture with HKT to provide a one-stop service for EV charging. • The CLP Charge Point Operator platform and EV driver app were successfully launched in 2023, both of which are instrumental to the electrification of the CLP fleet and the creation of a future business model that includes charging-as-a-service. • In Australia, EnergyAustralia has outlined plans to support the transport industry with vehicle electrification by working with EV manufacturers, fleet operators and their customers to plan and build the charging infrastructure they need.	• CLP*e* **eMobility** has installed close to 600 EV chargers in the past 2 years, out of which over 100 EV charging bays with majority of direct current fast chargers are connected to the CLP*e* public charging network, promoting commercial EV development in Hong Kong. • To date, **Smart Charge** has designed, installed and is currently managing EV charging infrastructure in residential car parks in Hong Kong covering more than 9,000 parking bays. • In 2024, EnergyAustralia embarked on the first stages of rolling out **a commercial green transport package**, to support its business and C&I customers (primarily fleet customers such as bus depots), involving of EV charging systems to power their fleets. Its aim is to help its customers further decarbonise over time by powering a portion of their vehicle charging from solar and battery systems and participating in the Virtual Power Plant (VPP). • EnergyAustralia's approach represents the next horizon for emissions reduction in the broader market as it addresses **'Scope 4 emissions'**, through initiatives and products that help to avoid or reduce emission in other market segments or parts of the value chain. EVs are good examples of avoided emissions. While the production process generates emissions (as is the case for all vehicles), compared to vehicles with traditional internal combustion engines, EVs generate lower emissions over their lifetime. As an energy company, EnergyAustralia has a unique position in facilitating greater efficiency, electrification and electric vehicle infrastructure and contributing to lower emissions throughout the whole Australian economy. • In parallel, operators of electrified fleets of vehicles will benefit from the continuing decarbonisation of the electricity they access for charging from the grid as the national electricity market continues to decarbonise, from lower electricity consumption as vehicle efficiency continues to improve and from lower emissions if they invest in expanding "behind the meter" solar and battery systems.

Enabling zero-carbon electricity supply	
Products and services	**Updates in 2024**
Decentralised renewable energy/rooftop solar CLP offers feed-in tariffs and rooftop solar for its customers in support of the decentralisation of energy and the growth of renewable energy. • The Feed-in Tariff (FiT) Scheme in Hong Kong enables customers to earn FiT payments by installing renewable energy system on their premises and connect the system to the CLP grid. • The array of decentralised generation products has expanded in Australia to now include residential rooftop solar and batteries, community batteries and support the 150MW VPP.	• From the commencement of the **FiT Scheme** in mid-2018 to the end of 2024, CLP Power received over 26,600 applications. Approximately 96% of the applications, representing a total capacity of around 404MW - equivalent to the annual electricity usage of around 99,700 residential customers, have been approved. About 23,800 applications have been completed and connected to the grid. • A **bring-your-own battery VPP product ("Battery Ease")** was launched as part of the growing Behind the Meter portfolio to provide solutions for residentials customers that already have invested in a residential battery to both lower energy bills during peak periods and manage peak price events. For customers without rooftop space, a community battery product was also launched so that a broader set of customers can partake in Australia's decarbonisation journey.
Corporate Power Purchasing Agreements (PPAs) Businesses wishing to increase the direct renewable energy available to them may elect to enter Power Purchasing Agreements with CLP. PPAs provide customers with the most credible and efficient clean energy available. There has been continued interest in the direct purchase of renewables whether via annual purchasing or 24/7 granular matching. In response to this positive market momentum, CLP is leveraging its expertise in renewable energy assets, battery storage and energy management indicators to support its corporate customers.	• In October 2024, **CLP China, BASF and Envision Energy** signed a 10-year power purchase agreement to support BASF's adoption of 100% renewable energy at its manufacturing sites in Nanjing, Rudong and Zhenjiang in Jiangsu province. CLP will provide renewable energy to BASF's three manufacturing sites in Jiangsu from its solar projects in Wuxi, Huai'an and Yangzhou within the province and Envision Energy will help achieve green electricity settlement between CLP and BASF. As one of the largest external investors in the energy sector in Mainland China, CLP focuses on developing clean and renewable energy and providing green energy solutions to corporate customers. The agreement will contribute to BASF's corporate goal of achieving net-zero carbon emissions by 2050 and accelerate the low-carbon energy transformation of Jiangsu.

Offsetting emission that cannot be otherwise avoided	
Products and services	**Updates in 2024**
Energy attribute certificates (EACs) CLP offers a range of EACs to support customers' decarbonisation objectives. In Hong Kong, Renewable Energy Certificates (RECs) offer an alternative way for customers to support local clean energy generation. Each unit of a REC represents the environmental attributes of electricity produced by local renewable energy sources, generated or purchased by CLP Power. In Mainland China, CLP China's renewable assets issue Green Electricity Certificates (GECs) which are the only officially recognised renewable energy certificates in Mainland China. They can be used to meet obligations under Mainland China's mandatory Renewable Energy Portfolio Standard, or to support voluntary green power trading. In Australia, EACs serve as an option to reduce customers' Scope 2 emissions when decentralised renewables are not a viable option. For example, PureEnergy from EnergyAustralia helps customers support the production of green energy from government accredited renewable sources.	• In 2024, **close to 340GWh units of RECs** were sold in Hong Kong, a significant increase from the 173GWh units sold in the past year. • CLP China's wind and solar projects are eligible to apply for and issue GECs that can be traded through the market. For example, the Qian'an III Wind Power Station in Jilin province transfers GECs to a multinational data centre client in Ningxia province. • Around 11,000 EnergyAustralia customers have chosen a GreenPower government accredited PureEnergy option for their electricity supply.
Carbon Credit Brochure CLP has recently transitioned its carbon credit-related information from the website to a brochure. This change aims to present the information in a more straightforward and accessible format.	• The brochure is designed to provide a clear and concise overview of carbon credits, making it easier for readers to understand the benefits and processes involved. By simplifying the presentation, CLP hopes to enhance engagement and ensure that all relevant details are readily available to those interested in CLP's carbon credit initiatives.
Carbon Credits Carbon credits represent carbon emissions avoided as a result of emissions reduction projects. CLP encourages its customers and corporates to purchase these carbon credits to offset their unavoidable emissions. In addition to selling carbon credits, CLP also collaborates with many industries to deliver carbon offset initiatives.	• CLP continues to support customers' decarbonisation journey through carbon offsets. Customers can offset their unavoidable emissions with CLP Carbon Credits after taking actions to reduce their emissions. In 2024, Apraava Energy has sold over 900,000 tCO_2e units of offsets from their renewable generation assets to customers around the world. • As at the end of 2024, EnergyAustralia had commenced the process of discontinuing its carbon offset products, Go Neutral for mass market customers, and Business Carbon Neutral. This will occur progressively in accordance with the terms that apply to customers. EnergyAustralia's focus is now on helping its customers to directly reduce their emissions. EnergyAustralia, however, continues to recognise that high integrity carbon offsets have an important role to play in the energy transition and the achievement of Net Zero. It is noted that the use of such high integrity offsets, having regard to best practice guidance, will be required to mitigate residual emissions associated with achieving Net Zero for Scope 3 by 2050. In the context of EnergyAustralia's Tallawarra B project, Australian Carbon Credit Units are currently being used to offset its Scope 1 emissions.

Case Study

Strengthening the energy management capabilities of Creative Property

CLP Power has signed a Memorandum of Understanding (MoU) with Creative Property Consultants Limited (Creative Property) to improve the energy management capabilities of its property management team, and enhance the industry's resilience in the face of extreme weather conditions.

The newly signed MoU will deepen the partnership between CLP Power and Creative Property in order to address climate change and encourage a low-carbon lifestyle for residents. CLP Power will assist Creative Property in raising its property management practitioners' awareness of power quality, and will arrange for engineering teams to conduct site visits to housing estates and test electrical equipment. CLP Power will also provide professional advice, technical support and recommendations on the installation of post-voltage-dip operation devices for equipment sensitive to voltage dips such as lifts, to help minimise the impact of voltage dips on residents.

Creative Property currently serves more than 120,000 public housing properties, Home Ownership Scheme flats and private residential units in CLP Power's supply area, more than 90% of which are connected to smart meters. To promote digitisation, CLP Power will also collaborate with Creative Property to encourage residents to switch to eBills, mobile payment services and mobile apps, and embrace low-carbon lifestyle. CLP Power and Creative Property will also pool their respective strengths to develop various community activities and support services to enhance residents' knowledge of energy saving, decarbonisation and home electricity safety and to support people in need.

CLP Power and Creative Property sign a MoU to enhance Creative Property's resilience against extreme weather conditions and to promote energy saving, decarbonisation, digitisation, and community support, drawing on their combined strengths to combat climate change.

Case Study

Supporting the Government's decarbonisation goals through a waste-to-energy initiative at the West New Territories (WENT) Landfill

In support of the Government's policy of promoting waste-to-energy initiatives and increasing lower-carbon energy supply for customers, CLP Power has installed power generation units (namely WE Station) at the WENT Landfill, in operation since 2020.

The units utilise landfill gas produced locally at the landfill site for power generation, and the electricity generated will be transmitted to CLP Power's power grid. With the commissioning of the two new generation units in October 2024, the generation capacity of WE Station has increased to 14MW, making it the largest landfill gas power generation facility in Hong Kong. The project highlights CLP Power's dedication to the decarbonisation of Hong Kong by converting waste into energy and reducing carbon emissions.

CLP Power's WE Station at the West New Territories (WENT) Landfill.

Case Study

CLP's new head office relocation to Kai Tak showcases sustainable building features to its customers

On 10 December 2024, CLP reached a new milestone in its history with the opening of its new head office in Kai Tak. The state-of-the-art building, custom-built for CLP, symbolises the firm's unwavering confidence in Hong Kong's future and its commitment to fostering sustainable practices.

To reduce overall air-conditioning energy consumption across the 320-hectare new Kai Tak urban development, the Hong Kong SAR Government spearheaded the design of an innovative seawater-cooled district cooling system (DCS). CLP has aligned itself with these governmental efforts and been closely involved in one of the city's most vital energy efficient infrastructure projects. CLP is also promoting sustainable transportation by example, every car parking space is equipped with an EV charger.

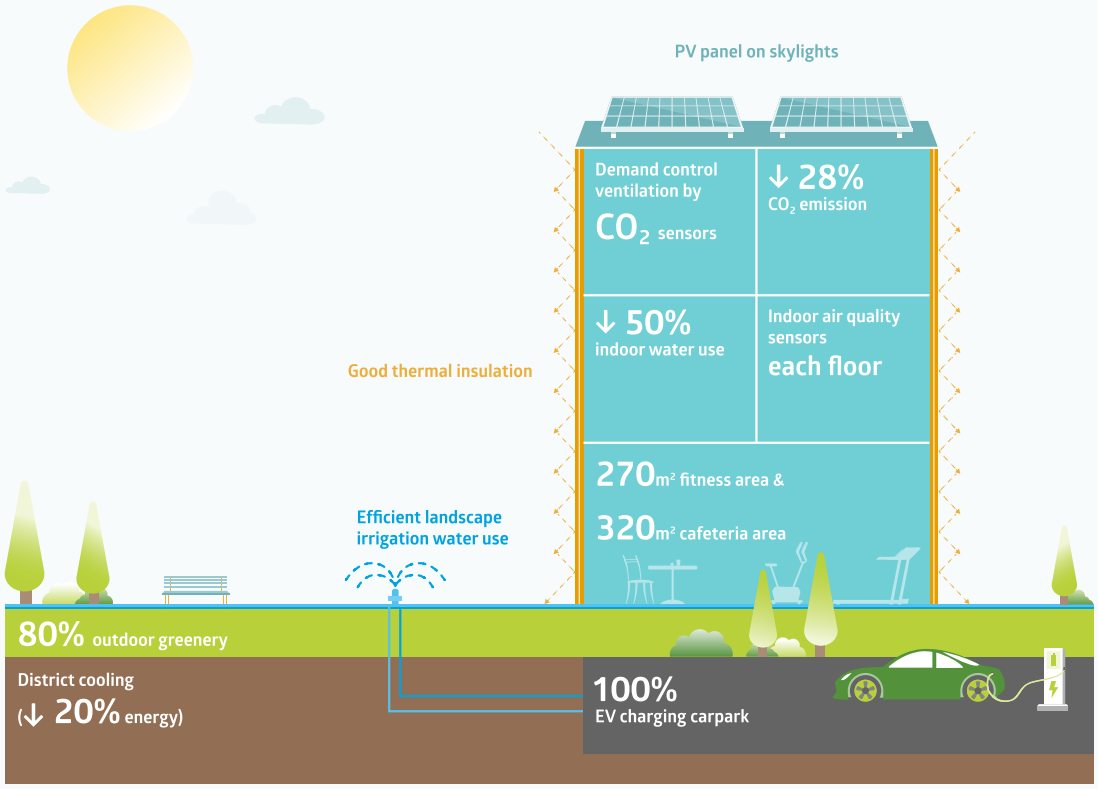
The building's energy-saving features include both passive design elements such as high-performance glazing and thermal-insulated building materials to avoid excess heat uptake and active measures such as Demand Control Ventilation (DCV) with carbon dioxide sensors and lighting controls responsive to daylight and occupancy photovoltaic panels on skylights are providing the building with renewable energy. The building's design prioritises energy efficiency, with carbon dioxide emissions reduced by 28% compared to the compliance standard specified in the Building Energy Efficiency Code (BEC) in Hong Kong.

An overwhelming participation of colleagues at the housewarming event, filling the main entrance of the new Kai Tak office building.

The head office includes a series of site-specific art wall installations that embody the core brand values of CLP, titled Transformative Loops. Using recycled materials in visually striking forms, Transformative Loops invites viewers to contemplate the transformative power of innovation and sustainable recycling practice.

The head office also incorporates a sustainable office strategy that reduces indoor water use by over 50% and landscape irrigation by 50% compared to Leadership in Energy and Environmental Design (LEED) standards. It adopts a low-carbon construction through the use of recycled materials and eco-friendly products. Community wellbeing is fostered with abundant green spaces that cover over 80% of outdoor areas. The health of building users is another priority, with Indoor Air Quality sensors on each floor, high-quality drinking water dispensers and a well-equipped fitness room promoting an active lifestyle, aligned with WELL building standards for a holistic approach to sustainability and wellbeing.

The head office design achieved the highest rating (provisional Platinum/pre-certification Platinum) in the BEAM Plus, LEED and WELL green and wellness building rating systems.



Customer privacy

GRI reference: 418-1

In Hong Kong, the Personal Data (Privacy) Ordinance (PDPO) governs the protection of the personal data of individuals. The Data Protection Principles in the PDPO outline CLP Power's obligations as a data user. They relate to the collection, accuracy, retention, use and security of personal data, as well as individuals' rights to access and correct their personal customer data.

Under Australia's *Privacy Act 1988* (Privacy Act), EnergyAustralia has obligations to ensure the appropriate collection, use, disclosure and security as well as access to individual's own personal information. There are also mandatory data breach reporting obligations in relation to Notifiable Data Breaches. On 28 November 2024, Parliament passed the first set of amendments to the Privacy Act to create a statutory tort for serious invasions of privacy and provide the privacy regulator with additional rights to enforce penalties for breaches of privacy. The new amendments also create a new obligation for EnergyAustralia to ensure that individuals are informed about situations where automated decision-making (ADM) 'could reasonably be expected to significantly affect the rights and interests of an individual'. The timeline for compliance is two years. A second tranche of reforms is expected in 2025 and EnergyAustralia continues to monitor for developments.

In 2024, no cases of customer data loss were reported by CLP Power in Hong Kong or by EnergyAustralia.

Customer satisfaction

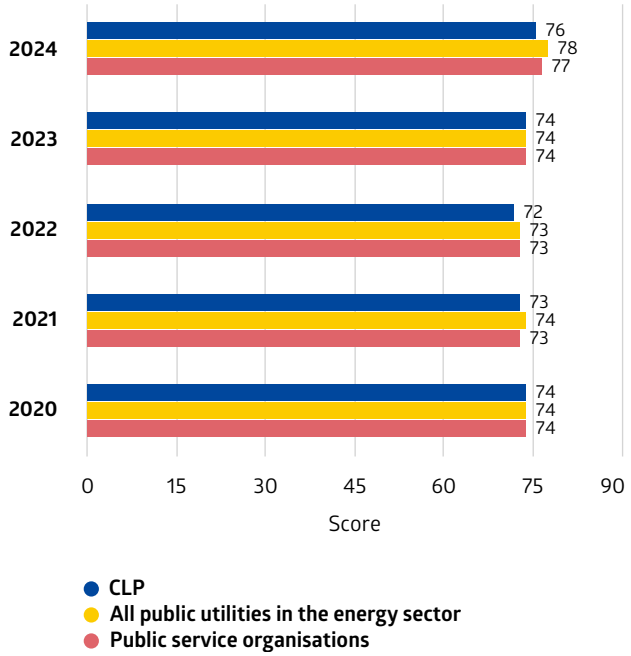
GRI reference: 417-3, 418-1

CLP is committed to providing safe and reliable energy for its customers to support their business operations and daily lives. Its frontline teams have continued to maintain essential support and customer services and to ensure the reliability of the power supply.

Hong Kong

CLP Power Hong Kong Limited customer satisfaction score

CLP Power's customer satisfaction score improved in 2024 and is on a par with other public service organisations.



Australia

EnergyAustralia averages around one to two million conversations with customers every year, either over the phone or via digital service channels. In 2024, EnergyAustralia handled more than 2.2 million calls. It also engaged with over 110,000 individuals, businesses and stakeholders through formal research to help shape its business decisions, products and services.

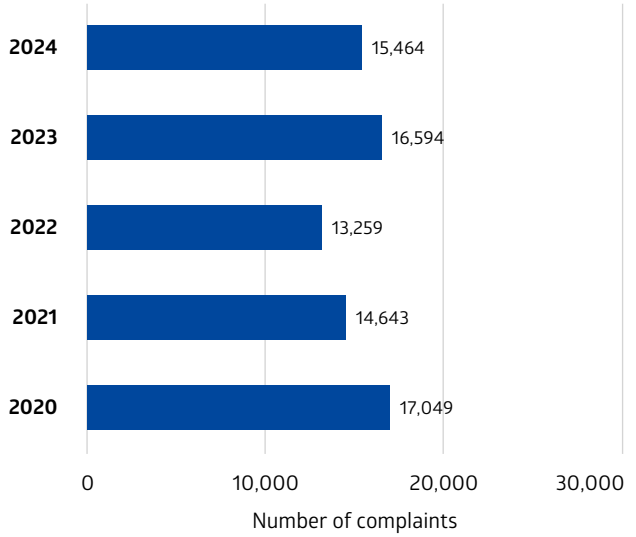
Complaints received by EnergyAustralia
Total complaint volumes in 2024 decreased by 10% from the 2023 figure. Following challenges in the first half of 2023 across the industry, this year saw the situation stabilise with flow on impacts of a decrease in customers bypassing EnergyAustralia's complaints process and decreased direct customer complaints. This resulted in customers showing greater trust in EnergyAustralia to resolve the complaint.

Despite these challenges, EnergyAustralia continued to go above and beyond to successfully address and resolve customer concerns through timely engagement and effective conversations with its customers preventing further escalations.

This has been reflected in EnergyAustralia's Transactional Net Promoter Score (TNPS) which is at a 6 year high of 36.8.

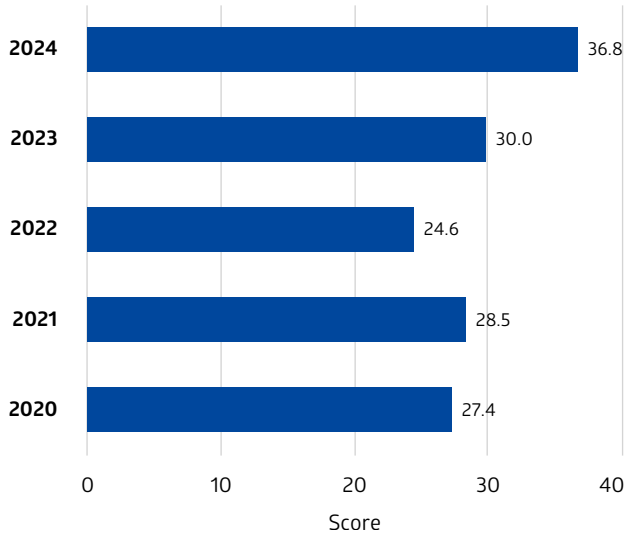
Complaints received by EnergyAustralia

Total complaint volumes in 2024 decreased by 12% from 2023.



EnergyAustralia's Transactional Net Promoter Score (TNPS)

This year's TNPS increased significantly as a result of EnergyAustralia's efforts to address and resolve customer concerns through timely engagement and effective conversations.



Artificial intelligence

Our approach

CLP's approach to AI governance is centred around building trust, transparency and accountability. This involves clearly defining the use and purpose of AI, assessing its limitations and impacts and ensuring transparency through notification, comprehensive user guides and risk assessments.

With reference to best practices across the globe, CLP has designed principles to help identify risks and controls when adopting AI in CLP's operations.

Strategies and procedures

The AI principles play a crucial role in CLP's governance approach by acting as the anchors to risks and controls when using AI. A summary of CLP's AI principles is:

- **Accountability**: Throughout the AI solution life cycle all stakeholders are responsible for adhering to the AI principles.
- **Purposeful use:** Each AI use case must have a clear purpose that aligns with CLP's values.
- **Fair, non-discriminatory and ethical design:** CLP aims to ensure that outcomes of AI-embedded solutions are fair, non-discriminatory and ethical.
- **Reliable, explainable and transparent AI:** CLP ensures a thorough understanding of inputs to AI and implication of its outputs; maintains relevant transparency with pertinent customers, employees and stakeholders.
- **Protect data privacy, data quality and ensure compliance**: Existing obligations relating to data privacy, regulations and quality requirements do not change with the use of AI.
- **Risk management**: A risk-based approach is adopted to identify and assess risks arising from use of AI in operations. These in turn gives rise to controls and mitigations that reduce risks to acceptable business appetites.
- **Security**: Comply with CLP's cyber security policies, to protect data & information when using AI in operations.
- **AI knowledge excellence**: Commitment to upskill employees, provide training and encourage continued adoption of AI in work processes. Promote knowledge exchange across use cases to leverage best-practices and continuous improvement.

Comprehensive efforts have been made to ensure compliance with the AI principles, identify incremental risks and design corresponding controls and mitigations. For CLP's Hong Kong businesses an AI risk taxonomy together with an AI impact assessment have been developed and integrated into existing processes.

Initiatives and progress

This year, CLP has spearheaded several key initiatives:

- **Digital marketing platform**: Included an event-driven customer messaging feature. This initiative has achieved an 80% reduction in turnaround time, significantly lowering the risk of Personal Identifiable Information (PII) data leaks.
- **AI-driven load forecasting:** Implemented AI-driven short-term load forecasts (intra-day, next-day, and 9-day) to support business decisions related to dispatch and maintenance activities.
- **Knowledge retrieval chatbot:** Developed knowledge retrieval chatbot powered by generative AI. This tool enhances domain training activities with multilingual content. Additionally, a similar solution has been introduced to streamline bespoke business processes, reducing manual workload.

To support the Hong Kong Government's green and sustainable finance initiative, CLP collaborates with banks, certification bodies, and partners to create synergy and facilitate customers' access to green and sustainable finance solutions:

- Sustainability-Linked Loan (SLL): Collaborates with banks, certification bodies, and corporates to assist in setting sustainability performance targets.
- SME Low Carbon Rewards Programme: A joint initiative with a bank and mall developer to encourage SMEs to adopt low-carbon operations and enhance sustainability practices.
- Community Energy Saving Fund (CESF): Established to provide funding and sustainability services to support energy-saving projects.

These initiatives involve a huge amount of data exchange between CLP and various entities, hence a secure, consistent, reliable and flexible data exchange gateway is indispensable for supporting different trials with low setup cost and short lead time. To address this need, CLP has developed the Reusable Data Exchange Gateway. This gateway has already been leveraged in multiple trials with different banks and organisations, enabling seamless and secure data communication to support the above innovative initiatives.

Case Study

Innovation Carnival 2024: Inspire and empower through innovation

The Innovation Carnival 2024, aligned with CLP's three-pillar strategies, ran from April to November, fostering collaboration and innovation in the utilities sector across the CLP Group. Roadshows at various CLP locations, reflecting our commitment to community involvement and reinforcing CLP's leadership in sustainable innovation.

Spotlight on Achievements

1. EV Charging Hub (Winner):

The final round was concluded in a CLP-wide poll, garnering 272 votes, 73 comments and 736 video views. The "EV Charging Hub" team emerged as the winner, receiving over 56% of the total votes.

Driving decarbonisation and enhancing user experience

By 2025, CLP*e* has installed over 350 EV chargers across 40+ locations in Hong Kong. To improve customer experience, the team proposed new CLP App features powered by NLP, Machine Learning and Generative AI, enabling seamless access to charger details, user manuals and promotions.

AI-powered chatbot: smarter, faster support

The AI-powered chatbot will be capable of:

- **Intent recognition:** Recognise user intent for accurate, instant responses.
- **Autonomous reasoning:** Use case histories to provide solutions and clarify user needs.

This functionality will significantly reduce manual effort and improve response times, ensuring a smoother experience for EV users.

Next steps

The team targets to begin in-depth solution design for these enhancements in 2025, marking a key milestone in CLP's journey to deliver smarter, customer-focused solutions.

2. Battery AI optimisation (2nd place):

This innovative solution harnesses advanced analytics to deliver actionable battery insights, optimise performance, enable predictive maintenance and extend battery lifespan for CLP users and clients. In November 2024, an initial trial analysed data from two CLP battery systems to assess health and recommend strategies for improved efficiency and reliability.

Moving forward, the team will continue refining and enhancing the algorithm to maximise its effectiveness.

3. Battery all-in-one platform (3rd place):

To address challenges in CLP*e*'s BESS operations, such as decentralised monitoring and limited remote control, the team designed an advanced platform to improve efficiency (20% faster operations), enable real-time monitoring via an interactive dashboard and simplify multi-site management.

The Innovation Carnival 2024 exemplifies CLP's commitment to fostering a culture of innovation, driving forward-thinking solutions in the energy sector.

Cyber security

Alongside the Hong Kong-based Security Operations Centre (SOC), which provides 24/7 security monitoring, reporting and response, the SOCs in CLP China, Energy Australia and Apraava Energy have also developed during 2024. The Incident Response Process and Business Continuity Planning have also been enhanced to speed up the responses to both IT and OT cyber security events.

Given that cyber security is one of CLP's top-tier risks, it is regularly assessed and reported to senior management through the risk management process. Cyber security risks to CLP Group, its investments and business interests are managed in line with CLP's established Risk Management Framework. Group Security offers business asset owners and project managers a Cyber Security Governance and Risk Management framework which helps them identify, assess and manage cyber security risks in line with their overall business objectives. Evidence of treatment action is gathered and the Group Security team track progress, re-assessing risks periodically or when there is significant configuration change. Appropriate internal and external validation and assurance (e.g. 'red team' cyber simulations) supplement the risk-based approach and CLP closely collaborates with broader government and law enforcement drills on a regular basis.

Work on cyber security has also continued throughout the year in Mainland China, India and Australia. CLP plans to continue to enhance its processes, personnel and technology capabilities and the Company is committed to retaining and acquiring the expertise required to execute them effectively.

Security management

The Group Security Policy lays out CLP's overall approach to minimising risks to people, including employees, contractors, customers and the public and managing other business risks to acceptable levels. Cyber security-related standards are regularly updated to take into account technological advances, changing legislation and emerging standards of good practice.

The Group Security Policy addresses the following areas

- **Integrated and centralised organisation and governance** – CLP has developed an integrated, enterprise-wide Group Security function within CLP Digital to provide security support to all areas of the business.
- **Standards and guidelines** – CLP applies standards, guidelines, procedures and processes to manage and monitor the organisation's regulatory, legal, risk, environmental and operational requirements in line with recognised industry standard.
- **Understanding the threat** – CLP ensures decisions related to the application of security measures are appropriately informed and, wherever possible, intelligence driven.
- **Communications and awareness** – CLP continuously enhances the security awareness and knowledge of its employees and contractors with the objective of encouraging positive security behaviour.
- **Technical domain** – CLP ensures that robust operational security protocols are developed, applied and maintained.
- **Liaison** – CLP maintains constructive and trusted security relationships with relevant government agencies and industry bodies to ensure speedy and effective cooperation when the need arises.

The Group Security team was established to ensure that CLP's cyber and physical security capabilities and efforts complement each other. The team gives CLP in-house capabilities across the full range of security skillsets. Regular reports are provided by Group Security to the Board's Audit & Risk Committee (ARC), providing assurance that adequate risk management is in place and that appropriate remedial action is being taken where needed.

Emergency and crisis management

CLP has continued to enhance its crisis management capability to ensure the organisation can respond promptly and effectively if an incident occurs.

From a crisis management perspective, the emphasis of the Company has been on maintaining and enhancing capability. Initiatives continued in the year include:

- Assessing potential replacements for the now established interim solution for the Crisis Communications Billboard (CCB 2.0) which was rolled out in early 2024;
- Rewriting the Group Crisis Management Plan to reflect the CLP Group's move to its new Headquarters office building in Kai Tak;
- Supporting CLP Power in its drafting of business continuity plans and playbooks to support new scenarios; and
- Creating an upper tier Group Business Resilience Policy and framework to encompass them.

Crisis management during extreme weather events

CLP has strengthened safeguards, increased contingency measures and enhanced monitoring to ensure its electricity supply systems remain as safe and reliable as possible before, during and after extreme weather events.

In Hong Kong, more than 30% of CLP Power's transmission network comprises overhead lines, which are more susceptible to adverse weather, lightning strikes and external interferences such as fallen trees that could affect power supply reliability. CLP Power has stepped up inspections of the power supply equipment in the network ahead of the typhoon season, using helicopters and drones to examine transmission towers and overhead cables and pruning trees that may potentially interfere with overhead lines. Floodgates have been installed at substations which are at risk of flooding during severe weather and emergency drills have been conducted to ensure staff's readiness to respond swiftly and effectively to typhoon and storm impacts.

Extreme weather events could also result in voltage dips and even power interruptions, causing inconvenience to customers. CLP Power's System Control Centre closely monitors grid operations throughout typhoons and storms, while emergency teams and additional personnel are dispatched promptly to restore power to affected customers wherever necessary.

CLP Power's 24-hour Customer Service Hotline service has been bolstered to enhance responsiveness during extreme weather events. CLP Power also maintains close coordination with relevant government departments and communities across its supply area during typhoons or power incidents to facilitate timely responses and coordinate power restoration efforts.

Tailored to different geographies, asset types and locations, CLP has also implemented a range of measures in the Group's value chain to strengthen its resilience to climate change. Examples of the Group's climate-related adaptation measures are summarised in the table on the next page.

Relevant part of the value chain	Climate-related adaptation measures
Supply chain	Diversify fuel supply. For instance, Hong Kong's offshore liquefied natural gas terminal would assist CLP Power in diversifying the natural gas supply.
Generation	**To address extreme heat and increased temperature:** • Maintain cooling equipment in good condition. • Refurbish cooling towers to improve efficiency. **To address water shortage and drought for thermal plants:** • Use sea water or recycled water for cooling to mitigate risks from freshwater shortage. • Where possible, work with local authorities to construct water transfer pipelines from nearby sources and water treatment facilities to secure water supply. **To address flooding:** • Ensure protection walls for coal yards and run-off water storage are in place. • Deploy asset-specific anti-flooding measures, including water pumps and piping for water discharge, ground-level drainage systems, sea walls along power station shorelines, flood gates and flood barriers. • Implement additional coverage via tarps, grass and tree planting and drainage works to avoid soil erosion. • For assets downstream of dams, continually control and monitor river rate flow. Maintain regular communications with local authorities on flood discharge schedule and flowrate. **To address changing weather patterns:** • Commissioned a climate model to estimate the future performance of wind farm projects. The data collected can be used to support investment decisions. • For CLP-operated wind farms, conduct regular wind resource forecasts based on the latest wind plant performance data • Maintain a Bushfire Mitigation Plan in Australia. **To address tropical storms:** • Critical structural assessment against typhoons of 360km/h three-second wind gust at a height of 500m was conducted. • The continuous ship and grab unloaders will be anchored by tie downs during a hit of super typhoon.

Relevant part of the value chain	Climate-related adaptation measures
Transmission and distribution	**To address extreme heat and increased temperature:** • Have operational guidelines in place that consider operations under high temperatures (of up to 45°C) **To address flooding:** • Continue flooding assessment for intensified heavy rain scenarios and mitigation measures for new and existing substations. **To address tropical storms:** • Continue reinforcement of transmission overhead line tower structures. • Strengthen foundations of transmission towers, and stabilisation of nearby slopes. • Enhance automatic detection and isolation of faulty sections of distribution overhead line circuits and use smart meter supply interruption data to proactively contact customers and prioritise recovery. • Implement predictive vegetation management to minimise risk from overgrown vegetation.
Retail	• Provide necessary support to customers directly impacted by extreme weather events through business continuity planning. • Through engagement events, inform customers of initiatives already undertaken to increase system resilience.
Condition monitoring and service recovery	• Install online condition monitoring systems for switchgear and transformers to allow real-time monitoring and detection of incipient fault conditions. • Develop intelligent management system (Grid-V) to manage key power facilities, which can identify potential risks in the environment in real time, issue alerts to engineers. • Enact emergency management procedures and response plans across all operations, and conduct regular drills. • Establish a typhoon response protocol and coordination system. Conduct regular drills and post-typhoon reviews to ensure smooth execution of contingency plans. • Utilise the CLP System Control Centre, providing round-the-clock surveillance of network status, enabling prompt mobilisation during power outages. • Utilise the emergency restoration system, enabling rapid construction of temporary masts to expedite restoration of 400kV overhead line circuits. • Enhance the communication capacity of customer services; in particular, post-incident customer communication for energy transmission outage. • Establish in-house unmanned aerial vehicle teams for post-typhoon surveillance inspection. • Reserve capacity, fuel switching or power import in case of emergency via the CLP Business Continuity Plan.

Our people

Highlights

Stakeholders' areas of interest

- Workforce size and mix
- Fair and ethical work practices
- Fostering diversity and inclusion
- Talent and skills development
- Human rights due diligence
- Supporting employees to thrive in change
- Health, Safety and Environment management
- Occupational health and safety

Relevant sustainability agenda

- Future-ready workforce

Outcomes for stakeholders

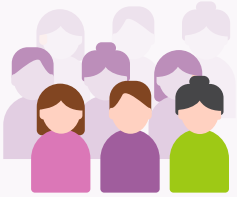
30.0% of leadership roles are occupied by women

13.3% of engineers are occupied by women

15.4% of training hours dedicated to upskilling and reskilling

Group Diversity & Inclusion strategy refreshed to be more holistic and market-aligned

A cross-function Human Rights Due Diligence conducted



First Diversity and Inclusion Awareness Week launched reaching over **4,500** staff

Refreshed **Health, Safety and Environment Strategy** launched

As the energy industry undergoes rapid transformation, CLP is equipping its workforce with the skills needed for career progression and adaptation to industry changes by investing in learning and development programmes. Valuing employee well-being, CLP ensures health and safety through comprehensive management systems and programmes. CLP also promotes diversity and inclusion, and is implementing initiatives to build a diverse workforce and an inclusive culture. Engaging employees in these efforts is creating a motivated and committed workforce, driving the company's success and contributing to its sustainability goals.

Workforce size and mix

GRI reference: 2-7, 2-8

CLP engaged over 15,100 employees and contractors on a full-time equivalent basis at the end of 2024.

Across CLP's markets in Hong Kong, Mainland China and Australia, the total number of employees increased though the total workforce slightly dropped, which is due to lower contractor activities primarily in Hong Kong and Australia. Utilisation of service contractors is lowered, reflecting our projects in the pipeline and outsourcing of activities with higher productivity driven by process optimisation and digitalisation.

Employees and contractors by region

	Employees			Contractors			Total	
	Average FTE (a)	Permanent %	Fixed-term contract %	Labour supply (b)	Service contractor (c)	Contractors sub-total	Total workforce (a)+(b)+(c)[1]	Contractors in total workforce %
Hong Kong	5,218.9	82.6	17.4	829.1	4,212.2	5,041.4	10,260.3	49.1
Mainland China	743.5	68.3	31.7	25.5	502.4	527.9	1,271.4	41.5
Australia	2,258.0	95.2	4.8	118.5	1,203.0	1,321.5	3,579.5	36.9
Group total[1]	**8,220.4**	**84.8**	**15.2**	**973.1**	**5,917.6**	**6,890.7**	**15,111.2**	**45.6**

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

Fair and ethical work practices

GRI reference: 201-3

CLP has furthered its efforts to operate ethically and fairly and has continued to receive external recognition for its policies and practices relating to wages and retirement.

CLP's Group Labour Standards outline CLP's commitment to international principles and conventions. They also provide details of how CLP delivers on this commitment through company-wide minimum standards on critical working conditions, including fair and decent work and working hours and the basic rights of employees in the workplace. These standards have also been embedded into procurement requirements for labour suppliers in Hong Kong and CLP has strengthened the tracking and monitoring of its temporary manpower resources. Relevant expectations of labour practices and human rights have been embedded in the Supplier Code of Conduct and communicated to CLP's suppliers.

In 2024, CLP did not identify any operation or supplier as having a significant risk of child labour, young workers exposed to hazardous work, or forced or compulsory labour and no breach of laws and regulations in relation to child labour and forced labour was recorded. Additionally, no Group operation was identified in which the right to exercise freedom of association and collective bargaining was violated or at significant risk.

In Australia, in line with its obligations under the Australian Modern Slavery Act 2018, EnergyAustralia submitted its fourth Modern Slavery Statement to the government. In 2024, EnergyAustralia implemented a Supply Chain Risk Management tool, Trust Your Supplier (TYS). This tool allows new suppliers to be onboarded and existing suppliers to be invited through registration, and includes questionnaires about employment standards and human rights. The tool provides ongoing risk monitoring for all suppliers referencing data including adverse media, sanctions and regulatory action. Modern Slavery Risk continued to be low in EnergyAustralia's operations.

With the launch of its refreshed performance management system, in 2024, CLP further strengthened its wage communications with employees in Hong Kong and placed greater emphasis on the linkage between rewards and performance. CLP regularly reviews its remuneration policies and practices to ensure competitive and fair pay. This is achieved through independent external assessments of job size and complexity together with external pay range benchmarking, allowing pay differentials to reflect only each employee's experience, performance and certain market factors. Performance and pay outcomes are reviewed internally and externally for gender bias and differences in the average pay between females and males are moderate, except for some technical roles which are typically dominated by male team members with higher length of service. CLP offers entry-level salaries that are well above statutory minimums, demonstrating our commitment to providing wages that support employees and their families.

Fostering diversity, equity and inclusion

Our approach

CLP believes having a diverse workforce and an inclusive culture fosters higher innovation and performance, and enhances its ability to contribute effectively to the many communities it operates in. To this end, CLP set aspirational targets in 2016 to significantly improve female representation in leadership and engineering and to ensure equal pay for work of equal value and to ensure that CLP meets all relevant local compliance and disclosure standards.

As CLP has continued to evolve with an expanding geographic footprint and increasing diversity in its technologies, products and services, employee base, customers and communities served, the Group Diversity & Inclusion Strategy has been refreshed to enhance its alignment with evolving organisational needs, market conditions and stakeholder expectations.

Group diversity, equity and inclusion key focus areas

Group Diversity, Equity and Inclusion Key Focus Areas

Diversity	Equity	Inclusion
Diversity as a source of talent and innovation	Fairness and meritocracy in policies and practices	Inclusion and belonging in our workplaces
Gender Diversity: increasing Women in Leadership and Women in STEM (encompassing Women in Engineering). **Diversity of Thinking:** actively seeking different perspectives and ideas. **Local Understanding:** ensuring deep understanding of local interests and needs that goes beyond representation.	**Equal Pay:** for work of equal value. **Equal access:** to job and development opportunities. **Merit-based:** in employee recognition and rewards. **Fair:** in work practices and benefits.	**Belonging:** our people feel empowered to participate fully and bring their best selves to work. **Safety and Wellness:** provide safe, healthy and secure environments fostering a sense of wellness and belonging, free from discrimination and harassment.

Policy framework underpinned by overarching Position Statement

Refreshed metrics & targets (gender representation actual, with a target to improve Y-o-Y)

The refreshed Strategy has three pillars with greater weight given to continuous improvements in gender diversity, encouraging female participation in STEM-related roles, diversity of thinking and local understanding, meritocracy and a 'safe to speak up' culture. These changes reflect CLP's evolving business nature, talent market conditions and the desire of team members for fairness and opportunities to progress.

Metrics, targets and disclosures will be aligned accordingly in the next reporting cycle, in line with market practice and the refreshed direction. From January 2025, CLP will measure and report:

- Continuous improvement in Women in Leadership (actual percentage, year on year progression)
- Continuous improvement in Women in STEM roles (actual percentage, year on year progression)

Reporting on family-friendly and employee wellbeing practices will be enhanced. CLP's focus on equal pay for equal work and wage fairness will be maintained and measured through external Fair Wage reviews, internal reviews of merit increase and bonus practices, and consistent externally-facilitated job evaluations.

Policies & Practices

Investment in and commitment to progress will continue through targeted programmes encouraging more young women to move into STEM careers, getting more women into the workforce, as well as wellness and family-friendly policies to help employees better integrate their work-life commitments.

Standards and procedures

CLP is a signatory to the International Energy Agency's Equal by 30 initiative, a commitment by public and private sector organisations to work towards gender equality in the energy sector by 2030 and to the Women's Empowerment Principles established by the UN Global Compact and UN Women in India. Local Diversity and Inclusion Councils operate in Hong Kong, India and Australia to drive the Company's efforts on diversity.

CLP's human resources policies include initiatives to encourage the retention of employees, such as flexible work arrangements, maternity leave and other family-friendly policies and benefits. CLP's recruitment processes are designed to be fair and non-discriminatory. In Hong Kong, its processes follow the Equal Opportunities Commission Code of Practice and include the use of consistent selection criteria. In other parts of the Group, CLP complies with local legislation and codes of practice on recruitment. When conducting senior level searches, CLP also requires external recruitment firms to identify candidates with diverse backgrounds, in line with the Group's values.

Monitoring and follow-up

Gender diversity progress is reviewed as part of CLP's regular general management and engineering talent reviews. The Board Human Resources & Remuneration Committee reviews progress against diversity targets annually. CLP also conducts regular reviews to identify any gender pay gaps and to ensure equal pay for work of equal value.

Initiatives and progress

GRI reference: 202-1, 202-2, 405-2

Management has continued to leverage a variety of targeted programmes and activities to drive improved outcomes in diversity and inclusion.

As of the end of 2024, the percentage of Women in Leadership roles was slightly increased (2024: 30% vs 2023: 29.1%), while Women in Engineering was maintained (2024: 13.3% vs 2023: 13.3%). Over the past two years, the number of female graduate trainees recruited in Hong Kong has nearly doubled as part of an enlarged intake. Many female graduate hires had previously participated in CLP's Female Engineering Student Mentoring Programme or had received an Engineering Study Award to support their final-year studies.

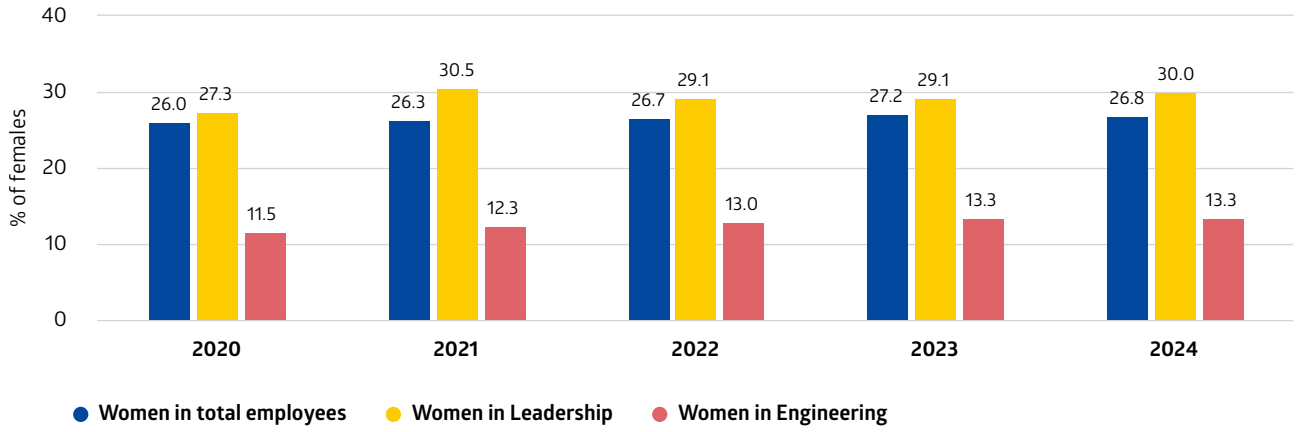
The percentage of women identified in succession pipelines, high potential pools and development programmes was around 30%, in line with last year. In Hong Kong, an empowerment programme for women leaders called *'Taking the Stage'*, aimed at building confidence and executive presence, has continued. In addition, selected female executives participated in Board preparation programmes and career facilitation dialogues. CLP also empowered employees to lead a Gender Equity support network to increase peer-to-peer engagement and topical learning.

New initiatives included the first 'D&I awareness week', which saw over 4,500 staff participating in various events, including workshops and learning sessions, with topics ranging from 'inclusive languages' to navigating careers through different life-stages. A new 'Male Allies' programme has been launched to help male colleagues develop greater awareness, new mindsets and skillsets in relevant areas.

Across the Group, EnergyAustralia continued to conduct activities to foster diversity, equity and inclusion as part of its Diversity, Equity & Inclusion (DEI) Strategy. EnergyAustralia has maintained its partnership with the Champions of Change Energy coalition and contributed to key initiatives including efforts to close the gender pay gap, strategies to increase female representation in traditionally male-dominated fields and enhancing gender balance within its talent pipeline. Since 2018, EnergyAustralia has continued to maintain a zero gender pay gap across all like for like job roles, reflected in its annual Workplace Gender Equity Agency reporting and analysis.

Female representation in CLP

Gender workforce participation remained similar in 2024, taking population changes into account.



Talent and skills development

Our approach

GRI reference: 404-2, 404-3

CLP's ability to transition to a zero-carbon and digitally enabled future requires systematic organisational development, including a fostering of the talent and skills required to compete effectively in key markets.

CLP has a comprehensive training and development framework in place, aligned with its business objectives, to help employees perform competently in their current roles and prepare them for future business challenges and opportunities. Investment is also being made in helping young people to develop and in building future energy industry capability that is inclusive and accessible to all.

Standards and procedures

CLP seeks to attract, retain and develop a diverse and multi-generational workforce, to develop new skills and share talent effectively across its portfolio of businesses. Internal development efforts are supplemented by external recruitment for new-to-CLP skills focused on capabilities in innovation, digital and renewables.

Investing in youth and early careers

To address the need for future skills and an adequate supply of talent in a competitive labour market, CLP must offer an attractive employment proposition and invest significantly in efforts to attract young people to the energy industry and invest in careers at CLP across different functional disciplines and levels.

CLP provides meaningful work, training and development opportunities and an open inclusive supportive workplace. Opportunities for young people to accelerate their careers in Hong Kong including mentoring programmes, partnerships with local and overseas institutions for work placements for secondary and tertiary-level students, internships for fresh and recent graduates across a range of disciplines, technical apprenticeships, operational cadetships and the CLP Graduate Trainee Programme.

The CLP Power Academy in Hong Kong also offers programmes for school leavers and working adults looking to pursue careers in the energy industry. CLP participates in youth development schemes such as the HKSAR Government's Greater Bay Area Youth Employment Scheme. In Mainland China, CLP supports the efforts of local technicians and engineers to attain professional engineering qualifications offering upward talent and social mobility opportunities. To date, CLP has helped more than 2,500 students through the Academy since it was founded in 2017.

Enhancing performance management as part of building a high-performing organisation
CLP has revised its performance management system in core markets, to provide enhanced feedback to team members to support their development as well to increase performance differentiation. 100% of CLP's employees are covered by annual appraisal review processes. Leadership expectations and competencies have also been refreshed to set out guidance on the behaviours and capabilities expected of employees.

Maintaining core skills and developing new skills for the future
Skills and safety training is provided to develop technical and functional competencies and behaviours. All CLP employees participate in an annual performance and development cycle which provides ongoing feedback and coaching and delivers clarity in terms of expectations of their behaviour and performance, understanding of how they contribute to CLP's objectives, and support for individual development needs. Cross-functional and 360-degree feedback is included where appropriate. Through this process, CLP also recognises and rewards individual performance and success. Employees have the opportunity to continuously learn and build skills via online and face-to-face learning resources and programmes and can access company support for employee-initiated self-development, including support for job relevant degree programmes or certifications.

Developing leaders
CLP's corporate strategy execution requires a diverse, resilient and agile leadership team with strong stakeholder management and change leadership skills to deliver growth, and high-quality succession planning in place for leadership roles. CLP remains committed to filling most of its leadership roles internally.

Strategic, general management and talent development programmes are used to develop future leaders. Additionally, digital online development programmes are accessible for managers. Externally CLP has key partnerships with leading academic institutions, including the International Institute for Management Development (IMD), the Tsinghua School of Economics and Management, the Chatham House and L'École Polytechnique Fédérale de Lausanne (EPFL) in developing senior leaders. Expert briefings and workshops are conducted on the latest global economic, political and technological trends, including those relating to energy transition, digital disruption, wellbeing and resilience.

Monitoring and follow-up
CLP conducts regular talent and capability reviews, underpinned by employee analytics, focused on general management, engineering and digital streams. These reviews monitor and follow up on actions to address current and future gaps and opportunities, including the progress of development programmes, recruitment campaigns, initiatives to strengthen gender diversity and cross-business assignments.

The effectiveness of this approach is measured against a range of key performance indicators, including retention of key talent, turnover, diversity and employee engagement measures, using developed employee analytics tools. The Board Human Resources & Remuneration Committee reviews talent and capability progress annually.

CLP continues to invest in youth development, core skills training, leadership development and talent pipeline programmes, in training systems and frameworks, ensuring future talent and skills supply.

Initiatives and progress

CLP inducted 33 trainees with diverse backgrounds into the CLP Group Graduate Trainee programme in 2024, of which 24% were female and 24% were from Mainland China.

CLP maintained its recruitment channels with a diverse pool of local, overseas and Mainland China institutions, resulting in significantly higher numbers of applicants from Mainland graduates. Inducted trainees participated in comprehensive training and other practical learning from internal mentors, senior leaders' interactions and job rotations.

Other development programmes for engineers and managers at other career levels progressed, strengthening CLP's career pipelines. Engineering talent rotations across Hong Kong and Mainland China have continued, while CLP's Energy Transition Experience Programme continued to give exposure to our people about the changing landscape of the energy business and opportunities in Mainland China.

To support the development of CLP digital talents and build their capabilities, targeted initiatives such as Digital Talent Day and the Digital Trainee Programme were organised. In addition, #Leaders of Future, one of CLP's leadership development programmes, has widened its scope to develop engineering, digital and commercial talent and now provides diverse developmental training by IMD faculty and other experts on situational leadership, strategic thinking and change topics.

Equipping our workforce with the skills necessary to thrive in the future is increasingly important. Reflecting CLP's commitment to building a sustainable and future-ready workforce, following the holistic review of CLP's sustainability targets in 2024, CLP has determined to commence tracking the percentage of training resources specifically devoted to upskilling and reskilling initiatives. This new metric will come into effect in 2025 and be tracked across CLP's businesses. This ensures CLP's employees are not only prepared for the challenges of tomorrow but are also empowered to excel in their current roles and future career paths. As a first step, figures for 2024 are being reported and are available in the ESG Data Hub.

Human rights due diligence

Our approach

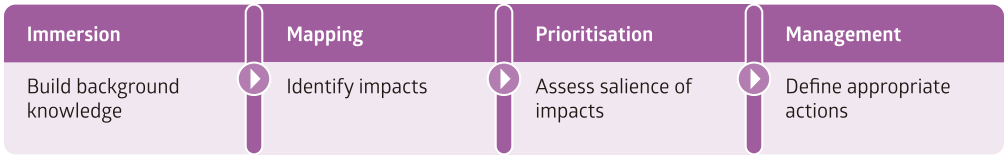
GRI reference: 2-23, 2-25, 407-1, 408-1, 409-1

CLP has demonstrated its commitment to upholding human rights by implementing into everyday operations and practices the Group's Value Framework, Code of Conduct, Supplier Code of Conduct, Labour Standards, and annual Modern Slavery Act Statements from EnergyAustralia, among others.

The Company places significant emphasis on managing various human rights matters, such as occupational health and safety, child labour, labour union engagement and diversity, and equity and inclusion (DEI). In its investment decision-making processes, CLP conducts thorough due diligence, including assessments of human rights considerations.

In 2024, CLP raised the bar by undertaking a comprehensive due diligence process to assess human rights risks across functions and regions in accordance with the United Nations Guiding Principles. This assessment evaluated non-financial impacts in areas like employment practices, environmental concerns, community relations and other stakeholder impacts. Subsequently, action plans were developed to mitigate the identified risks effectively.

Human rights assessment process overview



Human rights risks were assessed and mapped through extensive desk-based research, based on an analysis of CLP's current human rights management status quo. Interviews with internal stakeholders were conducted to review and gather perspectives on the initial findings with the aim of identifying salient human rights risks for prioritisation.

A total of 12 salient human rights topics were mapped across CLP's value chain. These topics underwent detailed risk assessments, providing valuable insights for developing risk management measures. Below is a summary of the salient topics identified, and respective level of management systems currently in place:

Salient human rights topics identified

		Level of management systems		
		Supply Chain	Development & Construction	Operations
Workers	Occupational Health and Safety	●	●	●
	Forced Labour and Modern Slavery	●	●	-
	Working Conditions	●	●	●
	Non-Discrimination and Diversity, Equity and Inclusion	●	●	●
	Child Labour and Juvenile Work	●	●	-
	Freedom of Association and Collective Bargaining	●	●	●
Community	Community Impact	●	●	●
	Health Environment	●	●	●
	Tribal/Indigenous Peoples' Rights	●	●	-
Cross-cutting	Just Transition and Responsible Decommissioning	●	●	●
	Grievance Mechanisms and Access to Remedy	●	●	●
	Privacy and Responsible Use of Technology	●	●	●

● High ● Medium ● Low - Not applicable

Notes: The order of the identified human rights topics in each category follows the prioritisation of saliency across CLP's value chain.

Evaluating the mapped human rights impacts enables the identified topics to be prioritised for developing follow up action plans based on their relative saliency. Saliency is determined by considering the scope, scale, remediability and likelihood of potential harm. High saliency of a human rights topic means that the topic is particularly prominent due to its potential for negative impact. In the table above, the order of the identified human rights topics in each category is based on the priortisation of saliency across CLP's value chain.

Furthermore, there is an additional layer of analysis of organisational capacity for impact mitigation, which reflects CLP's ability to mitigate salient human rights impacts. This is based on how closely the company is connected to the impact, the level of control over key factors influencing the impact, and current management practices.

Based on the due diligence results, the key highlights and action plans formulated to manage human rights-related risks are as follows:

- **Establish a standalone policy on human rights and just transition**
  In 2021, CLP implemented Group Labour Standards to define its commitments regarding critical working conditions and basic rights of employees in the workplace. This standard is intended to align CLP's operation to international standards, namely, the United Nations Guiding Principles on Business and Human Rights, International Bill of Human Rights and International Labour Organisation's Declaration on Fundamental Principles and Rights at Work.

  Given that three community-related and three cross-cutting topics have been identified among the 12 salient human rights risks, it has become evident that it is appropriate for CLP to develop a standalone Group-level policy on human rights. This policy will ensure that human rights matters are addressed clearly and comprehensively as part of due diligence efforts. The standalone policy will align with UN Global Compact principles inclusive of just transition elements and taking into account local context. In addition, detailed local implementation strategies will be formulated to ensure robust tracking, assessing and feedback mechanism are in place.

  Occupational health and safety is identified as the most salient labor rights topic due to the nature and potential workplace hazards in the context of power generation operations, servicing and maintenance of electricity lines, and other similar activities. This aligns with CLP's priorities to have put in place a robust safety management for its own operation. Meanwhile, CLP will also emphasise the management of third-party workforce labor conditions at all CLP sites in the standalone human rights policy.

- **Continue to strengthen supply chain risk management as a part of its 3-year roadmap on sustainable procurement**
  Another result of the analysis is that most topics with the highest salience levels are mapped under the supply chain. This is because, in the electric utilities sector, sourcing of fuels and certain procurement categories, such as electronic components, are particularly exposed to human rights impacts. CLP is committed to collaborating with its suppliers to meet its expected standards in human rights. The Company also outlines requirements in its Supplier Code of Conduct (SCoC) that suppliers must adhere to, particularly on topics with high saliency, such as occupational health and safety, the prohibition of forced and child labor, and non-discrimination. With approval from the Sustainability Executive Committee, a sustainable procurement programme spanning year 2024 to 2026 is underway to advance supply chain sustainability. For more details, please refer to the Supply chain sustainability management section.
- **Review our engagement activities with third-party contractor workforce and wider community in project sites**
  CLP believes in the importance of minimising any adverse impacts or potential effects on local communities living near CLP's project sites and the third-party contractors working at these locations. Existing processes for engagement activities with contractors and local residents will be further reviewed to ensure proper management of labour conditions, land use, construction activities, as well as the topics mapped with high salient level.
- **Invest resources in developing human rights knowledge**
  Recognising the importance of human rights-competence within its workforce, CLP will allocate resources towards developing human rights expertise and bolstering capacity across the Group. This aims to cultivate a foundational grasp of human rights principles and business responsibilities among a broader set of internal stakeholders, facilitating their ability to effectively implement and reinforce the human rights-related best practices.

Supporting employees to thrive in change

GRI reference: 401-2, 401-3, 404-2

CLP is committed to developing an engaged and high performing workforce and helping all its people to thrive in a period of change brought about by energy transition.

Offering flexible, family-friendly working arrangements
CLP aims to support employees through all their life stages, from those starting their careers to those reaching retirement.

In recognition of its efforts in providing sustainable retirement benefits, CLP also received awards for "Hong Kong Best ORSO (Occupational Retirement) Scheme" and "Hong Kong Best Member Communications" in 2024, by Asia Asset Management. These awards are given to companies in the Asia Pacific region for their excellence in managing retirement benefits for employees. CLP has been a winner for several consecutive years. CLP was pleased to receive the Best All-round MPF Employer Award from the Hong Kong MPF Authority last year. Together with other recognitions received, these reaffirmed CLP's continuous efforts to support the financial wellbeing of its employees through the retirement schemes and services.

People at different life stages benefit from different working arrangements. To this end, CLP promotes family-friendly leave policies and flexible working arrangements and offers a range of leave options to help its people achieve a good work-life balance. These include parental and adoption leave, volunteering leave and study leave. Where practicable in CLP's offices and premises, lactation facilities are provided for mothers in the workforce.

CLP has been implementing various family-friendly measures that help its staff achieve a healthy work-life balance, including implementing flexi-hours, creating a part-time working policy and a working from home policy, and providing various leave entitlements beyond the statutory requirements, such as wellbeing leave, marriage leave, maternity leave, paternity leave and adoption leave.

CLP has enhanced its flexible work policies and online collaboration tools to enable new ways for employees to connect virtually and perform their roles better. Working options have been made more flexible, resulting in an increased take-up of new part-time work options and work-from-home arrangements.

CLP continued to provide flexible working arrangements and family-friendly leave options for employees. In 2024, CLP introduced a wellbeing leave policy in its Mainland China operations. Across the Group, CLP recorded over 6,700 employees utilising various types of wellbeing leave during the year. CLP's parental leave offerings are also vital in helping employees balance personal and professional responsibilities, with close to 550 employees taking parental leave (maternity, paternity and even adoption leave where applicable) during the year. Notably, almost 97% of those who took leave returned to work afterwards. This high return rate underscored the effectiveness of CLP's support for employees at different life stages, reflecting both its commitment to their wellbeing and the dedication of its workforce.

Non-salary benefits & programmes in place	2024
Medical insurance (covering dependents)	✓
Flexible work practices	✓
Part-time working policy	✓
Remote work options	✓
Paid parental leave	✓
Wellbeing leave	✓
Electricity allowance	✓
Education allowance	✓
Leisure & cultural initiatives	✓
Home Loan program	✓
Scholarship to employees' children	✓
Employee Assistance Program	✓

Investing in health, wellbeing and strengthening resilience
CLP provides comprehensive support for its employees' physical, social, financial and mental wellbeing. CLP is working towards initiatives to manage psychological risk at work and promoting mental health to all levels of staff. Confidential employee assistance programmes are also offered to assist employees encountering work or personal issues and needing professional support.

CLP has received various awards in Hong Kong and Mainland China in recognition of its efforts to promote employee wellbeing, including Best Corporate Health Initiative awarded by the National Health Commission of China for the launch of innovative initiatives with measurable impacts on employee health and productivity, the Mindful Employer Award from the Mental Health Foundation, and the Excellence Award at the 19th Occupational Health Award, given by the Occupational Safety and Health Council in Hong Kong.

Keeping everyone informed and engaged
CLP's employee relations approach focuses on establishing and maintaining strong working relationships with employees, being proactive in consulting on any workplace changes and providing opportunities for employees to raise concerns. CLP employees have the right to join organisations and professional bodies of their choice. CLP respects and fully complies with all legal requirements with regards to union membership and collective bargaining. In Australia, CLP engages in collective bargaining with nearly 800 employees through certified enterprise bargaining agreements approved by the independent workplace relations tribunal, the Fair Work Commission. These agreements cover most terms and conditions of employment, including notice periods, provisions for consultation and dispute resolution.

To better understand its employees' views, CLP commissions independent external consultants to conduct regular employee engagement surveys. CLP strives to create a great place to work where everyone feels engaged and can participate fully. Towards the end of 2024, CLP conducted an all employee listening survey in Hong Kong and Mainland China, which enjoyed an industry-leading participation rate of 92%. The learnings from this will inform CLP's culture and engagement plans in 2025.

In Hong Kong, joint consultative committees have been established which act as an additional channel of communication between the Company and employees' representatives. Employee benefits are regularly benchmarked to ensure that appropriate remuneration packages and staff support are provided.

Developing a more agile organisational culture through new ways of working day-to-day is critical for future success. The launch of CLP's refreshed Value Framework and 'new ways of working' campaign in 2024 were key to activating such a culture and mobilising change in Hong Kong and Mainland China.

Culture roadshows and workshops were delivered to targeted employees, providing opportunities to engage and learn how to exercise 'Care, Excellence and Responsibility' daily, and embedding new habits across CLP's operations. As part of the change, new office environments in Hong Kong have become available that facilitate greater collaboration in the workplace.

Read more on CLP's refreshed Value Framework

Supporting employees and communities affected by energy transition or business restructuring
CLP provides comprehensive support to employees whose jobs are affected by business change or restructuring. Support is tailored to individual needs and includes training and skills development, career planning, assistance in redeployment and financial counselling. To this end, CLP has actively engaged with local stakeholders from employee representative organisations and local educational institutions to ensure that study opportunities are available to help meet the needs of its people and the region's new and emerging industries.

Following the announcement of the 2028 closure of Yallourn Power Station in 2021, EnergyAustralia implemented the Yallourn Workforce Transition Programme to provide career transition support to employees. The comprehensive support programme includes components covering employee engagement, training, re-skilling and accreditation, financial advice, job search skills and other specialist support.

In 2024, the Yallourn Transition Team continued to provide comprehensive support to employees. Key highlights included a well-attended Careers & Training Fair, attended by over 300 workers from the station and mine who engaged with training providers and potential job partners. To date, close to 250 Individual Transition Plans have been created and over 600 1:1 career coaching sessions have been held. The year 2024 saw the highest number of learning and training requests received, and so far, the number of training activities endorsed and financially supported under the Transition programme has reached 120. Progress and support will continuously be managed to facilitate the transition.

Case Study

CLP's first Diversity and Inclusion Awareness Week 2024

At CLP, embedding diversity, equity and inclusion mindsets and skillsets in the workplace is important as it helps accelerate culture development, creating an engaging supportive workplace for all. These underpin CLP's Core Values, foster trust, inspire higher innovation and performance and create long-term sustainable growth.

In 2024, CLP hosted its first "D&I Awareness Week" a week of relevant educational activities enabling all employees to learn more about the many aspects of diversity, and offering practical tips on how to create inclusion at work.

Over 4,500 employees across locations participated in curated activities designed to enhance awareness and understanding, and inspire action and change. Key activities included:

- Interactive 'Marketplace' – learning booths hosted by 15 NGOs and charities supporting various social causes, including people with disabilities, new immigrants and to minority groups;
- Leaders sessions - 22 internal and external leader speakers shared how to foster inclusion at work, covering topics from disability etiquette to family caregiving; and
- Skill-based workshops – practical tips for harnessing diversity and creating inclusion, on topics such as working with a multi-generational workforce and encouraging diversity of thinking in decision-making.

This first-ever company-wide D&I initiative was a time of curiosity, learning and close engagement. Through these new experiences, employees became more aware of daily diversity and inclusion opportunities and challenges, developed more empathy and new skills, and helped create an even better place to work as #OneCLP.

These efforts set the stage for continued improvements in CLP's culture as we embark on the next chapter of organisational learning.

Embracing a spirit of diversity and inclusion as oneCLP, participants came together to engage, learn and inspire one another in D&I Awareness Week.

Ms. Eileen Burnett-Kant, Chief Human Resources Officer, kicked off the marketplace activities in D&I Awareness Week, inviting employees to engage with NGOs and charities at their dynamic mobile booths showcasing their inspiring DEI visions.

Health, Safety and Environment management

In 2024, CLP Group Health, Safety and Environment (HSE) strengthened the HSE Management System (HSEMS) by implementing the HSE Management Governance Document, which outlines the HSE governance and management expectations at the CLP Group.

To ensure consistent HSE management, the annual HSE Governance Declaration has been integrated into the General Representation Letter for Managing Directors of each Business Unit. Third-party verification of the HSE Performance Data declaration by Business Units required under the HSE Management Governance Document is administered by CLP Group HSE. CLP has also strengthened its review of the HSEMS by establishing an assurance programme covering CLP's controlled Business Units.

Occupational health and safety

SASB reference: IF-EU-320a.1; GRI reference: 403-4, 403-5, 403-6, 403-9, 403-10, EU17, EU18

Throughout 2024, HSE Strategy evolved with adjustments reflecting CLP's updated operating model. The strategy was designed to be broad and high-level, so business units could undertake activities that assist in meeting the stated outcomes with the flexibility to prioritise and conduct their activities. Collaborative partnerships between business units and the Group to improve HSE have been actively promoted, encouraged and undertaken.

After a year of change, CLP will enter 2025 with a new Group HSE Strategy aligned with the priorities established under its new operating model. Group Safety led a workshop with the business units to develop the CLP Group 2025-2027 HSE Strategy, themed "Creating a Future Ready Business from Today's Foundation", which emphasised reflection, learning and improving. Key stakeholders from the business units provided feedback on their current group/business unit strategies, considerations regarding the new CLP Group operating model, and future CLP directions. Areas for consideration included:

Carry through

Carry through key items that have been identified as critical for achieving and enhancing our HSE performance.

Impact on Strategic Planning

Opportunity for the level of awareness a pull through of the Group's strategy into the Business Unit plans to be strengthened. It should impact their strategic planning and budget allocation to shape and inform their agenda.

On the horizon

Where we can foresee internal and external influences on the way we operate and the manner the CLP Group comply and report on the HSE aspects of our operations and investments.

The CLP Group 2025-27 HSE Strategy sets out the key opportunities and a framework for working together to make CLP healthier, safer and more sustainable. The pillars and elements that define the strategy are as follows:

- **Strengthening Capability & Capacity**
  Strengthening capability and understanding our people's capacity to deliver
- **Risk and Resilience**
  Resilience and resourcefulness in a changing landscape
- **Strength in Synergy**
  Collaborating for success from different lenses
- **Reimagining Work through Technology and Digital Solutions**
  Innovate, Integrate and Elevate
- **Focus on Excellence and Emerging Themes**
  Owning persistent and emerging challenges

CLP's future-ready Group HSE Strategy builds upon the foundation of people, data, technology and innovation to deliver value, enhance its customers' experience and foster a culture of learning and growth. Our approach is agile, dependable, environmentally sustainable and aims to empower our people to thrive in any scenario. *A strategy for today and tomorrow.*

CLP's HSE Performance Monitoring and Reporting Standard contains the safety performance indicators and the requirements for safety data reporting used by the Group. The safety performance indicators identify trends as well as areas which require attention. CLP has also used targeted engagements and worker insights to help develop comprehensive and effective incident prevention interventions.

CLP continued to address serious injury and fatality risks, with a particular focus on gravitational energy, guided by a shift in approach to find improved ways of working across its operations. Businesses across the Group are implementing HSE measures guided by approaches based on principles of learning from normal work (LFNW) and human and organisational performance (HOP), which draw on the knowledge and experience of frontline workers to drive better and more dynamic safety management at all levels before incidents occur. These guiding principles are tailored to specific local business unit needs and backed by training and learning resources for employees. Additionally, in 2024, CLP introduced a new CEO HSE Award category, the "Fatality Prevention Award" to ensure its sustained attention and promote learning across business units. Submissions for this award showcased the application of technology, new working methods and greater workforce engagement through LFNW initiatives.

Progress continues on implementing the HSE risk management platform Enablon, promising future time savings through improved data entry, automation and streamlining within CLP. In 2024, the team successfully delivered the following modules, which are now operational: Management of Change (MOC), Occupational Health, Ergonomics Analysis (DSE), Management System Assurance and Independent Assurance Assessment. The CLP China team is now also using this platform. Mostly centralised data and automated services will, as we develop our use, provide dynamic insights, reducing time for data consolidation and daily tasks. Further enhancements are planned and budgeted for implementation through 2026.

Personnel tasked with conducting investigations underwent new training in TapRooT® Root Cause Analysis to support the updated methodology approach. Those responsible for leading investigations attended an intensive five-day instructor-led session, while investigation participants received a two-day overview. Senior management was also briefed on the new methodology to ensure alignment with the goals of moving beyond simply attributing incidents to human error and understanding the more complex latent conditions within the systems where people operate that contribute to such incidents. The Group believes that leveraging frontline knowledge will not only yield better solutions but also cultivate a sense of ownership among its workforce, fostering a culture of responsibility.

The Group remains dedicated to enhancing the safety of its people during daily operations. Major progress has been made both by adopting technology and redesigning systems work approaches. For example, CLP Power updated all 11kV and 3.3kV unit and station switchboards in Castle Peak Power Station B (more than 250 panels). These had been in service for over 30 years and were scheduled for replacement due to obsolescence. An innovative solution was implemented to improve safer operations and maintenance, such as mobile rack in/rack out and "Plug & Play" solutions through in-depth research and development efforts.

Energy Australia undertook a comprehensive project to improve the fabrication and installation processes by designing and manufacturing a hydraulic lifting device that also preset the element banks into vertical position. The rationale behind these enhancements was to minimise manual material handling of tube sections from fabrication to installation, to reduce the need for multiple mechanical lifts, to decrease welding time and exposure and to lower overall manufacturing and installation costs. These improvements have significantly streamlined our operations, reflecting our commitment to safety, innovation and efficiency.

CLP China inaugurated a Safety Skills Practical Training Centre to address business needs for both staff and contractors. The centre includes five areas: high and low voltage work skills, overhead line maintenance, safety skills experiential and general training. It covers "Safety Learning & Skills Enhancement & Operations Learning & Practical Training" using Virtual Reality (VR) incident simulations and multimedia education to improve safety knowledge and foster a safety-oriented culture.

2024 Safety performance

The key safety metrics are summarised in the table below.

Regional safety performance [1](employees/contractors)

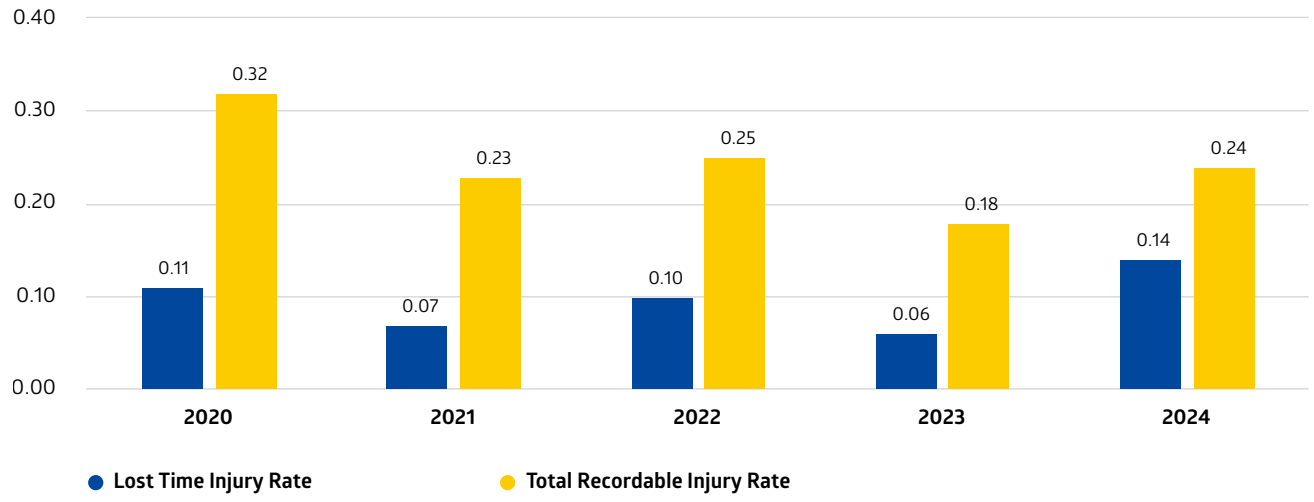
	Hong Kong[2]	Mainland China	Australia	Total	Employees and contractors combined
Fatalities (number)	0/0	0/0	0/0	0/0	0
Fatality rate (number per 200,000 work hours)	0.00/0.00	0.00/0.00	0.00/0.00	0.00/0.00	0.00
Days away from work injuries (number of personnel)	5/5	0/0	8/5	13/10	23
Lost time injury rate (number per 200,000 work hours)	0.10/0.08	0.00/0.00	0.39/0.42	0.16/0.11	0.14
High-consequence injuries (number of personnel)	0/0	0/0	0/0	0/0	0
Total recordable injury rate (number per 200,000 work hours)	0.21/0.13	0.00/0.07	0.54/0.75	0.28/0.21	0.24
Work-related ill health (number of personnel) – employees only	0	0	0	0	0
Lost days (number) – employees only	309	0	162	471	471

1 The LTIR and TRIR figures are for work-related injuries only (excluding work-related ill health and commuting related injuries), in line with the requirements of the Global Reporting Initiative. There were no work-related ill health (employee only) and commuting related injuries (employee and contractor combined) in 2024.
2 Hong Kong includes all staff from CLP Power Limited, CLP*e* Holdings and CLP Holdings.

Lost time injury rate and total recordable injury rate of CLP Group (employees and contractors combined)

In 2024, there were no fatalities or actual Serious Injury and Fatality (SIF) events. The total number of SIF events decreased by 29% from 55 in 2023 to 41 in 2024. Notably, 31 of the SIF events in 2024 were classified as SIF observations, where intervention occurred before any control was lost. This level of proactive behaviour emphasises the good progress made in enhancing our safety culture.

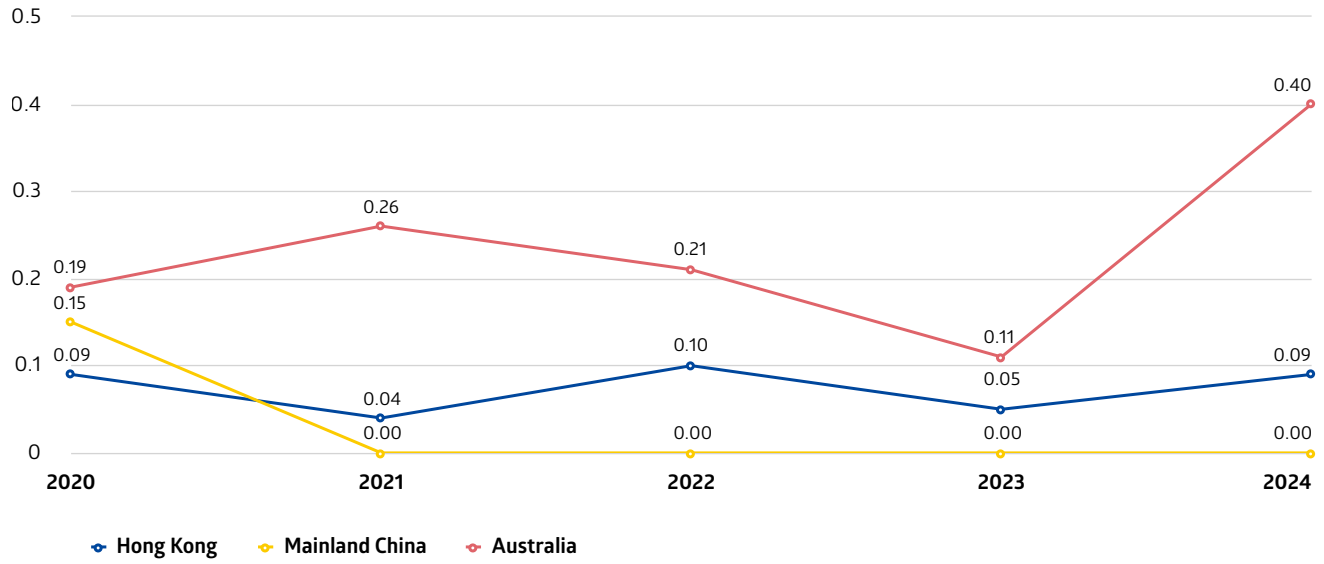
There has been a decline in our overall lost time injury rate (LTIR) and total recordable injury rate (TRIR) performance compared to 2023. This can partly be attributed to two significant factors: extensive major outage works, particularly those related to Energy Australia, and the new office build project at Kai Tak. Additionally, there was a 4.6% decrease in overall man-hours, which further impacted our performance. A significant observation within our LTIR and TRIR metrics includes a mixture of lower impact incidents such as twisted ankles, being struck by doors, and tripping, alongside more damaging events like serious lacerations and fractures.



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

Lost time injury rate (LTIR) by region (employees and contractors combined)

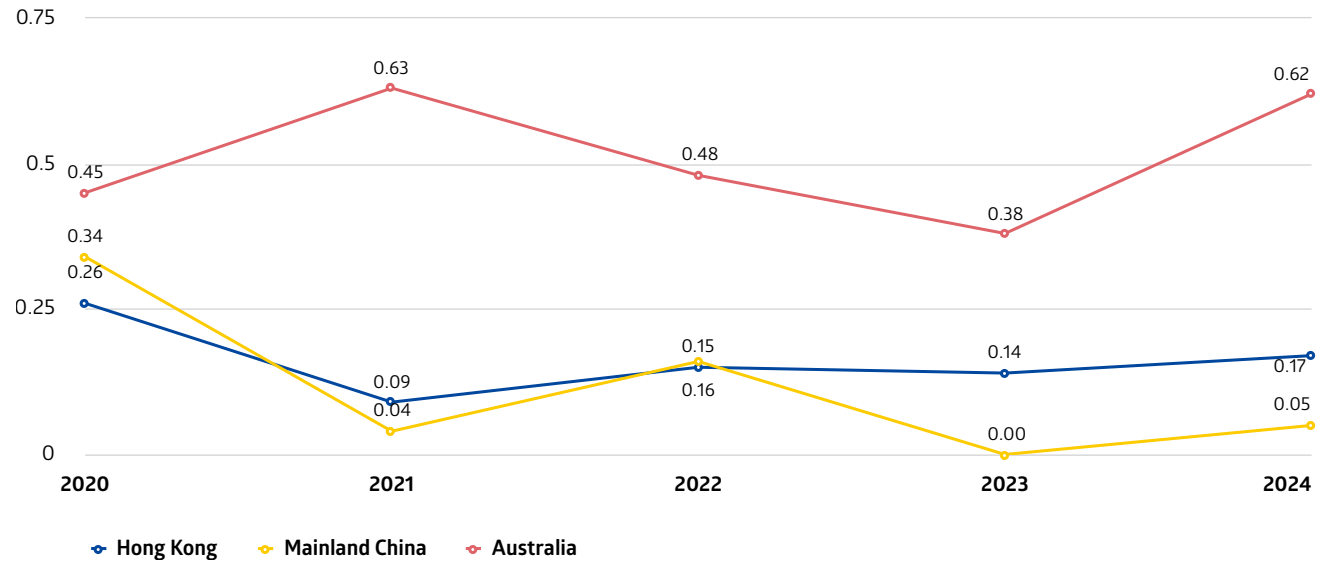
There has been a decline in our overall lost time injury rate (LTIR) and total recordable injury rate (TRIR) performance compared to 2023.



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

Total recordable injury rate (TRIR) by region (employees and contractors combined)

There has been a decline in our overall lost time injury rate (LTIR) and total recordable injury rate (TRIR) performance compared to 2023.



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

Partners

Highlights

Stakeholders' areas of interest

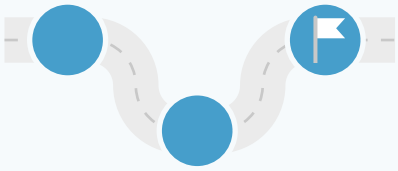
- Public policy
- Code of Conduct and anti-corruption
- Legal compliance
- Supply chain sustainability management

Relevant sustainability agenda

- Energy growth opportunities

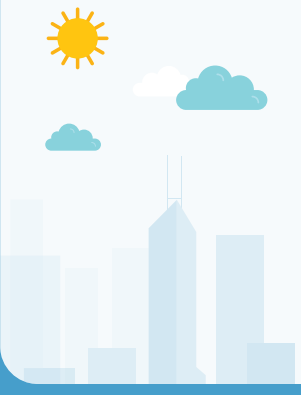
Outcomes for stakeholders

Enhanced information transparency and disclosures on information related to fuel costs and fuel procurement, etc.



Signed Memorandums supporting and participating in the Northern Metropolis Development

Implemented the three-year Sustainable Procurement Roadmap endorsed by the Sustainability Executive Committee



Pledged full support to the Hong Kong SAR Government's

Hong Kong Climate Action Plan 2050

Recorded **1 new reportable case** of legal non-compliance in 2024

CLP continues to be a trusted partner for its stakeholders by building strong relationships and engagement to advocate sustainability and uphold ethical business practices across its value chain. It supports government authority initiatives, aligning efforts towards shared sustainability objectives. Furthermore, CLP collaborates closely with its suppliers and contractors through capacity-building initiatives, regular engagement and adherence to high standards of governance and compliance. These efforts are ensuring that CLP and its partners are together contributing to the overall resilience and success of the business.

Public policy

GRI reference: 2-28, 201-4, 415-1

As a trusted partner in promoting sustainable development within the energy sector, CLP continues to strengthen its communication with and support to governments, regulators and standard setters, as part of its efforts to drive collaborative changes in energy market policies.

Joint efforts by the private and public sectors are essential for tackling the challenges emerging in the energy sector. In Hong Kong, CLP Power works actively with the Hong Kong SAR Government under the Scheme of Control (SoC) Agreement, which sets out the electricity regulatory framework and mechanism for the city's electricity supply.

The current five-year Development Plan, covering 1 January 2024 to 31 December 2028, was approved by the government in 2023. It provides strong support for the government's policy priorities with focuses on investments designed to drive Hong Kong's economic and infrastructural development, the continued delivery of a world-class reliable electricity system, the transition to a smart and resilient city and the continuation of the decarbonisation journey.

As part of the interim review of the SoC Agreement, CLP continues to enhance information transparency on fuel costs and procurement, operating expenses and borrowing arrangements.

By maintaining regular communication with government officials and legislators through channels such as site visits and information sharing sessions, CLP is fostering mutual understanding of the strategies and policy directions needed for shaping a low-carbon future. CLP also actively participates in major government and industry consultations by putting forward the Group's well-considered positions relevant to the energy sector's development.

CLP's responses to major public policy consultations, along with its position on critical issues such as climate change, are available on the Group's websites and other online channels.

- CLP Power pledged full support for the Hong Kong SAR Government's Hong Kong's Climate Action Plan 2050 upon its announcement in 2021. One of the government's key strategies is to promote the popularisation of electric vehicle (EV) in Hong Kong. CLP Power is actively supporting the Government in promoting green transport by both land and sea through accelerating the development of EV charging network, offering various power supply solutions to charging service operators to expedite the operation of public EV charging facilities and collaborating with petrol station operators to repurpose petrol-filling stations as quick-charging facilities.
- CLP Power has been promoting the wider use of electric commercial vehicles (ECVs) in Hong Kong through the eMobility Network which comprises 15 other businesses and organisations. In collaboration with Network members, CLP Power showcased the new EV Grid Management Platform and power supply solutions at the ReThink HK 2024 Sustainable Business Forum and Solutions Expo. At the event, the eMobility Network members also presented solutions to support Hong Kong in its transition to a low-carbon smart city, including state-of-the-art commercial EVs and associated equipment, a range of new charging technologies and green financial support services .
- CLP also promotes green office practices for energy saving and supports environmental charters and green campaigns organised by NGOs. In Hong Kong, CLP Power has signed the Energy Saving Charter and the 4T Charter (Target, Timeline, Transparency, Together) from the Electrical & Mechanical Services Department (EMSD). While employees are encouraged to support these green initiatives, an internal energy use target has been set to ensure energy utilisation remains below a reference Energy Utilisation Index (EUI).
- CLP also engages and collaborates with key stakeholders and communities to promote energy efficiency and saving. In 2024, CLP Power hosted workshops on power quality for newly elected district councillors and a seminar for property management professionals on energy saving, decarbonisation, power quality and transport electrification. CLP Power also teamed up with the Hong Kong Housing Society to promote sustainable lifestyles through raising residents' understanding on the benefits of "All-Electric Homes".
- In India, Apraava Energy actively engages in domestic and global discussions on energy and climate change legislation and regulations. For example, it participated in stakeholder consultations by the Bureau of Energy Efficiency (BEE) on the design of the National Carbon Market in India and by the Central Electricity Authority (CEA) on reducing the Right of Way (ROW) width for transmission lines, a reduction which would minimises tree cutting and disruption to wildlife. Apraava Energy is also a member of the Product Advisory Committee of the National Commodity and Derivatives Exchange (NCDEX) which is working on the design of carbon market derivatives.

- CLP Group contributed to the public consultation on the exposure drafts of two inaugural standards, including the HKFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information and the HKFRS S2 Climate-related Disclosures, issued by the Hong Kong Institute of Certified Public Accountants (HKICPA). The Hong Kong Standards are developed under the context of the Hong Kong SAR Government's Vision Statement on *Turning Obligations into Opportunities in Developing the Sustainability Disclosure Ecosystem in Hong Kong*, with an aim to align local sustainability disclosure requirements with the globally recognised International Sustainability Standards Board (ISSB) Standards, enhancing the consistency and comparability of sustainability reporting for investors and other stakeholders.

None of CLP's businesses receive any significant government financial assistance.

CLP actively engages with various organisations to keep abreast of different stakeholders' perspectives, navigate policy uncertainties and shape informed policy-making. The table below outlines the total amount CLP has contributed to organisations influencing public policy. These contributions include membership fees, donations, sponsorships and input into policy position papers. CLP has a general policy of avoiding political contributions and no contributions were made to political parties, government officials or political candidates throughout the year.

Contributions to different types of organisations (HK$M)

	2024	2023	2022	2021	2020
Lobbying, interest representation or similar (HK$M)	**0**	0	0	0	0
Local, regional or national political campaigns, organisations or candidates (HK$M)	**0**	0	0	0	0
Trade associations or tax-exempt groups (e.g. think tanks) (HK$M)[1]	**7.06**	8.05	8.69	14.12	8.90
Others (e.g. spending related to ballot measures or referendums) (HK$M)	**0**	0	0	0	0

1 Includes contributions to trade associations or tax-exempt groups that seek to influence public policy in the form of memberships, donations or sponsorship.

As a priority, CLP engages with organisations actively involved in climate change and broader energy market policies. Considerable resources are devoted to the organisations listed below (in alphabetical order) through membership, sponsorship and other contributions, including active involvement by CLP senior management.

Organisation	Description of organisation	CLP contributions and engagement
Australian Energy Council (AEC)	The AEC represents 20 major electricity and downstream natural gas businesses operating in the competitive Australian wholesale and retail energy markets.	The Managing Director of EnergyAustralia was previously Chair of the AEC. EnergyAustralia continues to actively participate in its various working groups on a range of energy market issues. For example, an EnergyAustralia representative chaired AEC's Sustainability Working Group before moving into the role of Deputy Chair in December 2024.
Business Council of Australia (BCA)	The BCA is a CEO-led industry association representing more than 100 of Australia's largest businesses. It supports the transition to a more carbon-efficient economy, with the goal of net-zero emissions by 2050.	EnergyAustralia is a BCA member and supports the BCA's advocacy for a national, bipartisan energy and climate change framework that can deliver against reliability, affordability and sustainability objectives.

Organisation	Description of organisation	CLP contributions and engagement
Business Environment Council (BEC)	The BEC is an independent, charitable organisation established by the business sector in Hong Kong, which promotes environmental excellence by advocating for the uptake of clean technologies and practices.	CLP actively participates in or sponsors events, public consultations and working groups organised by the BEC. CLP is also a signatory of the BEC Low Carbon Charter and the Power Up Coalition.
Confederation of Indian Industry (CII)	The CII is a not-for-profit industry-led organisation. It works to create and sustain an environment conducive to India's development through various advisory and consultative processes. It works closely with the Indian government on policy issues, interfaces with thought leaders and looks to enhance industry efficiency, competitiveness and business opportunities.	Apraava Energy has been a member of CII for more than a decade. Its Managing Director is the Co-Chairman of the CII National Committee on Power and its Chief Operating Officer is currently a member of the India CEO Forum for Clean Air, operating under the CII National Initiative Cleaner Air Better Life. Through these engagements, Apraava Energy plays an active role in representing the power sector in India on relevant issues.
Free Electrons	A global accelerator programme for electric utilities, Free Electrons enables startups to work closely with utilities to develop digital solutions to the challenges arising from the increase of renewable energy and the decentralisation of energy systems.	CLP has been participating in Free Electrons since 2018. The 2024 programme attracted applications from over 1,000 start-up companies worldwide. CLP collaborated with at least eight startups to pilot their innovative solutions in areas such as renewables, smart grids and energy storage. In 2025, CLP will host the third module in Hong Kong.
IFRS Foundation	The IFRS Foundation develops internationally recognised disclosure standards that bring transparency, accountability and efficiency to financial markets. Responding to the need for consistent and comparable sustainability information, it created the International Sustainability Standards Board (ISSB) in 2021 to develop IFRS Sustainability Disclosure Standards.	CLP is supporting the development of globally comparable sustainability disclosure standards in its role as a founding member of the IFRS Foundation Corporate Champions Network. Through this programme, CLP is playing an active role in building awareness and capacity for disclosure within companies and connecting a growing community of support for sustainability disclosure standards.
International Electric Research Exchange (IERE)	IERE is a worldwide, non-profit organisation for exchanging new electricity and energy-related technologies as well as research and development information. Its members include the electricity and energy supply industry, equipment provider businesses, academic researchers, and government bodies.	CLP joined IERE in 2000 and has been an Executive Member since 2014. Currently, CLP serves on the board as a board member and has a representative as Treasurer. CLP continues to work with IERE on projects in the joint research and development programme, such as the Technology Foresight Report, and on AI and power device life diagnosis projects.

Organisation	Description of organisation	CLP contributions and engagement
Kadoorie Farm and Botanic Garden Corporation (KFBG)	KFBG raises awareness of ecological and sustainability matters, undertakes species conservation and ecosystem restoration, reconnects people with nature and promotes sustainable lifestyles.	CLP has been supporting KFBG's 10-year forest restoration programme since 2022. This programme is supporting knowledge and capacity building on reforestation and potentially contribute to nature-based solutions and biodiversity recovery. By the end of 2024, a total of 7,794 seedlings were planted (of the 25,000 planned for this project), representing 277 species belonging to 66 botanical families.
The Construction Industry Council (CIC)	Formed in 2007, CIC consists of a chairman and 24 members representing various sectors of the construction industry in Hong Kong. Its main functions are to forge consensus on long-term strategic issues, convey the construction industry's needs and aspirations to the Hong Kong SAR Government, as well as provide a communication channel for the Government to solicit advice on all construction-related matters.	CLP is actively involved in the CIC, supporting efforts to reduce fatalities in the construction industry through the participation and leadership of both CLP Group and CLP Power in the Hong Kong Construction Industry Safety CEO Forums.
The Hong Kong General Chamber of Commerce (HKGCC)	HKGCC is a member-led organisation dedicated to improving the business environment and its competitiveness in Hong Kong. Its membership is composed of around 4,000 companies, which include multinational companies, SMEs and start-ups, from Hong Kong, Mainland China and internationally.	CLP actively participates in and sponsors events, public consultations and working groups organised by the HKGCC. The CLP Power Chairman and Managing Director are currently serving as member of the Chamber Council and the Vice Chairman of the Real Estate & Infrastructure Committee respectively. CLP's senior management are also serving as members of various Committees to support the Chamber's work.
The Hong Kong Institute of Directors (HKIoD)	HKIoD, Hong Kong's premier body representing directors, works to foster the long-term success of companies through advocacy, standards-setting in corporate governance and professional development for directors.	Since 2022, CLP has been a founding sponsoring partner of the HKIoD-hosted Hong Kong chapter of the Climate Governance Initiative, a programme that aims to raise awareness of climate issues among company directors.

Organisation	Description of organisation	CLP contributions and engagement
The International Emissions Trading Association (IETA)	Founded in 1999, IETA is a non-profit organisation committed to empower businesses to engage in climate action and pursue net zero ambitions to advance the Paris Agreement's objectives and establish effective market-based trading systems for GHG emissions and reductions. IETA works in collaboration with other stakeholders to develop components of global GHG market and trading systems, strengthen business capacity and promote market-based solutions and broad participation in GHG markets.	By having a representative serve as a Council member and sponsoring IETA's events and programmes, CLP is contributing to the development of effective carbon markets while gaining insights into the latest global and Asia carbon market trends.
World Business Council for Sustainable Development (WBCSD)	A global, CEO-led organisation of over 200 businesses, the WBCSD is working to accelerate the transition to a sustainable world. Its Sustainable Development Goals are being pursued through six work programmes: Circular Economy, Cities & Mobility, Climate & Energy, Food & Nature, People & Society and Redefining Value.	CLP actively participates in the WBCSD's programmes and working groups, in particular, the Nature positive workstream. In support of the WBCSD's Roadmap to Nature Positive for the energy system, CLP's representatives joined the relevant working group and shared practical experience in tackling nature-related matters. In 2024, CLP participated in engagement sessions to provide feedback on the prototype of the Nature Metrics Tool, aimed at helping sustainability practitioners identify the most relevant nature-related metrics to measure progress, set targets and disclose in alignment with major voluntary and regulatory frameworks. In addition, CLP leveraged the Roadmap to Nature Positive and contributed case studies to WBCSD. These case studies serve as practical illustrations that bridge the gap between theory and industry practice.
World Energy Council (WEC)	The WEC is a UN-accredited global energy body formed in 1923 with more than 3,000 member organisations in over 90 countries. The WEC informs global, regional and national energy strategies by hosting high-level events, publishing authoritative studies (e.g. the World Energy Trilemma Index) and working through its extensive member network to facilitate global energy policy dialogue.	CLP began participating in the WEC as a member organisation in 1988. Since the formal establishment of the Hong Kong member organisation (WEC-HK) in 2016, CLP's CEO has been serving as Chair and representing WEC-HK and its members. In 2024, CLP contributed to commentaries on Hong Kong in the 2024 edition of World Energy Issues Monitor, as well as contributing Hong Kong's profile for the World Energy Trilemma.

Case Study

Pledging full support for and participation in the Northern Metropolis Development by providing a stable and reliable power supply

As Hong Kong's largest power company, and one that has been serving the community for over 120 years, CLP has consistently been committed to providing a reliable and low-carbon electricity supply to support the new developments of the city.

In November 2024, CLP participated in the Enterprise Participation in Northern Metropolis Development Event organised by the Hong Kong SAR Government and signed Memorandums to support the Northern Metropolis Development. Aiming to meet the needs of innovation and technology, industrial and commercial and housing development in the Northern Metropolis, CLP will reserve sufficient capacity in its power system to meet the electricity demands of data centre and supercomputing centre development in San Tin Technopole and Sandy Ridge.

Through partnerships with various stakeholders including government bureaux and departments, CLP will leverage its professional knowledge and expertise in the energy sector to implement the necessary power grid expansion plan and drive the development of Northern Metropolis. The memorandum also signifies CLP's commitment to supporting the city's economic and social development.

CLP Power Managing Director Mr Joseph Law (front row, second from right) signed Memorandums in support of the Northern Metropolis Development.

Code of Conduct and anti-corruption

GRI reference: 205-3, 406-1, 417-2, 417-3

CLP's Value Framework and Code of Conduct, which includes 15 guiding principles, is a basis for its upholding of responsible business conduct and ethics. Applicable to all employees, subsidiaries and contractors, the Code and the Anti-Fraud Policy ensure integrity and prevent fraud and corruption within the Group and across its business operations.

In 2024, 31 breaches of the Code of Conduct were reported. None were financially or operationally material to the Group, and none involved employees at the grade level of senior manager and above.

In addition, there were no convicted cases of corruption. Any breaches were managed internally in accordance with CLP's complaint handling process for violations of the Code of Conduct.

Regarding whistleblowing cases, 20 cases were received in 2024 compared with nine in 2023.

Records of confirmed cases of Code of Conduct Principles breaches during the past five years are shown in the table below. Between 2020 and 2024, CLP did not have any breaches related to six Code of Conduct principles, namely Political Contributions, Gift & Entertainment, Laws & Regulations, Representation, Response to Incidents and Compliance & Report.

Code of Conduct Principles

	2024	2023	2022	2021	2020
Zero Harm Vision					
Includes issues regarding health and safety and alcohol and drug abuse.	**2**	0	0	0	0
Respect for People					
Includes discrimination, harassment and other issues related to not respecting people.	**11**	2	5	4	8
Ethics and Business Integrity					
Includes unethical business behaviour related to integrity, honesty and fairness.	**8**	0	2	10	1
Other Principles					
Includes conflicts of interest, company policies, financial controls, protecting information & assets and meeting responsibilities.	**10**	10	3	4	16
Total	**31**	12	10	18	25

Legal compliance

HKFRS S2/SASB reference: IF-EU-140a.2, IF-EU-550a.1; GRI reference: 2-27, 205-3, 206-1, 306-3 (2016), 411-1, 413-2, 416-2, 417-2, 417-3, 418-1, EU22, EU25

In the spirit of transparency and accountability, CLP reports cases of legal non-compliance annually in its Sustainability Report. These include cases of criminal convictions against CLP and major breaches that resulted in significant fines (greater than HK$1 million) or equivalent non-monetary sanctions.

CLP's 2024 legal compliance performance is summarised below, according to the GRI Standards and the HKEX Environmental, Social and Governance Reporting Code.

The Company is also exposed to the risk of contractual disputes and litigation in the course of its normal operations. The Group considers each instance separately in accordance with legal advice and makes provision and/or discloses information as appropriate.

There was one new reportable case of legal non-compliance in 2024.

Legal non-compliance

	Number of cases	Supplementary information
Business practices		
Anti-corruption	No reportable cases	Read more in the Code of Conduct and anti-corruption section.
Anti-competitive behaviour	No new reportable cases in 2023. There is one existing and previously reported case involving Ho-Ping Power Station in Taiwan, in which the CLP Group has a 20% equity interest	The Ho-Ping litigation is against a penalty for alleged concerted action with other independent power producers (IPPs) in violation of the Taiwan Fair Trade Act. The Taiwan Fair Trade Commission (FTC) in 2013 ruled and fined nine IPPs for alleged cartel behaviour. Ho-Ping filed litigations against the FTC penalty. The FTC's decision was eventually overruled by the Taipei High Administrative Court (THAC) in October 2014. However, the FTC successfully appealed the THAC's decision to the Supreme Administrative Court (SAC) and the case returned to the THAC for re-examination. In May 2017, the THAC ruled again in favour of Ho-Ping and rejected the FTC's decision. In June 2018, the SAC accepted FTC's further appeal and, for the second time, returned the case to the THAC for re-examination. In June 2020, the THAC ruled in favour of Ho-Ping for the third time and the FTC once again appealed to the SAC. In August 2022, the SAC ruled in favour of FTC. Ho Ping submitted an application for a retrial in September 2022. As of December 2023, there had been no new progress on the application for a retrial. In April 2023, Ho-Ping lodged an administrative appeal which was rejected by the SAC. In June 2023 Ho-Ping filed an administrative proceeding which was brought to the first preparation proceedings court in November 2023. The court proposed that both FTC and Ho-Ping undertake mediation before the matter proceeds further, to which both parties agreed and await a timetable for the mediation. Four mediation sessions were held in 2024 which have been focused on the legal basis and applicable formula to determine the amount of the penalty. Further sessions will be held in 2025.
Employees and contractors		
Employment practices	No reportable cases	-
Labour standards (child and forced labour)	No reportable cases	-
Occupational health and safety	No reportable cases	

	Number of cases	Supplementary information
Customer		
Customer privacy	No reportable cases	Read more in the Customer privacy section.
Product and service information and labelling and marketing information	One reportable case	On 22 September 2023, the Australian Competition and Consumer Commission (ACCC) instituted proceedings in Federal Court against EnergyAustralia for allegedly breaching the Electricity Retail Code and the Australian Consumer Law when notifying customers of its impending price changes. On 26 September 2024, the court delivered its final judgement. This involved EnergyAustralia paying a A$14 million fine and A$50,000 of the ACCC's costs and certain compliance orders.
Access to electricity	No reportable cases	-
Customer health and safety	No reportable cases	-
Community		
Rights of Indigenous people	No reportable cases	-
Environment		
-	No reportable cases	Read more in the Monitoring and compliance of emissions and other nature-related regulations section.
Other		
-	No reportable cases	No reportable cases

Supply chain sustainability management

GRI reference: 2-6, 2-24, 204-1, 308-1, 308-2, 407-1, 408-1, 409-1, 414-1, 414-2

CLP is strengthening its Sustainable Procurement Framework and enhancing the visibility of its supplier sustainability risk, as part of its three-year Sustainable Procurement Roadmap. Endorsed by the Sustainability Executive Committee, the Roadmap builds on five strategic directions, namely building suppliers' awareness, assuring suppliers' compliance, managing priorities, driving positive impact and getting stakeholders' recognition.

The Three-year Sustainable Procurement Roadmap Vision and Key Focus:

Build Awareness

Commercial and Supply Chain Management team capability uplift on sustainability awareness. Suppliers are communicated with and acknowledge to abide by CLP's Supplier Code of Conduct.

Assure Compliance

Third-party solution is equipped to enable visibility of CLP's suppliers' compliance with the Supplier Code of Conduct and their extended supply chains to monitor, assess, determine actions and develop improvement strategies.

Manage Priorities

Shift from reactive risk mitigation to advancing opportunities on strategic sustainability priorities. The assessment of supplier sustainability is embedded in CLP's procurement practices.

Drive Impact

Commercial and Supply Chain Management Sustainability is a platform for positive impact through collaborative programmes with suppliers that contribute to CLP's sustainability goals and objectives.

Recognition

Internal and external stakeholders' recognition of CLP's Commercial and Supply Chain Management Sustainability as industry's best practice.

Sustainable Procurement Framework

Driven by the three-year Sustainable Procurement Roadmap, CLP's is in the process of enhancing its supply chain sustainability management with the foundation of the Sustainable Procurement Framework which cultivates long-term and mutually beneficial relationships with suppliers who share CLP's values and goals. The framework is underpinned by the CLP Group Procurement Standard (GPS) which serves as a guide to the Group's procurement and supply chain management practices.

In enabling CLP's agenda of decarbonisation, building resilience and creating value in supply chain, the foundation of Sustainable Procurement draws on policies that include CLP's Value Framework, CLP Procurement Values and Principles and other procurement policies that govern daily CLP operations.

The Sustainable Procurement Framework now provides the foundation for all CLP's supply chain sustainability management activities, including various strategies and procedures of CLP's supply chain sustainability management, such as sustainability risk profiling and sustainability assessment. These are helping CLP to manage supply chain risks and communicate CLP's values and principles to suppliers, alongside with the SCoC. Overall, the framework is improving CLP's competitive advantages by building commercially viable strategic relationships with preferred suppliers. It evaluates business value outcomes based on factors such as total cost of ownership management, environmental, social and governance (ESG) value, supply chain resilience and innovation.

Sustainable Procurement Programme

The Sustainable Procurement Programme has been developed to provide CLP with a consolidated view of supplier sustainability risk and opportunity, for better informed procurement decisions. Implementing the three-year Sustainable Procurement Roadmap is also a key component of the Sustainable Procurement Programme. The programme not only involves regular meetings with suppliers, but has added in the use of third-party sustainability profiling and ratings, helping to ensure compliance and enhance supplier awareness of their unique sustainability journeys.

Sustainability risk profile

CLP's supplier sourcing strategies are designed to identify suppliers that best meet its requirements and that deliver value at an acceptable level of risk.

Under the standard procedure, supplier selections are conducted through competitive tendering, when each supplier's ability to fulfil criteria of quality, health and safety, environmental protection, delivery, innovation, sustainability and cost are assessed. Every supplier contract is designed to safeguard CLP stakeholder interests and ensure the supplier meets its commitments and obligations in areas such as legal and regulatory compliance, intellectual property rights, data confidentiality and security.

To better manage supplier clusters, CLP segments its contracted suppliers into tiers based on relative contract value and potential business impact, taking into account risks relating to supply chain and sustainability factors. The tiers are reviewed on an annual basis. This process of segmentation allows CLP to apply appropriate levels of governance and engagement to different suppliers for more efficient supply chain management.

In the first year of the three-year Roadmap, a key focus has been to assure compliance. This has been done by implementing an ESG profile tool that screens suppliers' inherent sustainability risks and any relevant incidents associated with the supplier company. Since the pilot launch of the ESG profile tool, over 1,300 suppliers have been screened by the tool and rated High, Medium or Low risk. Over 80% of the screened suppliers are rated Low risk. The tool will continue to monitor these Low risk suppliers for any changes in their risk level.

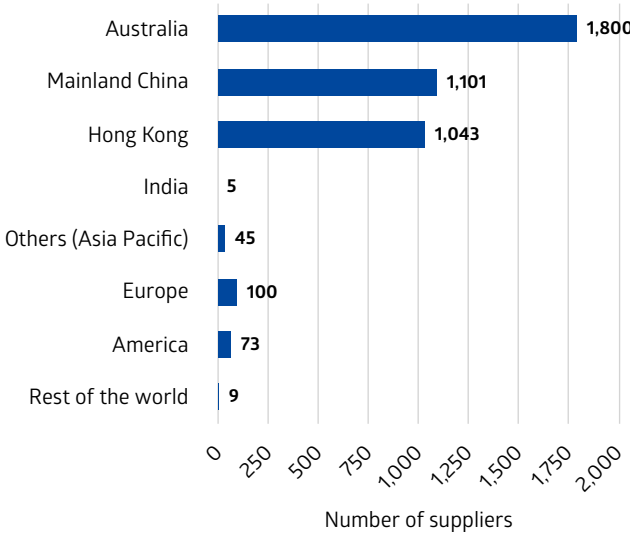
The remaining 20% of suppliers are rated Medium or High risk. These suppliers are required to attend supplier engagement meetings to address their specific sustainability risks, in accordance with the Supplier Code of Conduct requirements. They will also involved as a priority in a wider due diligence process which will involve in-depth Sustainability assessment.

CLP defines critical projects by considering their importance to its business operations, as well as their sustainability risks and contract value. All suppliers contracted for critical projects are subject to sustainability risk assessments. In 2024, these contractors represented 56.5% of CLP's total procurement project spend.

Suppliers for critical projects are assessed on their sustainability practices through tools such as questionnaires, proposal evaluations, site visits and where subcontracting is involved, audits on the subcontractor's capability to meet project requirements.

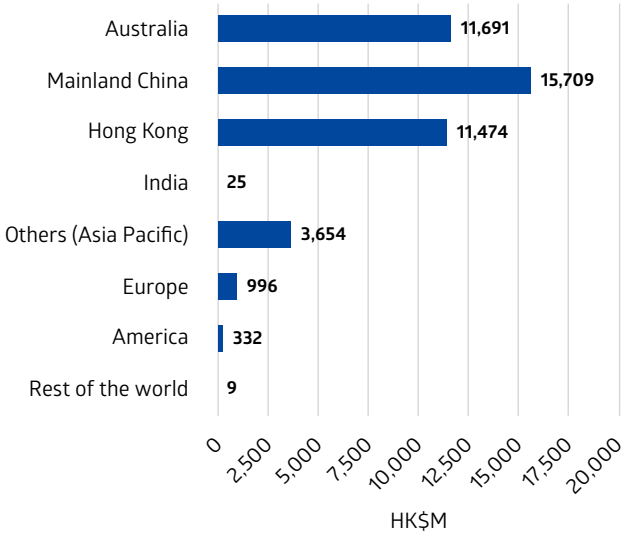
Number of suppliers by region

The highest number of CLP's active suppliers are in Australia.



Payment to suppliers by region in 2024

Total value of payments to suppliers in 2024 was highest in Mainland China.



Ongoing supplier sustainability risk monitoring
In accordance with its Corporate Risk Matrix, CLP conducts ongoing risk profiles monitoring of strategic suppliers with high business criticality and spend value. The profiles are conducted in conjunction with supplier risk management and supplier relationship management processes, and cover risks related to modern slavery, labour practices, supplier continuity, employee health and safety and cyber security.

Past performance data, future business needs and technology and innovation roadmaps are regularly reviewed with suppliers. CLP takes a risk-based approach to sustainable procurement across the procurement lifecycle. ESG risks are identified and evaluated regularly at category, project and supplier levels, taking into account responsible procurement practices. This evaluation considers the following risks:

- Country-specific risks;
- Product/service-specific risks;
- Industry/category-specific risks;
- Legal and regulatory compliance risks;
- Cyber security risks;
- Labour practices and sub-contracting risks;
- Health and safety risks;
- Governance and business conduct risks;
- Environmental risks;
- Operational/supply chain risks; and
- Brand and reputational risks.

Specifically, the risk profiling process helps CLP manage ESG matters in areas such as labour practices, human rights, modern slavery, child labour, harassment, safety, environment, subcontractor management and anti-bribery along the value chain. The risk profiling results provide CLP with insights for developing sourcing strategies and risk mitigation measures for its strategic suppliers in each category.

Through year-round operational, business and executive reviews, CLP has continued to enhance its supplier relationship management process for strategic suppliers. The reviews consistently assess the delivery performance of each strategic supplier and are used to drive ongoing improvements.

Procurement and business unit personnel work collaboratively to review and assess the performance of incumbent suppliers in the market. They also monitor sustainability risks in the areas of human rights/modern day slavery, environment and community. These initiatives provide useful information for formulating effective sourcing strategies as well as managing risk and supplier relationships.

In line with its obligations under the Australian Modern Slavery Act 2018, EnergyAustralia submitted its fourth Modern Slavery Statement to the government in 2024. In 2024, EnergyAustralia implemented a Supply Chain Risk Management tool, Trust Your Supplier (TYS). This tool allows new suppliers to be onboarded and existing suppliers to be invited, through registration and includes questionnaires about employment standards and human rights. All new suppliers must complete the questionnaires and register before being onboarded. Existing suppliers are being invited to update their details in phases, starting with critical suppliers and moving on to other suppliers. The TYS tool provides ongoing risk monitoring for all suppliers using data from an independent third-party, which includes data on adverse media, sanctions and regulatory action.

EnergyAustralia remains committed to fostering indigenous inclusion by including indigenous participation clauses in its supplier contracts, particularly for contracts relating to generation sites. By doing so, it seeks to encourage its suppliers to help drive indigenous inclusion by increasing their indigenous business spend and employment as well as boosting their cultural awareness.

This initiative stems from EnergyAustralia's Reconciliation Action Plan (RAP). The release of the second "Innovate" RAP in 2023 further clarified EnergyAustralia's commitment to promoting reconciliation and cultural understanding as well as enhancing relationships with Aboriginal and Torres Strait Islander peoples and organisations. This year, EnergyAustralia partnered with Mob Jobs on a revised First Nations employment strategy, consulting with First Nations employees and Traditional Owner groups to ensure our approach to First Nations attraction, employment and development is inclusive and sustainable. We also engaged supplier diversity expert Kristal Kinsela to present to some of our Board and the Business Unit Leadership Team (BULT) on the value proposition of Indigenous procurement for EnergyAustralia. We have been working closely with Traditional Owner groups around our developing projects, ensuring cultural perspectives are listened to and considered. We implemented a First Nations Cultural eLearning Programme, making cultural learning accessible to all our people. This enhances our peoples understanding of the connections between EnergyAustralia's project sites and local history and culture.

By the end of the year, the procurement team reported that it had sourced goods and services from 13 indigenous suppliers with a total of A$1,731,937 in spending.

Supplier engagement
CLP regularly conducts workshops for contractors to raise their safety, environmental and human rights awareness and capabilities. To enhance the professional development of contractor staff, workshops and training on procurement practices and supplier relationship management are conducted regularly.

CLP's contract terms and conditions include specific sustainability requirements and expectations regarding business ethics. Suppliers are encouraged to align their practices with the requirements and expectations stated in the SCoC and are expected to adopt similar standards and practices when doing business with the Company. To ensure compliance with the SCoC and further promote sustainable procurement practices, the Company issued a letter from the Director to all suppliers, stating that suppliers must acknowledge the SCoC and be prepared to provide evidence of their adherence to its standards. This might involve submitting accreditations, certifications, sustainability assessments, compliance reviews and audit reports. This initiative has reinforced the Company's commitment to maintaining high ethical and operational standards across its supply chain. In 2024, over 1,800 of CLP's suppliers have agreed to abide by the SCoC requirements.

CLP also values direct feedback from its suppliers, since it offers candid two-way communication opportunities and, when it has a specific focus on technology roadmaps and innovation, helps CLP prepare for future challenges. In addition, CLP proactively engages with selected strategic suppliers to directly discuss sustainable procurement best practices, including ways of minimising GHG emissions. In 2024, CLP engaged first-tier wind turbine suppliers in Mainland China to understand their capabilities regarding Circular Economy (CE) in the context of wind turbine generator production. Additionally, CLP introduced the CE Strategy to internal stakeholders to foster collaboration on CE practices between CLP and the suppliers.

Capacity building

As part of the key focus in 2024 for the Sustainable Procurement program, the Sustainable procurement training series has kick-started to build awareness within Commercial & Supply Chain Management (CSCM) team to mitigate supply chain risks. Over 100 CSCM team members participated in the training series. The sessions included town-hall training by an internationally recognised certification body on both general awareness on Supply Chain sustainability and the ISO 20400 Sustainable Procurement guidance course. This was followed by a Climate Fresk session with 10 certified facilitators to actively engage and support the team in building the Sustainable Procurement Guide, driving sustainable practices across different categories.

In 2024, CLP Power also introduced several initiatives designed to enhance the management of its supply chain and the associated risks. These included:

- Holding contract law training sessions to reinforce the understanding of key contract terms relevant to potential supply chain disruptions or supplier non-compliance events;
- Launching a Know Your Counterpart (KYC) questionnaire, and putting in place screening of existing and potential suppliers, to identify potential compliance and sanction risks arising from third party suppliers;
- Creating a Learning Portal to encourage self-learning in Commercial and Supply Chain Management; and
- Conducting a Supplier Survey to understand CLP's position in suppliers' markets.

The CSCM team collaborating on the Sustainable Procurement Guide during the Climate Fresk session.

Community

Highlights

Stakeholders' areas of interest

- Providing access to reasonably priced energy
- Community investment
- Promoting nuclear safety and clean energy
- Safety around CLP's network *(online only)*

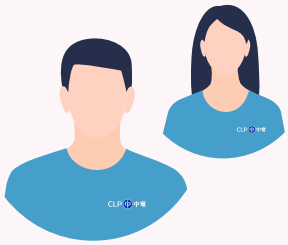
Relevant material topics

- Community stewardship

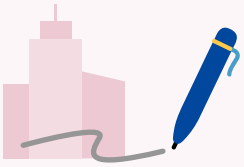
Outcomes for stakeholders

Launched a series of community activities to celebrate the

30th anniversary of the CLP Volunteer Team and the 10th anniversary of Sharing the Festive Joy Programme



Approximately A$1.5 million invested in grassroots programmes by EnergyAustralia since 2016, through the Community Grants programme



CLP Power signed a Memorandum of Understanding (MoU) with the **Hong Kong Polytechnic University** to cultivate electrical engineering talents

Series of community support programmes launched by CLP Power in 2024 with an allocation of

over HK$200 million under CLP Community Energy Saving Fund

CLP is dedicated to fostering strong community relationships and contributing to social sustainability. it engages with local communities through various initiatives that enhance community wellbeing and promote environmental conservation, education and art and culture. CLP values transparency and collaboration and works closely and openly with stakeholders to address community needs and concerns. By investing in community programmes and partnerships, CLP is creating positive social impacts and driving long-term sustainable growth.

Providing access to reasonably priced energy

SASB reference: IF-EU-240a.3

CLP has put various subsidy schemes and hardship programmes in place in Hong Kong and Australia to relieve those in need and safeguard their access to electricity, along with special arrangements to help customers facing financial difficulties to avoid disconnection.

Hong Kong

CLP Power is committed to maintaining electricity tariffs at reasonable levels while ensuring power supply reliability. CLP Power's tariff adjustments have been relatively stable over the years, an outcome achieved by adopting prudent cost management measures, embracing a diversified fuel mix, and utilising innovative technologies. Having a stable fuel supply and utilising nuclear power have been important factors in mitigating the impact of market volatility. CLP Power will continue to apply prudent cost controls, maintain a diversified fuel mix strategy, and enhance its operational efficiency in order to manage electricity tariffs effectively while meeting the Government's environmental policy objectives.

CLP Power allocated over HK$200 million from the CLP Community Energy Saving Fund in 2024 for a series of programmes to support the underprivileged households and promote energy conservation. HK$50 million was allocated to the CLP Electricity Subsidies for the Underprivileged Families Programme, to provide electricity subsidies of HK$600 to 50,000 single elderly people and elderly couples aged 65 or above, low-income families and people with disabilities, as well as electricity subsidies of HK$1,000 to 20,000 tenants of subdivided units.

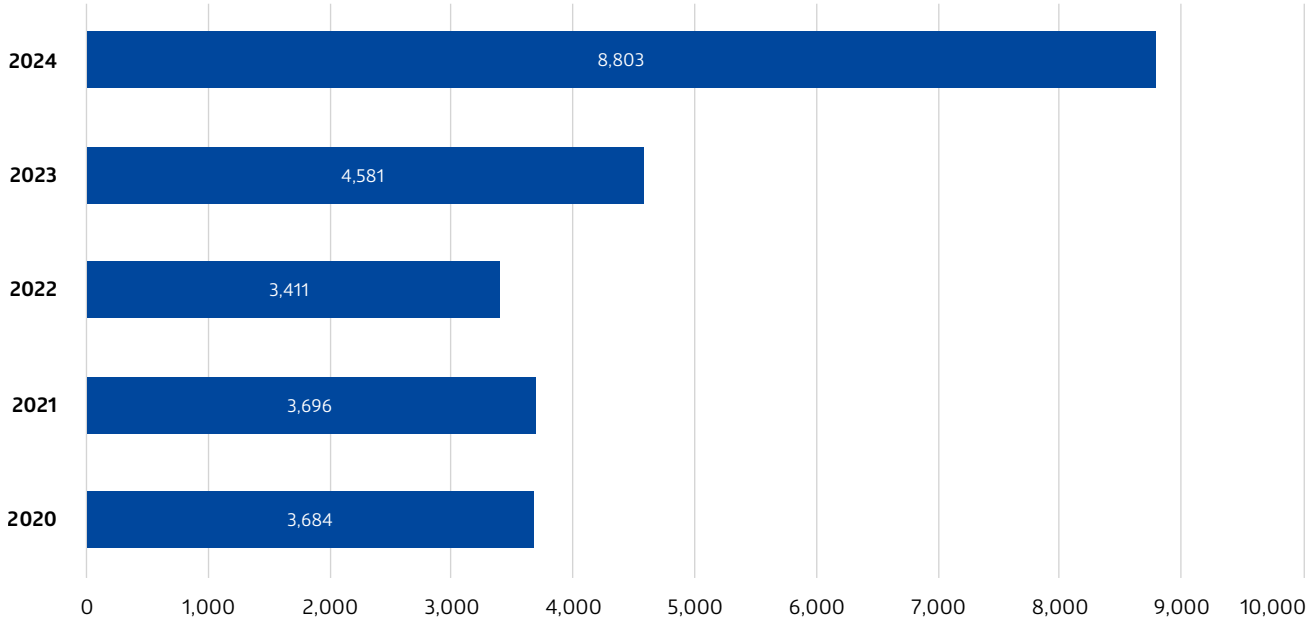
In addition, CLP Power allocated HK$3 million to support the Hong Kong SAR Government's pilot programme to equip Community Living Rooms with energy-efficient electrical appliances and educational resources relating to energy saving and conservation to help tenants of subdivided units. CLP Power continued to carry out rewiring works for the installation of individual electricity meters for tenants of subdivided units. Also, families living in transitional housing received subsidies of HK$2,000 each for purchasing energy-efficient electrical appliances to improve their home energy efficiency.

CLP Power has also introduced the Home Electrical Safety Enhancement for the Underprivileged Programme. This programme is enhancing home safety for underprivileged families including low-income households, people with disabilities, elderly households and ethnic minorities by providing them with free electrical inspections and repairs by qualified electricians.

CLP Power announced contributions of over HK$200 million in community support for 2024 programmes.

Disconnections by CLP Power

Digital metering system allows remote connection and disconnection. The total number of disconnections for residential customers in Hong Kong was increased to 8,803 in 2024.



Australia

Believing that all customers should have fair and equal access to its products and services, EnergyAustralia has published an Energy Charter outlining its commitment to working with customers to improve their energy affordability, energy efficiency and providing support to those in vulnerable circumstances.

Download the latest EnergyAustralia's Energy Charter disclosure

The rising cost of living continues to present challenges for many Australians. To support households facing short-term financial difficulties, EnergyAustralia has continued to offer payment plans and payment extensions, as well as information on available government assistance. The EnergyAssist hardship programme offers support to customers experiencing financial hardship through tailored solutions that include customised payment plans, payment matching, debt waivers and energy-efficiency education. These measures are also helping customers make better decisions about their energy consumption practices.

EnergyAustralia also partners with various organisations to directly assist customers facing financial hardship and help them improve their energy efficiency:

- Member of the One Stop One Story Hub Partnership, which supports people facing family and domestic violence or financial hardship by helping them navigate support programmes and reduce the need for multiple interactions.
- Partnered with Uniting Energy Audits to provide customers with energy-efficiency information via a home or phone audit, thus helping them to reduce their energy consumption and bills.
- Partnered with The Good Guys to assist with the delivery of new appliances and the removal of old ones.

EnergyAustralia's business customers can also access support through the Rapid Business Assist programme, launched in 2020 to support small to medium enterprises facing financial uncertainty. In consultation with these customers, the Company develops customised payment schedules, provides advice on reducing energy consumption and offers guidance on accessing government energy-relief subsidies.

Read more on EnergyAustralia's Hardship Policy

Community investment

GRI reference: 201-1, 203-1, 203-2, 413-1

CLP Power launched a series of community support programmes in 2024, described in the following case study section.

Beneficiaries (number)	2024	2023	2022	2021	2020
Direct beneficiaries (number)	**1,270,000+**	626,000+	1,305,000+	1,580,000+	918,000+
Organisations benefitted (number)[1]	**323**	291	280	232	263

1 Includes professional bodies, academic institutes, NGOs and community groups.

Beneficiaries by theme

Of the more than 1,270,000 beneficiaries in 2024, 48.3% benefitted from CLP's Community Wellbeing programmes. The main contributor was the CLP Retail and Catering Coupons Programme which aims to encourage local consumption.

In 2024, we met the target of 16,000 hours for the Group's volunteering services, with a slight decrease of service hour when compared with 2023. A remarkable increase of service hours in Hong Kong was contributed by the initiatives launched to celebrate the 30th anniversary of CLP Volunteer Team and the 10th anniversary of Sharing the Festive Joy Programme. The increase was offset by a decrease in Mainland China, where the Rural Vitalisation Programme focused on facility improvement works in the local communities.

EnergyAustralia's refreshed approach to volunteering saw an increased take up of volunteer leave, with teams and individuals supporting organisations to deliver food relief, support women and children escaping family violence, plant trees and donate life-saving blood and plasma. Close to 500 additional hours were volunteered in our local communities in 2024 versus 2023.

Workplace Giving donations were slightly down, however there is a planned refresh of the programme in 2025 aimed to increase participation and total donations and better align partnerships with our purpose.

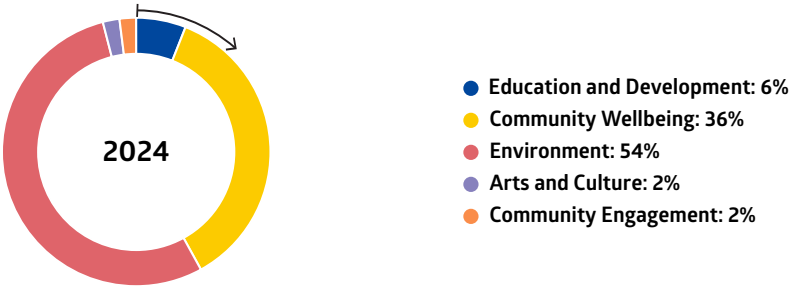
The amount donated by CLP for charitable and other community purposes decreased to HK$6.91 million. Community spending by theme and geography is summarised in the charts on the next page.

	2024	2023	2022	2021	2020
Amount donated for charitable and other purposes (HK$M)[1]	**6.91**	9.18	10.02	15.09	27.00
Volunteer hours (hours)[1]	**16,498**	16,701	19,329	16,541	10,973
Programmes implemented (number)	**514**	458	481	443	468

1 Numbers have been subject to rounding.

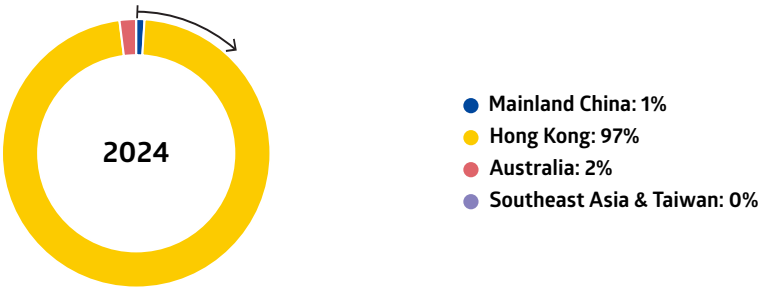
Community spending by theme

The largest percentage of community spending was directed to environment initiatives (54%), followed by community wellbeing initiatives (36%).



Community spending by region

The largest percentage of community spending was directed to Hong Kong (97%).



Case Study

A$1.5 million contributed to local non-profit initiatives by EnergyAustralia since 2016

Since 2016, EnergyAustralia has invested approximately A$1.5 million in grassroots programmes through its Community Grants programme. These contributions have supported local organisations working to make a tangible difference in education, sustainability and building resilient communities in the areas around EnergyAustralia's operations.

In 2024, EnergyAustralia implemented changes to the focus areas and application forms of the Community Grants programme, resulting in an increase in the number of applications by local organisations.

EnergyAustralia's Social Performance Lead, Jade Torcasio, said: "At EnergyAustralia, we recognise that many communities are facing increased challenges, particularly with the rising cost of living. We are seeing that reflected in the number of applications.

"Our operations plants are not just located in these communities — they are part of them. The Community Grants programme is one way we can support local organisations that are working to help people navigate these challenges. By backing initiatives focused on education, sustainability and resilience, we aim to strengthen our local communities and help shape a sustainable future for everyone."

EnergyAustralia awarded a total of 34 community grants across five regions through the programme in 2024.

Find out more about EnergyAustralia's Community Grant Programme

Find out more on local community initiatives at EnergyAustralia

Case Study

A partnership with Morwell Neighbourhood House that is tackling food insecurity in the Latrobe Valley

Morwell Neighbourhood House has been a partner in EnergyAustralia's Workplace Giving programme since 2021. Employees donations are matched by the business and go towards funding 'The People's Kitchen', an initiative that engages businesses and volunteers from the local community in producing healthy pre-cooked meals for people facing food insecurity.

EnergyAustralia was a founding partner of this programme. Today, the volunteering sessions are booked out months in advance. Each session produces around 150 meals for the Morwell Neighbourhood House Foodbank, accessible by the community.

Tracie Lund, manager of Morwell Neighbourhood House, said that the rising cost of living had seen a significant increase in people needing their assistance. "The need is growing each year. This year we have seen 700 more people than in 2023," she said.

Food security is a significant concern for the region. According to Foodbank Victoria, 21 percent of parents in the region rely on low-cost, unhealthy foods to avoid food insecurity, compared with 13 percent of Victorians. People living in regional areas are also 33 percent more likely to face food insecurity than their metropolitan-based counterparts.

In the three years of the partnership, EnergyAustralia has donated over A$80,000 to The People's Kitchen through workplace-giving donations and 117 volunteers from across the business have helped prepare almost 3,000 meals. These efforts in collaboration with volunteers from other businesses and community groups have seen The People's Kitchen distribute over 14,000 meals since 2021.

EnergyAustralia volunteers enjoying their work at The People's Kitchen.

Case Study

Summer delights at CLP Pulse promote arts and culture alongside green living

CLP Pulse staged a month-long summer programme of arts and green living activities called 'Discover the Summer Delights at CLP Pulse'. It included activities that enabled the community and tourists to learn the unique stories behind the historic CLP clock tower building and the Kowloon neighbourhoods around it.

For the event, CLP Pulse teamed up with local historians and artists to organise a wide range of activities, including a heritage talk on the histories of Kowloon Tong and Ho Man Tin, workshops on subjects ranging from miniature art techniques to upcycling and sustainability tips and a harp performance. Many of these activities and workshops gave participants the opportunity to unleash their creativity and explore the concept of decarbonisation for a sustainable future. During the summer holiday period, the programmes attracted over 8,300 visitors to CLP Pulse.

The handrails at the main entrance of CLP Pulse were decorated with 'yarn-bombing', making the site a colourful photo spot for visitors.

The summer programme featured workshops that gave participants the opportunity to unleash their creativity and explore the concept of decarbonisation.

Case Study

Connecting the elderly with society as a celebration of the 30th anniversary of the CLP Volunteer Team

The year 2024 marked the 30th anniversary of the CLP Volunteer Team and the 10th anniversary of the CLP Sharing the Festive Joy programme. The CLP Volunteer Team was founded in 1994 by a group of frontline employees who volunteered their power expertise to carry out rewiring services for vulnerable elderly people. It has since grown to more than 1,800 members, including retirees and employees' family members and friends, and become one of the largest corporate volunteer teams in Hong Kong.

To celebrate this milestone, CLP Power teamed up with the Tung Wah Group of Hospitals and the Salvation Army to launch the **Be Your Peer Community Power Journey** programme. The programme recruited and trained 20 elderly people as docents, who guided community tours for around 100 guests around the Kowloon Walled City Park and explained its history. They also visited CLP Pulse to learn about the development of power in Hong Kong and the importance of energy conservation and decarbonisation. At the celebration luncheon of the 30th anniversary of the CLP Volunteer Team, a graduation ceremony was held for the elderly docents in recognition of their efforts.

The Be Your Peer Community Power Journey programme tapped the unique skills of elderly docents, enabling them to continue making contributions to the community.

The CLP Sharing the Festive Joy programme also celebrated its 10th anniversary this year. CLP Power collaborated with Fusion HUB, St James' Settlement, Yan Chai Hospital and Hong Kong Sheng Kung Hui Welfare Council in organising nearly 20 upcycling workshops. Over 180 CLP volunteers worked alongside more than 600 elderly people to create unique eco-friendly bags, wallets and cushion covers from nearly 1,000 unused garments donated by CLP colleagues. The programme, which gave the elderly participants the chance to utilise their past sewing experience, was valuable in emphasising the importance of sustainability and waste reduction at source.

To celebrate Senior Citizens Day, CLP Power partnered with NGO partners and Youth College (International) to host an upcycled fashion show at a celebration luncheon in November. Eight design students from Youth College (International) created outfits inspired by trends from the 1960s to the 1990s. They also worked with 16 elderly participants to transform recycled clothing into 12 innovative fashion pieces, which were presented on the runway by CLP volunteers and elderly models.

The Sharing the Festive Joy programme got elderly participants involved in transforming old clothes into fashionable and practical items, while also learning about the importance of waste reduction at source.

CLP Power has three Hotmeal Canteens in Sham Shui Po, Kwun Tong and Kwai Tsing districts, which provide nutritious hot meals for people in need as well as offer a place for them to meet, socialise and connect with the community. CLP volunteers visited the Canteens regularly to help serve meals, as well as to organise thematic activities to promote physical and mental health, such as games and art workshops.

CLP volunteers visited the CLP Hotmeal Canteens regularly.

Case Study

Providing opportunities for young people and nurturing the generation of the future

In the face of the challenges encountered by fresh graduates and career starters, CLP Power is dedicated to addressing the working needs of local youth and collaborating with various partners to boost the opportunities available for young people.

In 2024, CLP Power was presented with an Outstanding Rehabilitation Partners Award by the Correctional Services Department (CSD) in recognition of its contributions in providing rehabilitation opportunities to young people in custody and helping to build a more inclusive and harmonious society. CLP Power continued to collaborate with CSD in the year, delivering three career talks for 85 young inmates that included useful information about continuing their studies and exploring pathways in engineering.

Three career talks were delivered for 85 young inmates that included useful information about continuing their studies and exploring pathways in engineering.

CLP Power also supported the Hong Kong SAR Government's Strive and Rise Programme 2023/24 by nominating 11 mentors, including graduate trainees, young engineers and representatives from various business units to participate in a one-year mentorship programme in which they paired one-on-one with underprivileged junior form students. Throughout the year, the mentors accompanied the students in a wide range of activities, including 20 visits to CLP facilities such as the CLP E-Playground, the CLP Power Academy and the CLP Low Carbon Energy Education Centre, and provided them with valuable life and study advice. Our efforts have been recognised with CLP being awarded the Supporting Organisation Award for the second consecutive year.

Further, CLP Power supported the Hong Kong Federation of Youth Groups for the CLP Energy for Brighter Tomorrows Award by providing scholarships for 20 young people with outstanding achievements in battling adversity. Ten CLP Power colleagues acted as mentors for the students. Since its launch in 2018, a total of 120 students have been awarded scholarships.

CLP Power signed a Memorandum of Understanding (MoU) with the Hong Kong Polytechnic University in 2024 to cultivate electrical engineering talents in Hong Kong and the Greater Bay Area. Under the MoU, CLP Power will jointly develop innovative digital training and learning materials utilising advanced technologies, including the metaverse, immersive virtual environments, virtual reality and augmented reality. Students from the Department of Electrical and Electronic Engineering at the University will also have opportunities to experience the real-life working environment of the power industry.

CLP Power is committed to promoting a low-carbon and energy-saving lifestyle through the use of innovative tools and public education programmes. A newly launched board game titled "Low-Carbon City Planner" with a coding element has been sent to all kindergartens and primary schools in Hong Kong, teaching young children about energy saving, low carbon living and waste reduction at source in an interactive way. Its official launch, officiated by Under Secretary for Education Mr Jeff Sze and Ms Quince Chong, our Chief Corporate Development Officer, was held in September 2024 and attended by nearly 70 guests, including members of the CLP Education Fund Advisory Committee, CLP Local Community Advisory Committee, NGO partners, school principals and teachers. A demonstration of the board game was made to the public at the Hong Kong Book Fair, where nearly 40,000 visitors visited CLP's booth to learn about energy saving and the power journey through exhibits such as the board game, mini games and a

new cartoon video on the Power Kid Channel. With support from CLP graduate trainees and young engineers, kindergarten visits continued that involved talks given to young kids about the power generation journey, the safe use of electricity, the work life of engineers and tips for energy-saving. To date, this initiative has reached over 56,000 children at more than 750 kindergartens.

The CLP booth at the annual HK Book Fair attracted nearly 40,000 visitors.

Since its launch in 2016, the "Engineer in School Programme" has motivated secondary school students to save energy and explore careers in power engineering. CLP engineers have engaged with more than 71,000 students from 190 schools through school talks and workshops, STEM workshops and visits to the Power Quality Workshop, CLP E-Playground, the InnoPower Hall and the Low Carbon Education Centre.

Under the CLP Empowering Youth for a Sustainable Future Programme, CLP Power organised the Energy-Saving and Low-Carbon Innovation for Tomorrows Competition in partnership with the Institution of Engineering and Technology (IET) Hong Kong. Funded by the CLP Community Energy Saving Fund, the competition attracted entries from more than 90 teams from higher educational institutions, who were challenged to improve the lives of disadvantaged people and the community at large by designing practical solutions to encourage energy saving and low carbon living. 20 teams were selected as finalists and received funding from CLP Power to create prototypes of their proposed solutions. Feedback and advice on the prototypes were provided by professional engineers and representatives from the social welfare sector to help the students turn their ideas into reality. A total of 8 teams with outstanding performance were awarded and received a total cash prize of HK$110,000.

Finalists of the CLP Energy-Saving and Low-Carbon Innovation for Tomorrows Competition outline their research findings and prototype solutions to officiating guests.

Case Study

Enabling growth and engagement through Continued Community Support

As part of its commitment to community stewardship, CLP Power has rolled out a range of targeted initiatives to address the needs of different communities in Hong Kong.

CLP Power allocated HK$5.7 million from its Community Energy Saving Fund in 2024 to launch the E-Learning Assistance Programme. The programme provided new iPads to support the e-learning needs to 2,000 primary, secondary and tertiary students from low-income families.

CLP Power distributed e-learning devices to 2,000 underprivileged students to support their e-learning needs.

CLP Power continued its Community Beautification Project, designed to connect people with their communities by decorating substations with murals promoting energy conservation, carbon reduction and green living. In 2024, CLP Power teamed up with the HKCT Institute of Higher Education (HKCT) to beautify six substations in two phases.

The first phase involved a CLP Substation Mural Painting Competition, in which HKCT students and alumni were invited to design murals for three substations in the Kowloon City, Tsuen Wan and Wong Tai Sin districts. The competition ran from June to September, with the winning entries then painted on the substation walls. The second phase was the Peer-to-Peer Coaching Programme, in which HKCT students are working with students from Catholic Ming Yuen Secondary School, Tsang Pik Shan (Sung Lan) Secondary School and Yuen Long Merchants Association Secondary School to beautify substations in Sai Kung, Shatin and Yuen Long districts respectively. The Peer-to-Peer Coaching Programme was kicked off on 4 November, at ceremony where awards were also presented to the winners of the Substation Mural Painting Competition.

CLP volunteers, HKCT students and local residents worked together to paint the wall of the substation.

Winners of the CLP Substation Mural Painting Competition share with the audience how they incorporated local landmarks, cultural characteristics and low-carbon messages into their designs.

Promoting nuclear safety and clean energy

GRI reference: 306-3 (2016), 306-1, 306-2, 306-3

The International Nuclear and Radiological Event Scale (INES) is a scale developed by the International Atomic Energy Agency (IAEA) and the Organisation for Economic Co-operation and Development (OECD) to improve public understanding and awareness of the nature and significance of safety aspects of incidents and communicate the safety significance of nuclear and radiological events consistently. Any event occurring in a nuclear power station that qualifies for the INES scale is considered as a Licensing Operational Event (LOE). In 2024, Daya Bay Nuclear Power Station continued to operate smoothly, with no LOE occurrences.

To ensure the provision of low-carbon and cost-competitive energy to Hong Kong, Daya Bay Nuclear Power Station is continuing to provide an additional 10% of electricity output to Hong Kong from 2024 to 2028, in addition to the 70% of its electricity already committed to Hong Kong. This arrangement is helping to minimise carbon dioxide emissions in the city and keep the tariff stable.

CLP is committed to promoting education about nuclear and low-carbon energy. In 2017, it sponsored City University of Hong Kong in setting up the CLP Power Low Carbon Energy Education Centre. Since then, the centre has served as an important platform for engaging with and educating the public about the benefits of low-carbon energy sources, including nuclear energy and how they help address the challenge of climate change. The centre includes five themed zones that introduce various types of low-carbon energy, namely wind, solar, hydro, gas and nuclear through interactive exhibits and tools. Guided tours and various low-carbon themed workshops are offered to visitors free of charge. In 2024, more than 9,500 visitors visited the centre, including students, teachers, professional groups and the general public.

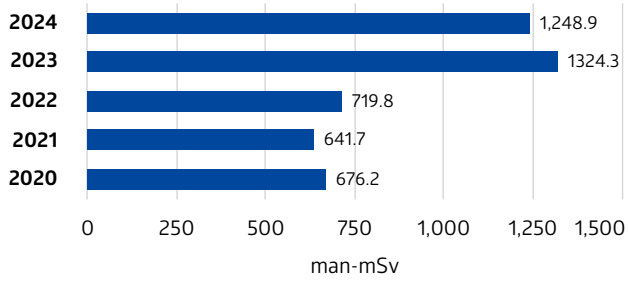
The average radiation dose rate for workers in 2024 was less than 0.4 mSv per person per year. By comparison, the background radiation dose rate from the natural environment in Hong Kong is 2.4 mSv per person per year.

The charts on the right and below show the amounts of spent nuclear fuel and low- to intermediate-level radioactive nuclear waste from Daya Bay in recent years. The amounts of both types of waste are related to the number of planned refuelling outages in each year.

In 2024, Daya Bay carried out a 30-year planned outage and the total quantity of spent nuclear fuel generated reflected this event.

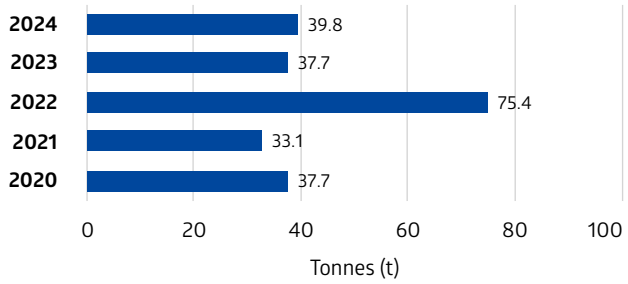
Collective radiation dosage for workers

The collective radiation dosage for the year was 1248.9 man-mSv, similar with the 2023 level, as there was a 30-year planned refuelling outage of a longer duration.



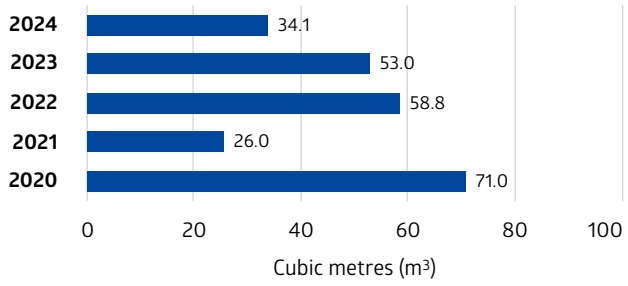
Spent nuclear fuel

The amount of spent nuclear fuel in 2024 was at an expected level, given that there was only one planned refuelling outage, same as the previous year.



Solid radioactive nuclear waste

There was a decrease in low- to intermediate-level nuclear waste in 2024, as compared with 2023, due to a stringent management of nuclear waste although there was a 30-year planned refuelling outage of a longer duration.



Case Study

Supporting nuclear energy education for all

CLP Power is committed to supporting the development of a lower carbon city. To mark the 30th anniversary of the import of nuclear energy from the Daya Bay Nuclear Power Station into Hong Kong, CLP Power launched several initiatives to enhance public understanding of nuclear energy, including many aimed at young people.

In partnership with the Nuclear Division of the Hong Kong Institution of Engineers, CLP Power has developed a series of animated videos aimed at enhancing public understanding of nuclear energy. The series of four videos, available on CLP's YouTube channel, covers the topics of nuclear power generation, radiation in daily life, the role of nuclear power in addressing climate change and nuclear safety. The videos present complex scientific concepts in a simple and engaging way, making them accessible to a broad audience, especially students.

CLP Power and Daya Bay Nuclear Power Operations and Management Co., Ltd. (DNMC) have also supported the Mainland China study tours organised by the Education Bureau of the Hong Kong SAR Government. These tours are part of the Citizenship and Social Development subject in the school curriculum and aim to deepen students' understanding of national development. Starting from the 2024/2025 school year, they include visits to the Daya Bay Nuclear Power Station, where students learn about the importance of nuclear energy for achieving decarbonisation goals and contributing to sustainable development. The first group of over 150 senior secondary students, teachers and principal visited the power station on 7 November 2024. During their visit, they explored the Daya Bay Nuclear Power Science and Technology Museum and learned about nuclear safety and the development of the nation's nuclear industry.

The CLP Power Low Carbon Energy Education Centre (LCEEC), established by CLP Power and City University of Hong Kong, held its second "Low-Carbon Invention Competition" in the year to raise students' awareness of decarbonisation and energy-saving in response to climate change. Over 600 students from 54 schools participated, creating everyday inventions and transforming them into 3D models using 3D drawing software. This year, to mark the 30th anniversary of CLP Power's nuclear energy imports from Daya Bay Nuclear Power Station, nuclear energy was included as a scoring criterion. Many winning entries creatively integrated nuclear power principles into their inventions, showcasing the students' understanding of nuclear energy.

More than 600 students across 54 schools joined the Low-Carbon Invention Competition to unleash their creativity by designing low-carbon inventions for everyday life.

Students visited the Daya Bay Nuclear Power Science and Technology Museum, learning about China's nuclear energy development.

Glossary

Accelerator programme	A programme that offers support, including financing and mentorship, to facilitate the development of start-up companies.
Air emissions	The emission of air pollutants such as sulphur dioxide (SO_2), nitrogen oxides (NO_x) and particulate matter (PMs).
Availability	The fraction of a given operating period in which a generating unit is available without outages and capacity reductions. Also known as Equivalent Availability Factor.
Capacity purchase	Additional third-party owned power generation capacity contracted by CLP under long-term agreements to meet customer demand. Some of these agreements may confer CLP rights to use the generation assets and exercise dispatch control as if they belonged to the Group.
Capital investments	Includes additions to fixed assets, right-of-use assets and intangible assets, investments in and advances to joint ventures and associates and acquisition of businesses.
Carbon credit	A carbon credit is a tradeable instrument which represents either: (a) a permit which gives the holder the right to emit one tonne of carbon dioxide or equivalent greenhouse gas (tCO_2e) into the atmosphere; or (b) a certificate from a project that represents the removal or avoidance of one tCO_2e from the atmosphere. CLP Carbon Credits (https://www.clpcarboncredits.com) are generated from renewable energy sources and can be used to offset carbon emissions generated by governments, organisations or individuals.
Carbon neutral	The condition in which greenhouse gas emissions associated with an activity or entity's carbon footprint are reduced as much as possible and any remaining hard-to-abate emissions are counterbalanced by offsetting through measures such as the use of carbon credits, carbon sinks or storage.
Circular Economy	Circular Economy is defined in general as a framework that can address the global challenges of climate change, biodiversity loss, waste and pollution, which is achieved through three principles – eliminating waste and pollution, circulating products and materials at their highest value and regenerating nature. Embracing the Circular Economy, an utility company can contribute to the transition to a more sustainable and resilient energy and resource management system by adopting cleaner technologies, promoting resource efficiency and investing in nature conservation.
Climate Action Finance Framework (CAFF)	Launched in 2017, CAFF supports the transition to a low-carbon economy by attracting socially responsible, sustainable financing to fund CLP's investments to reduce carbon emissions and increase efficiency of energy usage. The CAFF formalises and governs project evaluation, usage and management of proceeds, as well as reporting for Climate Action Finance Transactions, including bonds, loans and other forms of finance.
Climate Vision 2050	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. Launched in 2007 with a focus on the ambition to mitigate CLP's climate impact, Climate Vision 2050 has been instrumental in informing CLP's business strategy and guiding its investment decisionmaking.
Combined-cycle gas turbine (CCGT)	A power generation technology that uses dual turbine design, comprising a gas turbine and steam turbine. During the process, the heat from the gas turbine is captured and transported to heat up water in a boiler. Steam is then produced to drive the steam turbine for power generation. The combined-cycle design enables significantly higher efficiency by allowing for greater output without the use of additional fuel.
Decarbonisation	Used to describe the action of lowering GHG emissions. For the power sector, this primarily refers to the reduction of GHG emissions from electricity generation and providing energy efficiency services and solutions to customers which reduce carbon footprint.

Decentralised generation / distributed generation	Refers to electrical generation and storage performed by a variety of technologies of a smaller scale located close to the load they serve. In contrast, centralised generation is the large-scale generation of electricity serving multi-loads connected to the transmission network.
Demand response	Demand response programmes encourage participating customers to commit to short-term reductions in electricity demand, helping energy suppliers to keep the grid running optimally during high load periods.
Development Plan	CLP Power's Development Plan, which is part of the Scheme of Control (SoC) Agreement, covers capital projects for the provision and future expansion of electricity supply systems under CLP's operation. It is implemented over a given five-year period, and is subject to the review and approval by the Executive Council of Hong Kong.
Digitalisation	The application of new information technologies including artificial intelligence and data analytics to help electric utilities develop new customer-centric services and improve operations.
Distributed energy	Distributed energy includes power generated from sources such as solar panels and wind turbines located close to the users, as well as controllable loads or storage such as electric vehicles and batteries.
Double materiality	Under the concept of double materiality, companies assess matters affecting business sustainability from two perspectives: firstly financially material topics that may reasonably be expected to affect the business's cash flows, access to finance or cost of capital; secondly impact material topics with potential effects on people, the environment and the economy. The concept was formally proposed by the European Commission in 2019.
Electricity sent out	Gross electricity generated by a power plant less self-generated auxiliary power consumption, measured at the connecting point between the generating unit and transmission line.
Energy-as-a-Service	Evolution in the business strategy of energy companies to provide a more diverse range of value-adding energy services such as energy management and distributed energy resources, enabling customers to benefit from sustainable energy solutions through a schedule of regular payments, minimising upfront costs.
Energy attribute certificates (EACs)	EACs are a category of contractual instrument that conveys certain information (or attributes) about the energy generated, including the resources used to create it, the emissions associated with its production, the location of the facility that generated the unit of energy and when the unit of energy was produced. EACs are usually issued for renewable energy. Currently, CLP offers two types of EACs, namely Green Electricity Certificates (GECs) and Renewable Energy Certificates (RECs). See definitions of both in this Glossary.
Energy purchase	Electricity purchased by CLP to meet customer demand under long-term agreements from power plants not owned by CLP and without existing capacity purchase agreements with the Group.
Energy security	The uninterrupted availability of energy sources.
Energy transition	The transition of the global energy sector from fossil-fuel based energy systems to low- or zero-carbon sources.
Equity basis	An approach set out by the GHG Protocol Corporate Standard for an organisation to consolidate GHG emissions for the purpose of accounting and reporting GHG emissions. On this basis, the organisation accounts for GHG emissions from operations according to its equity share in the operations.
Feed-in Tariff (FiT)	Payable by CLP under the SoC Agreement to purchase electricity produced by any of its customers with an embedded renewable energy system qualified to participate under the terms of the FiT Scheme.
Flue gas desulphurisation (FGD) facility	Equipment used to remove sulphur oxides from the combustion gases of a boiler plant before discharge to the atmosphere.

Generation capacity	The maximum amount of power that a generator is rated to produce. Also known as installed capacity or nameplate capacity.
Green Electricity Certificates (GECs)	Issued by China's National Energy Administration, GECs provide proof of the environmental attributes of renewable energy and enable holders to claim the associated benefits.
Greenhouse gas (GHG) emissions	The emission of gases that contribute to the greenhouse effect, causing a changing climate. CLP's GHG emissions inventory covers the six GHGs specified in the Kyoto Protocol. Nitrogen trifluoride (NF_3), the seventh mandatory gas added under the second Kyoto Protocol, was deemed immaterial to CLP's operations after evaluation. The GHG Protocol Corporate Standard classifies an organisation's GHG emissions into three 'Scopes'. Scope 1 emissions are direct emissions from owned or controlled sources. Scope 2 emissions are indirect emissions from the generation of purchased energy. Scope 3 are indirect emissions (not included in Scope 2) that occur in the value chain of the organisation.
Just transition	For energy companies, the transition to a net-zero economy directly impacts individuals, workers and communities. A just transition seeks to mitigate negative impacts on people while effectively harnessing opportunities to deliver equitable and inclusive outcomes.
Megatrends	Large, transformative global forces that define the future by having a far-reaching impact on business, economies, industries, societies and individuals. A megatrend is distinguished from other trends in that it cannot be stopped or significantly altered, even by powerful actors such as governments. Megatrend analysis is an important tool for companies aiming to drive sustainable growth as competition increases and new disruptive ideas and concepts affect entire industries.
Microgrids	Localised networks with generation, energy storage and load entities, that can operate in tandem with an existing grid or independently. They can potentially be deployed to meet the energy needs of remote areas cost-effectively, foregoing the expense of transmission grids.
National Electricity Market (NEM)	Australia's NEM is a wholesale spot market connecting six regional market jurisdictions – Queensland, New South Wales, the Australian Capital Territory, Victoria, South Australia and Tasmania.
Nature	Nature is the natural world, with an emphasis on the diversity of living organisms (including people) and their interactions among themselves and with their environment. In the context of corporations, these interactions includes ecosystems providing different ecosystems services and corporation's operational impacts and financial implications that arise from nature loss.
Net-zero	The situation in which greenhouse gas (GHG) emissions 2 are reduced, and the residual emissions are balanced by the removal of an equivalent amount of GHG from the atmosphere which is durably stored.
Non-carbon energy / non-carbon emitting energy	Energy from power sources that adds no extra carbon to the atmosphere, such as wind, solar, hydro and nuclear energy. It does not include waste-from-energy and other forms of biomass.
Operational control basis	An approach set out by the GHG Protocol Corporate Standard for an organisation to consolidate GHG emissions for the purpose of accounting and reporting GHG emissions. On this basis, the organisation accounts for 100 percent of the GHG emissions from operations over which it has operational control, but does not account for GHG emissions from operations in which it owns an interest but has no control.
Offtake	A long-term agreement to purchase electricity from another generator (see capacity purchase).
Particulate matter (PM)	Microscopic solids or liquid droplets in the air.

Peaking plant	A power generating station that is normally used to produce extra electricity during peak load times.
Phase out coal-fired generation capacity	In CLP's context, phasing out coal-fired generation capacity refers to: (a) the retirement and closure of a coal-fired power asset; (b) the move away from a build-own-operate-transfer coal-fired project before the end of the contract term or according to the terms of the project; or (c) the divestment from a coal-fired asset.
Photovoltaic (PV) panels	PV panels convert solar energy into DC electricity.
Power Purchase Agreement (PPA)	A long-term electricity supply agreement specifying deliverables such as the capacity allocation, the quantity of electricity to be supplied and financial terms.
Renewable energy	Energy that is generated from renewable resources, which are naturally replenished on a human timescale, including sunlight, geothermal heat, wind, tides, water, waste-to-energy, and various forms of biomass.
Renewable Energy Certificates (RECs)	In Hong Kong, RECs represent all the environmental attributes associated with electricity produced by local renewable sources in Hong Kong including solar, wind and landfill gas, purchased or generated by CLP Power Hong Kong Limited (CLP Power).
Scheme of Control (SoC) Agreement	The SoC Agreement sets out the electricity regulatory framework, procedures and policies for the 1 October 2018 – 31 December 2033 period. It governs and applies to the financial affairs of CLP Power and CAPCO, the manner in which CLP Power and CAPCO are responsible for providing, operating and maintaining sufficient electricity-related facilities and supplying electricity to meet demand in Hong Kong over the term of the Agreement.
Science-based target (SBT)	A target for greenhouse gas reductions that is in line with the goals of the Paris Agreement to limit global temperature increase to well below 2°C above pre-industrial levels and pursue efforts to limit warming to 1.5°C. SBTs are managed by the Science Based Targets initiative (SBTi).
Sustainable Development Goals (SDGs)	The 17 SDGs, adopted by all United Nations Member States in 2015, are the blueprint to achieve a better and more sustainable future for all. Find out more on https://sdgs.un.org/.
Utilisation	Gross generation by a power plant unit in a given period as a fraction of the gross maximum generation. Also known as Gross Capacity Factor.
Virtual Power Plant (VPP)	VPPs are networks of distributed energy systems such as rooftop solar and battery storage systems that are pooled together to provide additional capacity to the electricity grid.
Waste-to-energy	A form of renewable energy generation using waste such as landfill gas. Greenhouse gases are emitted during the process.
Zero-carbon electricity	When the GHG emissions associated with the electricity consumption of a system/project are either non-existent (i.e. refer to the definition of non-carbon energy below) or cancelled out or balanced by virtual renewable power purchase agreements (VPPA) or energy attribute certificates

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