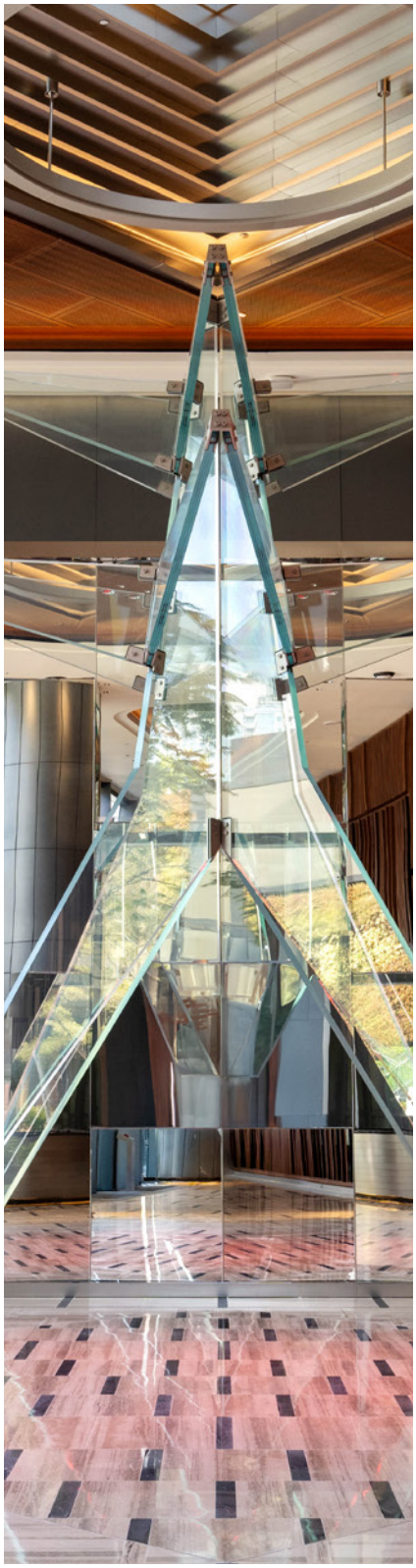
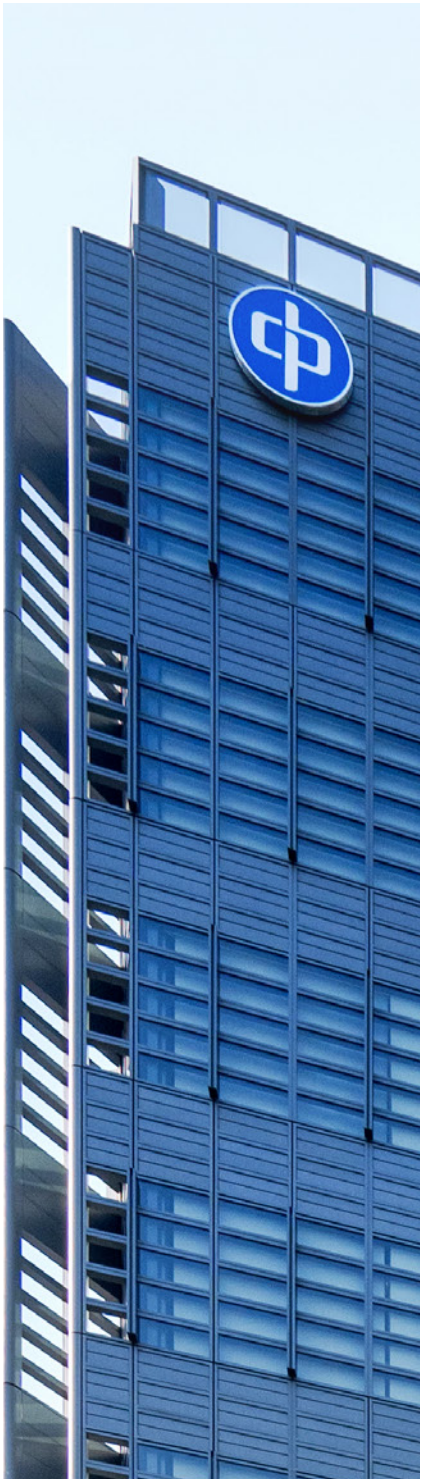
2025
Sustainability Report

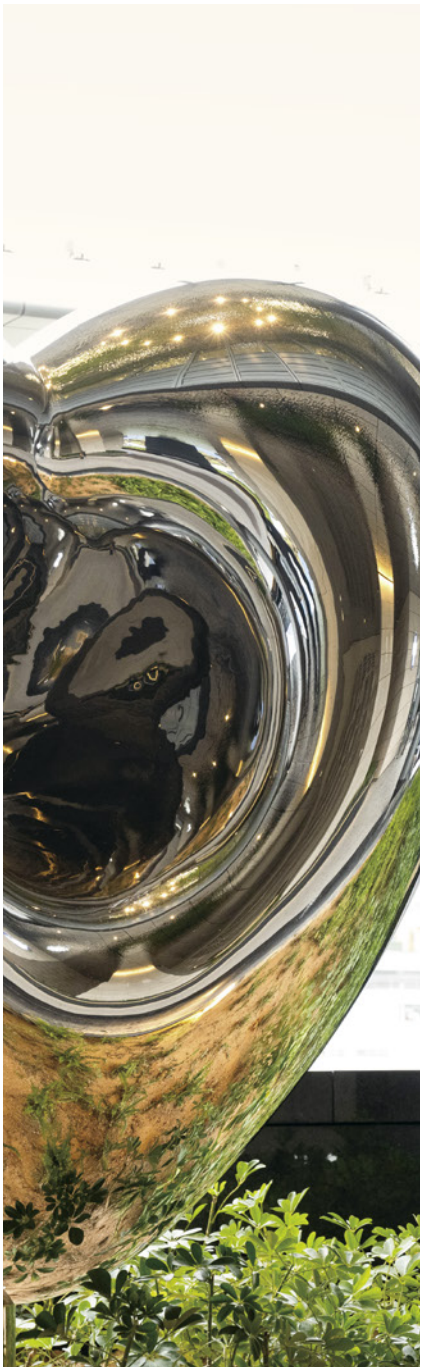
Stock Code: 00002

CLP 中電 | 125

Power Brighter Tomorrows







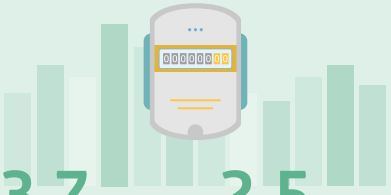
Customers

Highlights

CLP Power maintained world-class power supply reliability of **99.999%** in Hong Kong

Hong Kong's first chiller system project using zero-carbon electricity at Nina Tower, delivered by CLP*e*, received a Merit Award at the Green Building Award 2025

Outcomes for stakeholders



3.7 million **2.5 million**

Connected over **3.7 million smart meters** for customers in Hong Kong and Australia and installed **2.5 million smart meters** in India

More than 5,000 EV charging points were connected to CLP Power's eMobility Grid Management Platform (eGMP)

Stakeholders' areas of interest

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

Relevant material topics

Energy growth opportunities

Digital innovation and cybersecurity

CLP is committed to delivering reliable, reasonably priced energy to its customers. By leveraging innovative technologies and customised services, CLP is enhancing customer satisfaction while promoting energy conservation and supporting the adoption of renewable energy. CLP is actively engaging with customers and other stakeholders to address their evolving energy needs and foster strong relationships, while at the same time 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.

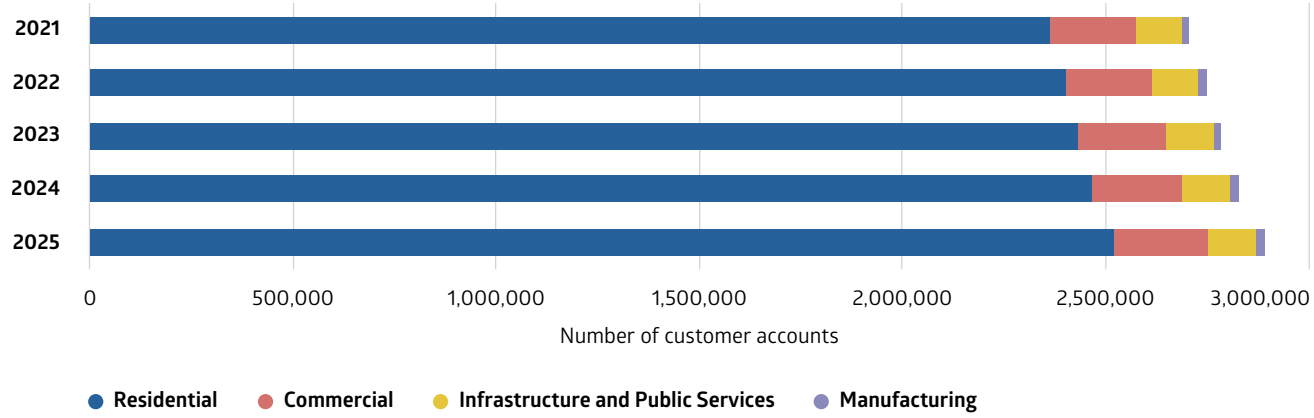
In 2025, the number of customer accounts in Hong Kong increased in all sectors, including residential, commercial, infrastructure and public services, and manufacturing.

CLP Power is the sole electricity provider for Kowloon, the New Territories and most of the outlying islands in Hong Kong. It serves about 2.90 million customers accounting for over 80% of Hong Kong's households. Total electricity sold in 2025 was 35,760GWh.

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, new local railway infrastructure projects and new data centres. Hong Kong's Northern Metropolis Development Strategy requires highly reliable power supplies in support of this ambitious plan to transform 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.

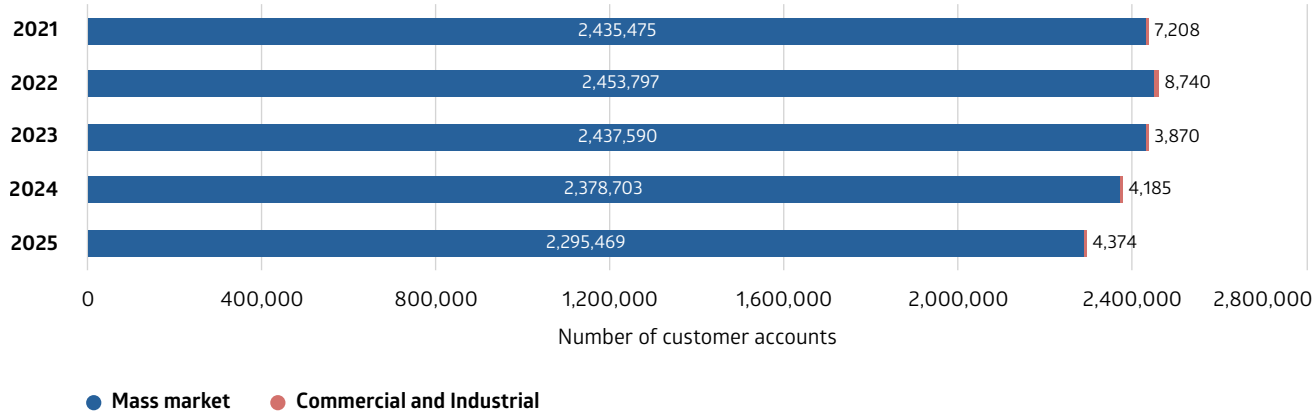


	2025	2024	2023	2022	2021
Total Hong Kong customers (number)	**2,895,398**	2,830,411	2,789,644	2,752,071	2,711,421
Residential	**2,528,522**	2,474,155	2,439,557	2,407,225	2,369,217
Commercial	**228,009**	218,266	214,616	212,251	210,821
Infrastructure and Public Services	**122,248**	121,479	118,548	115,404	113,956
Manufacturing	**16,619**	16,511	16,923	17,191	17,427

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 2025, total customer accounts declined by 3.5% due to intense retail competition.



Access to reliable energy

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

The consistent availability of electricity generation assets is fundamental to ensuring a reliable energy supply for consumers.

CLP calculates the equivalent 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 equivalent availability range of 90% and above for its newer assets. For the equivalent availability factor of individual assets, please refer to 2025 Asset Performance Statistics.

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.

CLP Power is committed to delivering a secure, reliable, and sustainable electricity supply to meet Hong Kong's growing energy needs. To achieve this, the company adopts a multi-faceted strategy that combines infrastructure upgrades and maintenance, advanced technologies, and organisational development to enhance operational efficiency. Investment in generation and network facilities ensures sufficient capacity to meet forecast demand and manage both planned and unforeseen outages. Energy security has been further strengthened through the launch of the offshore liquefied natural gas terminal, enabling access to competitive global gas supplies. At the same time, innovative solutions such as Beyond Visual Line of Sight (BVLOS) pilot project, cage drones equipped with Light Detection and Ranging (LiDAR) systems, crawler robots, and a centralised Asset Health Monitoring System have been deployed to enhance operational efficiency, optimise preventive maintenance strategies and inspect overhead lines and towers. Complementary measures, including lightning protection systems, anti-flooding enhancements, and accelerated asset replacement programmes, help safeguard critical infrastructure against environmental risks.

To optimise system performance and prepare for emerging challenges, CLP Power is implementing demand response programmes in selected distribution networks to manage temporary local peak demand and support the integration of electric vehicles and renewable energy systems. Smart grid technologies, such as the Grid-V intelligent management system, enable real-time monitoring of critical assets and operating environments.

Looking ahead, CLP is continuing to pursue innovative projects in robotics, energy storage, video analytics, building information modelling (BIM), and automation, leveraging insights from regional experiences to strengthen its integrated management framework. These efforts are collectively reducing operational risks, enhancing portfolio management, and reinforcing CLP's commitment to sustainable, reliable energy delivery for Hong Kong.

Effective emergency response and resilience during power outages are supported by close collaboration with government departments, property managers, and key customers. CLP Power also prioritises workforce development, investing in recruitment and training programmes such as the CLP Power Academy. By working with both local and international institutions, the academy prepares electrical and mechanical engineering professionals, ensuring a strong talent pipeline for the future of the power industry.

CLP Power's reliability performance

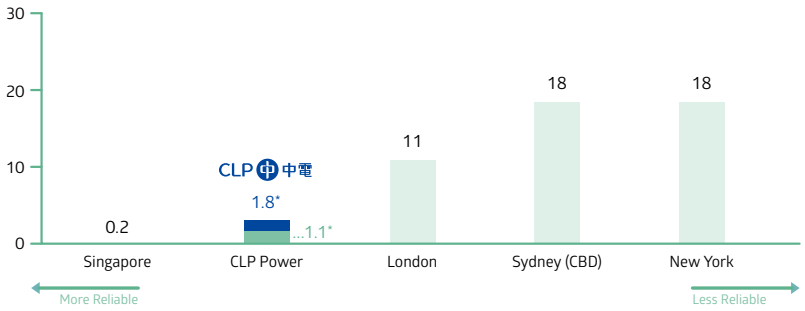
In Hong Kong, CLP Power has maintained its world-class supply reliability of 99.999%, surpassing the reliability performance of other major international cities such as Sydney, London and New York.

CLP Power's transmission and distribution network in Hong Kong serves approximately 80% of the city's population. At the end of 2025, CLP Power had approximately 17,358 km of circuits at medium or higher voltage. In addition, there were 257 primary and 15,944 secondary substations operating in Hong Kong. As of 2025, the average network loss for the past five years was 3.30%, slightly lower than the five-year average of 3.36% reported in 2024.

CLP Power 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 its 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. *2023-2025 average for CLP Power was 1.8 minutes; Taking out the impact due to Major Event Day (such as Typhoon Saola in 2023, Typhoons Wipha & Ragasa in 2025), the three-year average was 1.1 minutes.
2. 2022-2024 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 (2023–2025) was 0.20, meaning customers experienced a power interruption approximately once in five years during this period. This was lower than last year's three-year rolling average of 0.26.
System Average Interruption Duration Index (SAIDI)	
The average duration of interruptions each customer may encounter in a given year.	• The three-year average SAIDI (2023–2025) was 0.23 hour, including both planned and unplanned interruptions. This was lower than last year's three-year rolling average of 0.30.
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 average (2023–2025) of unplanned CML was about 1.8 minutes[1], which was lower than last year's three-year rolling average of 6.0 minutes.

1 Taking out the impact due to Major Event Day (such as Typhoon Saola in 2023, Typhoons Wipha & Ragasa in 2025), the three-year average was 1.1 minutes.

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 increasingly stringent regulations on emissions and fuel efficiency. 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 has continued 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

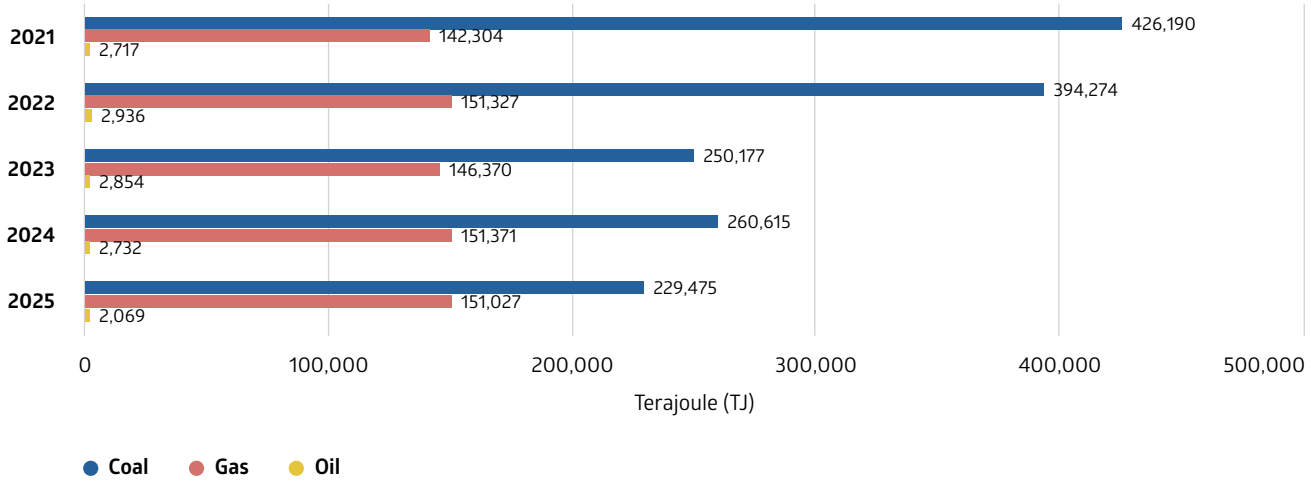
In 2025, coal consumption decreased year-on-year while gas consumption remained broadly stable (operational control basis). On an equity plus long-term capacity and energy purchase basis, the electricity sent-out mix continued to evolve: coal's share declined, while both gas and nuclear contributions increased, demonstrating gas' ongoing role in providing flexibility and transition support, alongside continued access to reliable, non-carbon electricity supply.

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

Download CLP's asset performance statistics

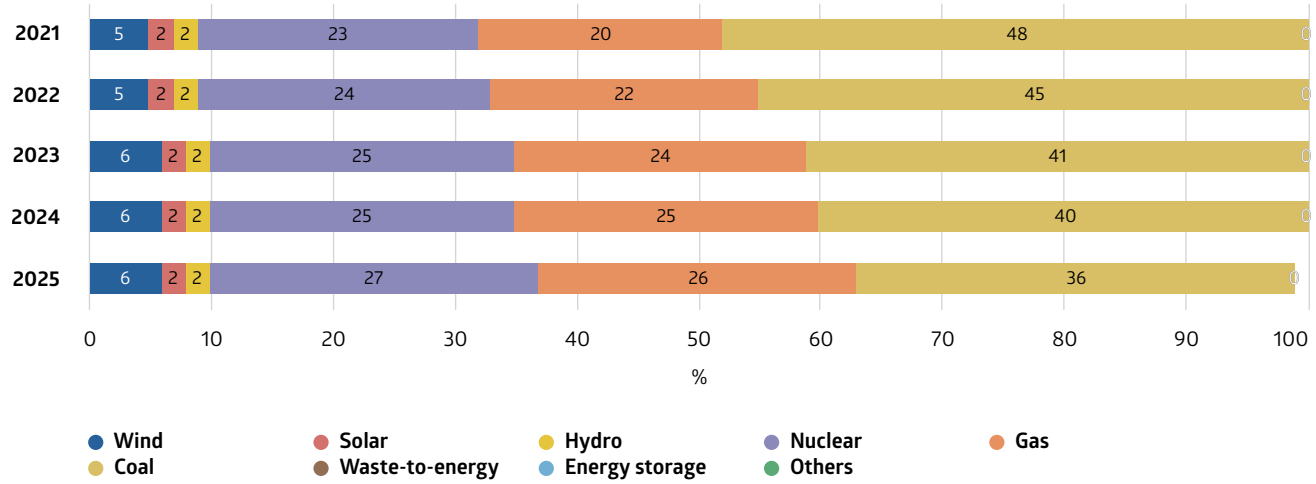
Annual fuel consumed for power generation

Coal consumption declined by 12% year-on-year, reflecting lower coal-fired utilisation across the portfolio. The reduction was driven by Hong Kong decarbonisation efforts, where coal use declined by 20%, and by lower dispatch and reduced availability in Australia, with coal consumption down by 9%, notably at Mount Piper and Yallourn Power Stations. Gas consumption was broadly flat year-on-year. In Hong Kong, gas use edged down by 1% due to lower local demand and higher nuclear offtake, supported by ongoing efficiency improvements. By contrast, Australia's gas consumption increased by 18%, consistent with higher dispatch of gas-fired assets during the year.



Energy sent out by asset type[1] (on an equity plus long-term capacity and energy purchase basis)

CLP continued to deliver electricity from a diversified mix across thermal, nuclear and renewables, generating 77,268 GWh in 2025 on an equity plus long-term capacity and energy purchase basis, 3% lower than 2024. The decrease was primarily driven by a lower coal contribution, reflecting reduced coal-fired utilisation across the portfolio, including Hong Kong's reduced reliance on coal and weaker coal output in Australia, as well as the exit of coal-fired minority assets on the Chinese Mainland. This was partially offset by higher nuclear offtake in Hong Kong and a modest increase in gas contribution (including the rebound in Australia's Tallawarra following an improved operational profile), with incremental support from renewables and waste-to-energy.



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

Energy services and solutions

GRI reference: 2-6, 302-5

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 for supply restoration, energy saved annually, customer services, the CLP Eco Building Fund, Electrical Equipment Upgrade Scheme and Energy Audit.
2. **Peak Demand Management programmes:** This enables commercial and industrial (C&I) 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 five-year energy-saving target:** To earn incentives under the SoC Agreement, CLP Power must achieve energy savings of at least 4% on the basis of average annual sales within a fixed five-year period. 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 continues to harness its global open innovation platform to connect solutions to business needs, address operational challenges, enhance efficiency and unlock new business opportunities. Through initiatives such as Free Electrons and the Phoenix scouting programme, CLP collaborates with start-ups worldwide to foster innovation, gain valuable market insights, and conduct risk-mitigated pilot before scale-ups. To strengthen its ability to meet customer needs and effectively navigate the energy transition, CLP also expanded its innovation ecosystem reach by collaborating with Hong Kong Science and Technology Parks Corporation.

CLP is developing technology roadmaps that will identify emerging ideas and technologies that could have significant long-term impacts on both CLP's operation and the wider energy transition. CLP has established robust research networks and partnerships with local and international associations, research institutes and universities, and is collaborating on several key projects. Notably, CLP is studying generation decarbonisation and the utilisation of urban flexible load resources to enhance power system flexibility through its Research Fellowship Scheme.

Summary of energy services and solutions

Improving energy efficiency	
Products and services	**Updates in 2025**
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 in 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.	• Hong Kong's first chiller system project using zero carbon electricity at **Nina Tower,** delivered by CLP*e*, received a Merit Award at the Green Building Award 2025 in the Existing Buildings Category (Facilities Management), co-organised by the Hong Kong Green Building Council (HKGBC) and the Professional Green Building Council (PGBC). • In March 2025, CLP was honoured with **"Excellent Enterprise"** and **"New Quality Productivity Innovation"** awards at the **2024 Gold Pilot Awards**, hosted by the Hong Kong Chamber of Commerce in Guangdong. These accolades recognise its leadership in energy infrastructure and innovative management. • In June 2025, the CaaS project for **Pacific Panyu Textiles Limited** started commercial operation. The new centralised electricity chiller plant system will reduce 39,473 tonnes of carbon emissions annually. • In March and September 2025, CLP*e* expanded its CaaS partnership with **Henderson Land** at Manulife Financial Centre, Metro City Plaza (MCP) and the MOSTown (Phase 5). Upgrades include variable-speed chiller systems and eco-friendly refrigerants at Manulife Financial Centre, improving energy efficiency by over 60%, cutting annual electricity consumption by more than 30%, and saving 2.4 GWh of electricity annually. • In May 2025, CLP*e* signed a CaaS agreement with **Laws Group** to replace and upgrade the chiller plant system at its headquarters, Laws Commercial Plaza. • In November 2025, CLP*e* partnered with **OneLink Group** to provide CaaS to OneLink Plaza in Yuexiu, Guangzhou. CLP*e* will finish replacing the property's aged cooling system with a more energy efficient and environmentally friendly cooling system in May 2026, which will reduce electricity consumption by 46%, equivalent to 768 tonnes of carbon emissions annually.
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 photovoltaic (PV) systems convert solar energy into electricity to support energy demand and allow customers to feed electricity back into the grid.	• Building on the success of its partnership with **Link Real Estate Investment Trust (Link REIT)**, in 2025 CLP*e* signed agreements for an additional solar photovoltaic (PV) system, which is scheduled for phased completion by 2027. Upon completion, CLP*e*'s SaaS model at Link's premises will represent a significant share of Link REIT's overall solar capacity. This expansion underscores CLP*e*'s commitment to accelerating Hong Kong's transition to clean energy and supporting the adoption of large-scale renewable energy by the property sector. • In March 2025, CLP*e* completed a 1.3MWp solar PV system at **HAECO** Hangar 1, making it one of the largest single-site solar energy projects in Hong Kong. This initiative supports the aviation industry's sustainability objectives by reducing carbon emissions from energy consumption at critical infrastructure sites. Integrating renewable energy into aviation operations is another example of CLP*e's* leadership in delivering scalable, sustainable energy solutions across diverse sectors. • In May 2025, CLP*e* successfully completed the expansion of the Floating Solar PV System at **San Tin Polder**, increasing its capacity to 351.6 kWp. This was a significant innovation milestone in the deployment of renewable energy. This installation is now the largest floating solar system managed by the Drainage Services Department. The project demonstrates how underutilised water surfaces can be transformed into clean energy sources, contributing to Hong Kong's decarbonisation goals while optimising land use.

Improving energy efficiency	
Products and services	**Updates in 2025**
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 together with technical and maintenance support, collaborating with its customers over a period of time at an agreed rate, helping develop fully integrated energy storage solutions that meet their specific needs.	• In the first quarter of 2025, CLP*e* expanded its Battery Energy Storage System (BESS) portfolio by introducing two new models—**Model Mia** and **Model Sarah**—alongside the existing **Model Leanna**. This enhanced range offers greater flexibility and supports a wide variety of applications, including special events, roadside projects, and backup power supply. Model Mia features a modular design with separate cabinets for the power conversion system and battery, while Model Sarah allows parallel operation of up to ten units. Both new models are forklift-compatible, ensuring ease of mobility and deployment. • CLP*e* deployed 43 BESS units as sustainable replacements for diesel generators across seven National Games[1] competition venues from September to December 2025, for provision of power for temporary outdoor facilities and broadcasting vans. In addition to technical support, CLP*e* offered service assistance to the Electrical and Mechanical Services Department (EMSD), covering BESS electrical installation, testing and commissioning, monitoring and maintenance, and on-site standby support. • CLP*e* also supported the operation of the BIM CAVE—a mobile mixed reality space designed to deliver lifelike virtual simulations for construction site safety training by deploying its most compact BESS, Model Sarah. This enhanced the mobility of the training facility, enabling deployment across multiple sites and offering flexible and immersive learning experiences. In collaboration with Hip Hing Construction Company Limited, this innovation earned CLP*e* recognition in the Service & Solution category at the prestigious International Innovation Awards. The accolade highlights CLP*e*'s shared commitment to advancing construction safety through technology. • CLP*e* deployed more than 100 BESS units (using all three models) at construction sites in Hong Kong in 2025, compared with 94 units in 2024. This expansion delivered an estimated reduction of over 4,500 tonnes of carbon emissions, representing a 75% decrease compared with conventional diesel-powered operations. These achievements underscore CLP*e*'s dedication to sustainability and innovation in energy solutions.

1 The 15th National Games, the 12th National Games for Persons with Disabilities and the 9th National Special Olympic Games.

Improving energy efficiency	
Products and services	**Updates in 2025**
Energy efficiency improvement for buildings • CLP Eco Building Fund: The fund provides subsidies for energy efficiency improvement works for residential, C&I buildings. • CLP Electrical Equipment Upgrade Scheme: The scheme provides subsidies to C&I 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 to enhance the energy efficiency of their communal areas. The initiative aims to save 48GWh of energy annually. In 2025, customers saved around 48GWh of electricity from over 600 buildings. • Since the launch of the **CLP Electrical Equipment Upgrade Scheme** in 2019, over HK$180 million in subsidies has been offered to C&I customers for replacing or upgrading their electrical equipment to more energy-efficient models.

Improving energy efficiency	
Products and services	**Updates in 2025**
Energy efficiency improvement for businesses CLP Power works in partnership with different businesses and offer flexible and innovative smart solutions to them.	• CLP Power partnered with **Chinachem Group** to develop a "5G-powered Cooling Load Prediction System for Sustainable Shopping Malls". Successfully deployed at Nina Mall, the system integrates 5G technology, AI, and big data analytics to forecast cooling demand and optimise air conditioning performance. This innovation has improved comfort levels while achieving an estimated-annual energy savings of 675,000 kWh and recovering investment cost within one year, showcasing the effectiveness of smart energy solutions in driving decarbonisation. The project was internationally recognised with a Gold Medal at the International Exhibition of Inventions Geneva, underscoring its innovation and impact. • CLP Power worked closely with **Hong Kong Disneyland Resort** to advance energy efficiency and sustainability across the resort area. Key initiatives included upgrading to high-efficiency lighting, installing over 7,900 solar panels that generate 3.6 million kWh of electricity annually, and introducing the resort's first all-electric Halal kitchen to provide sustainable dining options. This successful collaboration not only reduced carbon emissions and enhanced operational efficiency but also earned international recognition, with the project receiving the Corporate Energy Management Runner-Up – International Award from the Association of Energy Engineers.
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 cuts in demand of around 249MW and 77MW from residential and C&I customers respectively in 2025. • EnergyAustralia's PowerResponse has a current contracted capacity of 543MW involving over 615,000 household customers and 700 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. • A mass rollout of smart meters to all CLP Power customers, from 2018 to 2025, is supporting Hong Kong's Smart City transformation.	• Since 2018, CLP Power has connected more than 2.88 million smart meters for its residential and SME customers, promoting smarter electricity use, low-carbon living, and enhancing safety and reliability of the power supply. In 2025, CLP Power completed the territory-wide replacement of conventional electricity meters with smart meters for its residential and SME customers. • As of 31 December 2025, EnergyAustralia had approximately 916,000 smart meters installed for its customers across Australia. It entered 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 1.8 million.

Improving energy efficiency	
Products and services	**Updates in 2025**
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 2025, CLP Power helped its C&I customers save around 48GWh of electricity with more than 600 energy audits completed. • A Memorandum of Understanding (MoU) was signed with **Hang Seng Bank** in August 2025. The collaboration enables corporate clients under Hang Seng Bank's Sustainability Power Up Fund to further explore CLP Power's services including energy audits and the Smart Energy Online (SEO) platform. Hang Seng Bank complements this by providing sustainable financing solutions to support the clients' transition to low-carbon operations.
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 (SEO) is an online assessment and management tool for C&I customers in Hong Kong.	• At EnergyAustralia, major C&I customers can opt for the PurchasePro product suite, which offers a more direct way of managing energy market exposure, giving customers control over when to transact in the Australian electricity futures market, and the ability to purchase Swaps, Caps through the portal and, as of 2025, Renewable PPAs through engagement with their Account Executive. • EnergyAustralia's Large Market customers can review their consumption and cost information through 'MyAccount', provided by our Large Market billing provider. • SEO is another key tool that enables business customers to monitor and analyse their energy usage. The SEO user base had increased to over 2,800 C&I customers at the end of 2025, more than 12% more than in 2024, reflecting growing adoption among C&I customers. • To foster broader collaboration, CLP Power signed an MoU with the Vocational Training Council (VTC) in July 2025 to promote energy efficiency through energy-saving projects and the training of energy management professionals. VTC will leverage CLP's SEO platform at some sites to monitor and manage energy use more effectively.
CLP Retro-Commissioning and Retrofitting Charter 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 2025, CLP Power allocated HK$1 million to launch the CLP Retro-Commissioning and Retrofitting Charter Programme. The Programme aims to encourage C&I customers to retrofit and decarbonise their existing premises to achieve greater energy efficiency and lower operating costs in the long run.

Using electricity more widely for transport industry	
Products and services	**Updates in 2025**
Electric Vehicle Charging-as-a-Service (EV CaaS) • EV CaaS is a one-stop fleet charging offering that enables fleet customers to enjoy flexibility in their electrification journey while saving capital investments related to charging infrastructure and software. CLP*e* will invest, design, build, operate and maintain EV CaaS charging solutions in their own or other premises over a period of time at an agreed rate. • EV CaaS also includes the development of CLP*e*'s Public Charging Network for use by private users and corporate/ business customers. • The CLP Charge Point Operator platform and EV driver app were launched in 2023. Both are the core foundations of the EV charging business.	• In 2025, CLP*e* signed EV CaaS contracts with key customers across multiple segments, including schools, taxi operators, and transportation service providers. These agreements enable customers to electrify their fleets without heavy upfront investment, offering predictable costs and operational flexibility. • CLP*e* is actively supporting taxi fleet licence holders by providing charging services for electric taxis. In addition, contracts have been signed with traditional taxi licence holders to accommodate the growing number of electric taxis in Hong Kong. • As part of its commitment to Hong Kong's electrification journey, CLP*e* delivered in-depot charging infrastructure and solutions to a local NGO and coordinated with relevant parties to determine suitable charger locations for their electric minibuses. Beyond bespoke solutions, CLP*e*'s public charging network grew significantly in 2025, comprising over 300 charging bays across more than 35 locations under CLP*e* management. • To further strengthen its network, CLP*e* secured two strategic sites: – **Lantau Charging Station**: provides Southbound and local drivers with access to convenient and fast GB/T (China standard) and CCS2 (European stanadard) charging services. – **Tai Po EV Charging Station**: transforms a former petrol filling station site into an EV charging station and operates it for a 12-year land lease term. Additionally, CLP*e* secured a deal to install and operate chargers at a newly built development on Hong Kong Island, adding a substantial number of DC and AC chargers in a prime location. • The CLP*e* Charging mobile app continued to grow its user base in 2025, introducing new features tailored to target users. For example, taxi drivers can now self-register using their licence for verification, unlocking access to taxi-specific promotions and offers. The app complements CLP*e*'s pay-as-you-go charging service, providing convenience and flexibility for individual users. • For fleet operators, CLP*e* offers subscription-based contracts with committed usage over agreed periods at fixed rates. Customers pay a monthly all-inclusive fee that covers EV charging costs, reducing investment costs, asset constraints and manpower requirements. Additional benefits include 24-hour customer support and a cloud management platform, enabling operators to manage their fleets, adjust operational needs and monitor real-time charging facility availability and EV charging status, complete with electricity consumption data.

Using electricity more widely for transport industry	
Products and services	**Updates in 2025**
Electric vehicle infrastructure • CLP Power continues to support green motoring and electrification of vehicles in Hong Kong – a long-term government policy objective set out in the Hong Kong Roadmap on Popularisation of Electric Vehicles and its updated version. • CLP*e* provides EV charging solutions to meet private and commercial users' charging needs. Its subsidiary, Smart Charge (HK) Limited, a joint venture established with HKT in 2016, provides one-stop EV charging service for residential customers. • 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 Power fully supports the Hong Kong SAR Government's Fast Charger Incentive Scheme which earmarks HK$300 million to subsidise the installation of public fast chargers. To support its implementation, CLP Power has conducted preliminary power assessments across its supply areas and identified around 8,000 potential locations for fast charger installation. This information serves as a reference for EV market stakeholders and charging service operators, enabling more effective planning and deployment of fast chargers. • CLP Power is also collaborating with the Hong Kong SAR Government and petrol station operators to convert over 50 petrol stations into an EV fast charging network. • CLP*e* operates over 900 charging bays, and Smart Charge has designed, installed, and currently manages EV charging infrastructure across residential car parks in Hong Kong, covering more than 13,300 parking bays. • CLP Power introduced the Electric Vehicle Residential Time of Use Tariff in May 2025 offering discounted energy charges during off-peak hours to encourage smart charging. More than 5,000 applications had been received by year-end. • In 2025, EnergyAustralia continued to roll out a commercial green transport package to support its business and C&I customers (primarily fleet customers such as bus depots), involving EV charging systems to power their fleets. EnergyAustralia aims to help its customers further decarbonise by powering some of their operations with solar and battery systems, and participating in the Virtual Power Plant (VPP). Construction of the first depot electrification site was completed in 2025 (Tropic Wings Cairns Tours & Charters, Hartley Street, Bungalow, Queensland), and included a grid upgrade, a BESS and seven EV chargers.
Ship-to-Ship Liquefied Natural Gas (LNG) Bunkering as a Service Following the release of the Hong Kong Government's Action Plan on Green Maritime Fuel Bunkering, CLP*e* has partnered with China National Offshore Oil Company Guangdong Water Transport Clean Energy Company Limited (CNOOC) to provide LNG fuel bunkering services in Hong Kong.	• Delivered Hong Kong's first ship-to-ship LNG bunkering with simultaneous cargo operations, supplying **10,000 cubic metres of LNG**—the largest single ship-to-ship LNG bunkering operation in Hong Kong to date. This milestone strengthens Hong Kong's position as a green marine fuel hub and supports decarbonisation of shipping. • CLP*e* is committed to supporting the decarbonisation of the maritime industry by strengthening its LNG bunkering supply capabilities, and is collaborating with **CNOOC**, which has an established and extensive presence on the Chinese Mainland's LNG bunkering market. • LNG bunkering enables shipping operators to reduce greenhouse gas emissions by up to 20% compared with conventional marine fuel, contributing to Hong Kong's 2050 carbon neutrality goal and CLP's commitment to low-carbon energy solutions.

Enabling zero-carbon electricity supply	
Products and services	**Updates in 2025**
Decentralised renewable energy/rooftop solar CLP offers feed-in tariffs for its customers, in support of energy decentralisation and renewable energy. • The Feed-in Tariff (FiT) Scheme in Hong Kong enables customers to earn FiT payments by installing a renewable energy system on their premises and connecting 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 for the 150MW VPP.	• From the commencement of the FiT Scheme in mid-2018 to the end of 2025, CLP Power received over 28,605 applications. Approximately 95% of the applications, representing a total capacity of about 450MW, equivalent to the annual electricity usage of more than 100,000 residential customers, have been approved. About 25,859 applications have been completed and connected to the grid. • EnergyAustralia continue to expand the bring-your-own battery VPP product ("Battery Ease") as part of the growing Behind the Meter portfolio to provide opportunities for residential customers who have already invested in residential batteries to lower their energy bills during peak periods and manage peak price events. For customers without rooftop space, a community battery product was also launched so that more customers can take part 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 PPAs 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 January 2025, CLP China signed power purchase agreements with companies such as Linde, Envision and K.Wah Construction Materials, and started a supplier programme with an existing client to support the adoption of renewable energy in Jiangsu and Yunnan provinces. CLP will provide renewable energy to corporates from its solar and wind projects in Yunnan and Jiangsu provinces. As one of the largest external investors in the energy sector on the Chinese Mainland, CLP focuses on developing clean and renewable energy and providing green energy solutions to corporate customers. The agreements will contribute to the corporate goal of achieving net-zero carbon emissions by 2060, and accelerate the low-carbon energy transformation of the Chinese Mainland.

Offsetting emission that cannot be otherwise avoided	
Products and services	**Updates in 2025**
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. On the Chinese Mainland, CLP China's renewable assets issue Green Electricity Certificates (GECs) which are the only officially recognised renewable energy certificates on the Chinese Mainland. They can be used to meet obligations under the Chinese Mainland'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 renewable electricity from government accredited renewable sources.	• In 2025, around 363GWh units of RECs were sold. • 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 13,791 EnergyAustralia customers have chosen a GreenPower government accredited PureEnergy option for their electricity supply.
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 published a carbon credit brochure, which provides a clear and concise overview of carbon credits, explaining the benefits and processes involved. By simplifying its presentation, CLP hopes to enhance engagement and ensure that all relevant details are easily available to those interested in CLP's carbon credit initiatives. • CLP continues to promote carbon offsetting and support its customers' decarbonisation journeys. Customers can offset their unavoidable emissions with CLP Carbon Credits Customers can offset their unavoidable emissions with CLP Carbon Credits after taking actions to reduce their emissions. In 2025, Apraava Energy sold over 2 million tCO_2e units of offsets from its renewable generation assets to customers around the world. • EnergyAustralia recognises that high integrity carbon offsets have an important role to play in the energy transition and the achievement of Net Zero. 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.

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. To further strengthen its commitment to personal data privacy, CLP refreshed its Group Privacy Policy Statement in December 2025.

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 individuals' own personal information. There are also mandatory data breach reporting obligations in relation to Notifiable Data Breaches. EnergyAustralia is required to report data breaches if there are any unauthorised access to, unauthorised disclosure of, or loss of personal information that EnergyAustralia holds where this is likely to result in serious harm to one or more individuals and it has been unable to prevent the likely risk of serious harm with remedial action.

As was reported last year, on 28 November 2024, the Australian 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 amendments also created 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 with the ADM transparency requirements is two years. EnergyAustralia is continuing to develop its plans for complying with the ADM requirements and monitoring for any new changes and developments that are announced.

In 2025, no cases of customer data loss were reported by CLP Power in Hong Kong, one case was reported by EnergyAustralia to the Office of Australian Information Commissioner which involved potentially fraudulent activity by a third party.

Customer satisfaction

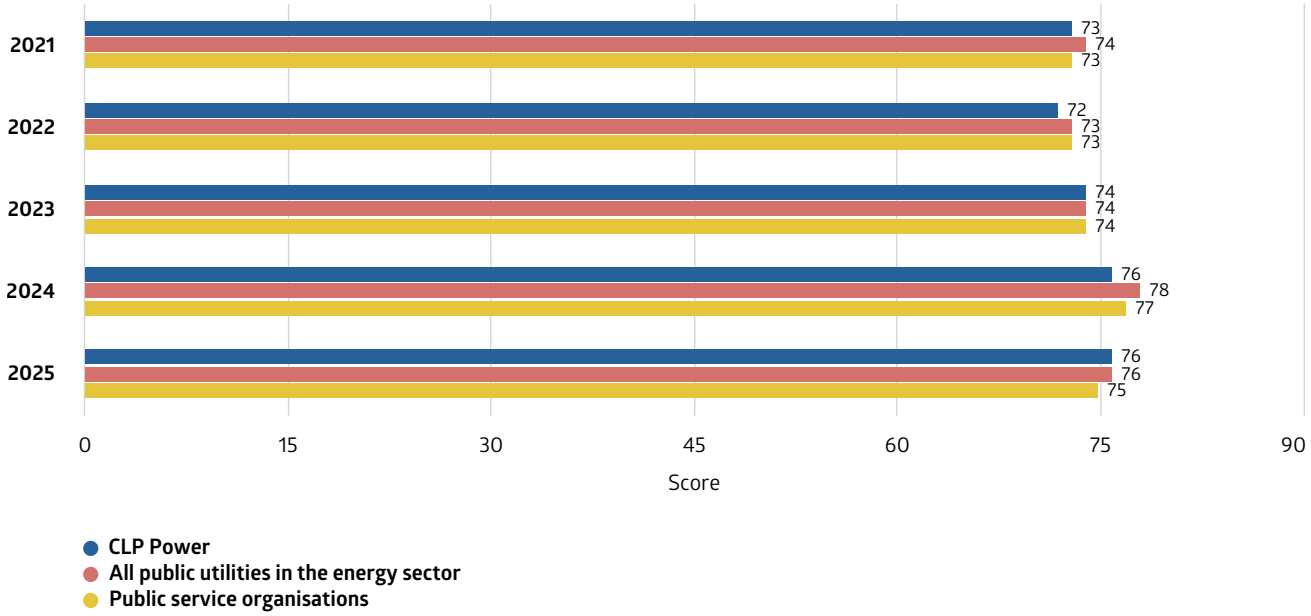
GRI reference: 417-3, 418-1

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 ensure the reliability of the power supply.

Hong Kong

CLP Power customer satisfaction score

CLP Power's customer satisfaction score remained stable in 2025 and is on a par with other public service organisations.



Case Study

Innovate to Elevate

CLP secured an impressive total of 30 accolades at the Contact Center Association of Asia Pacific (CC-APAC) and Hong Kong Customer Contact Association (HKCCA) Awards 2025.

This year's theme, *Innovate to Elevate: Transforming Customer Experience in the Digital Age*, highlighted the critical role of innovation and human-centric service. The numerous corporate and individual awards won by CLP underscore the company's steadfast commitment to integrating advanced digital solutions with personalised care, ensuring exceptional customer experiences across all touchpoints, including our hotline, customer service centres, and digital platforms such as the CLP website and mobile app.

The professionalism and dedication of our team was recognised in multiple prestigious awards, including **CC-APAC Best Employee Engagement Contact Centre**, **Greater China Contact Centre Alliance Recognition Award**, and **HKCCA Mystery Caller Assessment Award (Public Services and Utilities) – Customer Service Hotline – Best-in-Class**, alongside **10 Gold, 9 Silver, and 8 Bronze HKCCA Awards**.

These accolades affirm our focus on continuous improvement and responsiveness to evolving customer needs. Inspired by this recognition, CLP is committed to setting new benchmarks in service excellence, through interactions that are innovative, empathetic, and efficient.

Australia

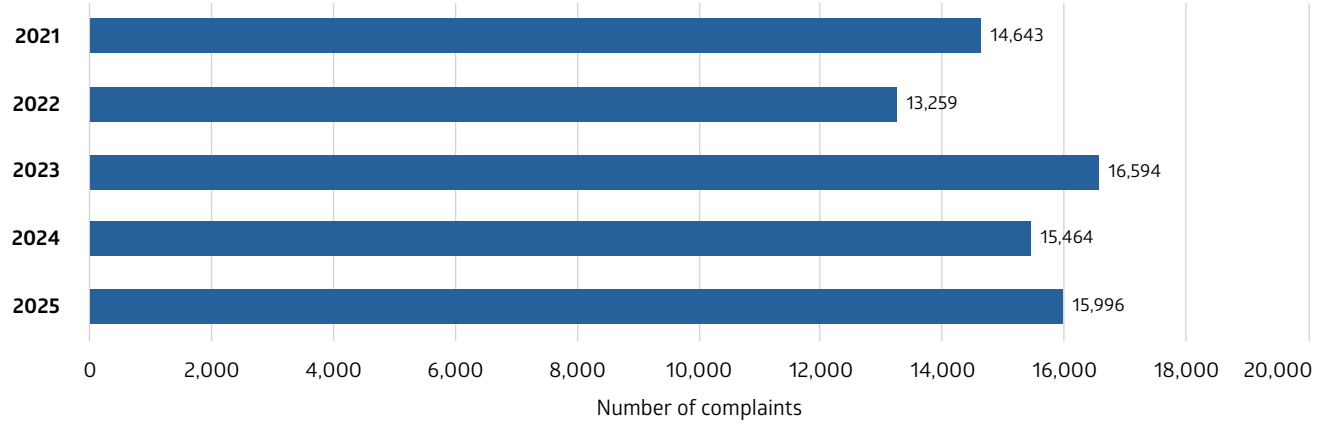
EnergyAustralia's strong dedication to handling customer complaints is reflected in its consistent focus on timely engagement, effective communication, and personalised support. This commitment to continuous improvement in complaint resolution is reflected in a Transactional Net Promoter Score of 37.9, underscoring the organisation's unwavering priority to put customers first and deliver reliable, high-quality service across all touchpoints.

In 2025, total complaint volumes increased by 3% compared to 2024, with Ombudsman escalations decreasing by 11% year-on-year. This reflects a higher proportion of issues being identified and resolved internally through more timely and direct customer engagement.

The marginal increase in internal complaints was due to enquiries relating to the expiry of a benefit plan, with customers seeking clarification on changes to discounts and rates upon the plan's expiry. These cases were managed through clear and consistent communication, ensuring customers received accurate information and appropriate resolutions.

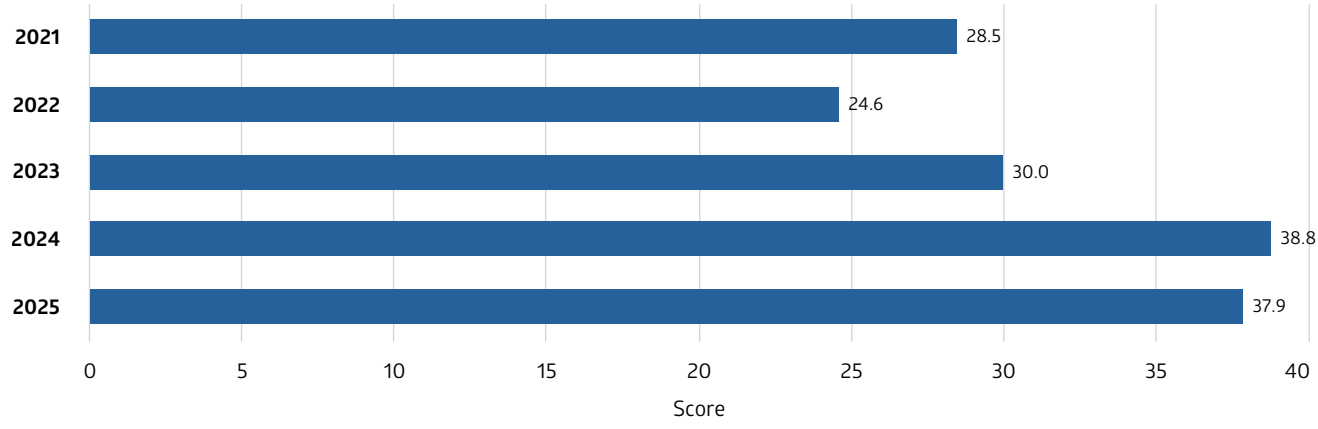
Complaints received by EnergyAustralia

Total complaint volumes in 2025 marginally increased by 3.4% from 2024.



EnergyAustralia's Transactional Net Promoter Score (TNPS)[1]

TNPS slightly decreased to 37.9 from 2024, but it still demonstrates a continued focus on addressing customer concerns quickly and effectively, reducing the need for further escalations through early engagement in the customer journey.



1 Since 2024, the scope of the Transactional Net Promoter Score has been revised to include Digital Net Promoter Score in order to reflect customers' digital experience.

Artificial intelligence (AI)

Our approach

CLP is ensuring the responsible use of AI through an AI governance approach that is establishing group-level policies, robust risk management, and ongoing stakeholder engagement. The approach balances innovation with risk, ensuring compliance and transparency.

With global AI adoption rapidly increasing and new regulations such as the emergence of the European Union's AI Act, CLP recognised the need for proactive governance to mitigate risks and build trust in the safe, ethical and transparent use of AI.

Strategies and procedures

The **CLP AI Policy** establishes the governance framework and structures required for responsible AI use across the Group. The policy clearly defines what constitutes AI, explains the need for governance, and sets expectations for all stakeholders. The policy outlines accountability, escalation points, and reporting structures to ensure informed oversight by the Group Executive Committee and the Board as well as to define how risks are identified, assessed, monitored, and reported at both the use case and business unit levels, using the Group AI Risk Taxonomy in line with the Group Risk Matrix. In addition, the policy provides practical guidance including actionable do's and don'ts, human oversight requirements, transparency measures such as AI disclaimers, and standards for multimedia development to mitigate risks like deepfakes.

CLP has formal structures in place to assess AI risks. All AI use cases undergo formal assessments across the deployment life cycle, which evaluate factors such as ethical use, data privacy, and human oversight to ensure responsible implementation. AI assessments are also included in procurement workflows, to ensure that external suppliers and solutions meet CLP's AI standards. These AI assessments extend to existing solutions that introduce new or incremental AI features.

CLP has also established principles for internal teams and external vendors producing AI-generated content, to ensure responsible, ethical and consistent practices.

These efforts enable CLP to balance innovation with robust governance and controls in adopting AI solutions or instruments.

Initiatives and progress

CLP has a scalable, open-access AI enablement strategy that empowers employees at every level to create and deploy AI solutions in alignment with CLP's business needs. By providing access to secure, enterprise-grade platforms, we aim to encourage innovation and adoption across the organisation. Our approach is structured around three core pillars:

- **Personal Productivity:** Over half of the employee population has adopted CLP's internal AI platform, VoltAI, to accelerate routine tasks, undertake document translation, and improve knowledge sharing. This has resulted in a 30% reduction in data security risks and measurable gains in operational efficiency.
- **Low-Code/Self-Built Solutions:** Colleagues are provided with Copilot Studio and targeted coaching to enable the development of AI solutions to address work challenges. Ten AI agents have been created, reflecting robust AI adoption in the business units. Examples built by the business units include the Operations Instructions Chatbot by Generation Business Group (GBG), the AI Engineer by Power Systems Business Group (PSBG), the Privacy Impact Assessment Assistant by Group Legal Affairs, and the Process Chatbot by Group Internal Audit.
- **Pro-Code Environments:** Advanced users leverage enterprise-grade AI instruments to develop sophisticated solutions. Live Agent Assist, Email Agent, Complaint Agent and Training Agent are examples of AI agents developed by the Customer Success and Experience (CSE) team using the AI Foundation instruments, supported by CLP Digital. In another example, CLP Digital has built a knowledge retrieval chatbot capable of processing thousands of schematic diagrams in addition to textual data, simplifying knowledge search for GBG engineers analysing assets.

Case Study

VoltAI – CLP's own GenAI Platform

VoltAI is CLP's own AI-powered concierge, designed to help employees work smarter, faster, and more securely. Beyond its role in enhancing productivity, VoltAI is also a launchpad for CLP's larger AI ambitions. It offers seamless access to advanced models, reusable AI components and a team of in-house experts, enabling rapid exploration, testing and scaling of innovative solutions that drive business impact.

Current Context

- As the popularity of generative AI tools like ChatGPT, Grok, and Deepseek has grown, CLP employees have increasingly adopted public AI platforms in their daily work. This trend has introduced risks around data security since many users are unaware of potential vulnerabilities.
- The proliferation of AI tools has led to siloed solutions which introduce risks of inconsistent standards, duplicative efforts and solution lock-in.

Solution

CLP's strategy is to develop in-house experts capable of producing scalable and secure AI solutions that meet business needs where external solutions have proven to be unviable. To host these solutions, CLP Digital has launched VoltAI, an internal AI platform having relevant instruments. VoltAI offers secure, flexible, and license-free access to leading large language models (LLMs) within the CLP environment. Key features include:

- Unified chat with multiple industry-leading LLMs, allowing easy switching between models.
- Translation agent for both documents and everyday business needs.
- Centralised knowledge curation for organising company information.
- Enterprise-grade security, ensuring all data remains within CLP.

VoltAI was built and scaled in just three months, with a focus on security and on providing tailored business solutions, such as chatbots for specific departments. This platform is empowering employees to explore and deploy AI safely, effectively supporting CLP's Digital strategy.

Outcomes & Impact

- VoltAI has quickly become a cornerstone of CLP's digital strategy, with half of the employee population having access to the platform. By providing in-house LLM features, CLP has achieved a significant 30% reduction in data security risks and strengthened compliance with internal policies.
- Productivity across the organisation has improved, with employees using VoltAI for translations and actively engaging with its chat feature. The ability to develop advanced AI solutions in-house has reduced reliance on external platforms, accelerated the delivery of business-specific use cases, and allowed CLP to leverage its deep organisational expertise. Through VoltAI, CLP has also fostered responsible AI adoption and empowered employees to experiment and innovate safely, positioning the company as an early AI adopter in Hong Kong.

Cybersecurity

The Security Operations Centre (SOC) Team has implemented a Security Orchestration, Automation, and Response (SOAR) capability, automating the incident analysis and investigation process and improving detection and incident response efficiency and accuracy. Playbooks have been designed to help the team quickly identify different incident types.

The Group-wide cybersecurity strategy, structured around an internationally recognised cybersecurity framework, is also being refreshed to align with business objectives and regulatory changes. It is incorporating lessons learned from Red Team exercises, a maturity assessment, and audits. In addition, both Hong Kong and the Chinese Mainland have introduced additional laws to strengthen the security of computer systems and data. On the Chinese Mainland, the Regulations on Network Data Security Management came into effect on 1 January 2025, providing a structured and operational framework for safeguarding network data. In Hong Kong, the Protection of Critical Infrastructure (Computer Systems) Ordinance (Cap. 653) took effect on 1 January 2026 and aims to enhance the computer system security of critical infrastructure to minimise the potential for cyber disruption or compromise of such services.

At CLP, strong data security, infrastructure protection, and cybersecurity remain key priorities. While compliance with these laws has not required significant financial investment, our businesses have taken this opportunity to conduct a comprehensive review of existing processes and implement enhancements, including the establishment by Group Security of a dedicated task force which reviewed the requirements and coordinated the action required to meet the new regulatory obligations. In addition, cybersecurity-related standards are regularly updated to take into account technological advances, changing legislation and emerging standards of good practice.

To strengthen resilience, the Security Architecture Team has developed and implemented a Security-by-Design framework that enables streamlined, risk-based decision-making for cybersecurity throughout the entire project lifecycle.

Across the Group, we have continued to test the resilience of CLP's assets and sites, working with the relevant business units to help them apply appropriate controls and measures to protect people, equipment and information.

CLP's Red Team simulates real-world cyber attacks and then works with business units to assist with remediating the findings and addressing vulnerabilities. The Risk Assessment Team helps the business understand how threat actors can exploit weaknesses to compromise the confidentiality, integrity or availability of data, and offers mitigation options to bring risks within acceptable levels.

Finally, security awareness of cyber threats has been enhanced by the introduction of a next-generation phishing simulation and reporting tool, as well as a comprehensive programme of webinars, broadcasts and training sessions.

Security management

The Group Security Policy lays out CLP's overall approach to minimising risks to its employees, contractors, customers and the public, and managing other business risks to acceptable levels.

The Group Security Policy addresses the following areas:

- **Integrated and centralised organisation and governance** – CLP has an integrated, enterprise-wide Group Security function within Group Digital with visibility and skillsets to cover all relevant lines of activity in CLP, providing security support to all areas of the business.
- **Policies, standards and guidelines** – CLP applies policies, standards, guidelines, procedures and processes to manage and monitor the organisation's regulatory, legal, risk, environmental and operational requirements in line with recognised industry standards.
- **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 looks to continuously enhance 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, and that wherever possible these are "best-in-class".
- **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, and 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.

The Company also maintains its duty of care by providing employees with travel security guidance and a security support service.

Emergency and crisis management

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

Initiatives continued in the year included:

- Reviewing procedures and arranging training and exercises to ensure our crisis management team members are familiar with the new requirements of the Protection of Critical Infrastructures (Computer Systems) Ordinance, which takes effect from 1 January 2026;
- Coordinating and conducting periodic crisis management exercises to ensure that all members fully understand their roles and responsibilities and are adequately prepared to execute them during an actual incident;
- Integrating a computer software (CCB 2.0) with the Advanced Distribution Management System (ADMS) to enable real-time data access during crisis management for rapid decision making and effective resources allocation; and
- Reviewing the Group's Business Continuity Plans to incorporate new scenarios and reflect changes, ensuring their alignment with emerging risks and new regulatory requirements.

Preparedness to tackle during extreme weather events

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

In Hong Kong, overhead lines make up over 30% of CLP Power's transmission network. These are more susceptible to adverse weather, lightning strikes and external interferences such as fallen trees that could affect power supply reliability.

CLP Power stepped up inspections of the power supply equipment in the network ahead of typhoon season, using helicopters and drones to examine transmission towers and overhead cables and pruning trees that could interfere with overhead lines. Floodgates have been installed at substations at risk of flooding during severe weather and emergency drills 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 power interruptions, bringing inconvenience to customers. CLP Power's System Control Centre closely monitors grid operations throughout typhoons and storms, and emergency teams and additional personnel are dispatched promptly where necessary to restore power to affected customers.

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.

In 2025, Hong Kong experienced a record-breaking 14 typhoons, including two No. 10 hurricane signals issued under Super Typhoon Ragasa and Typhoon Wipha. Five instances of black rainstorms were also recorded in July and August. Despite the extreme weather, CLP Power's power supply system maintained a high overall performance, demonstrating the effectiveness of our preparedness efforts.

CLP has also implemented a range of measures across the Group's value chain to strengthen its resilience to climate change, tailored to different geographies, asset types and locations, as summarised in the table below.

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:** • Conduct flooding assessments for intensified heavy rain scenarios and carry out 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 stabilise the 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, CLP communicates with customers the climate adaptation initiatives that have been implemented to enhance system resilience and reliability.
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 an intelligent management system (Grid-V) that can enhance management of key power facilities, identify potential risks in the environment in real time, and 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 Power System Control Centre, which provides round-the-clock surveillance of network status, to enable 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 capabilities of customer service teams, with a particular focus on post-incident customer communications. • Establish an in-house small unmanned aircraft team with BVLOS pilot project drones for inspecting overhead lines and towers. • Provide reserve capacity, fuel switching or power import in case of emergency via the CLP Business Continuity Plan.

Case Study

CLP Power Enhances Preparedness for Hill Fire Season

When Hong Kong entered the hill fire season, CLP Power implemented a series of measures to safeguard its power infrastructure and ensure uninterrupted electricity supply, maintaining operational resilience and safe power supply.

Seasonal dry weather and customs such as grave sweeping during Ching Ming Festival heighten the likelihood of fires in rural areas that could damage power facilities. Minimising service disruptions and preventing potential voltage dips require real-time monitoring and rapid response capabilities. Addressing these challenges calls for a robust strategy integrating preventive maintenance, technological innovation, and close coordination with external stakeholders.

CLP Power's comprehensive preparedness plan focuses on prevention, monitoring, and emergency response. Preventive maintenance in the year included site inspections at hill fire black spots and enhanced vegetation management, including clearing weeds and trimming tree branches near power facilities. Pole cleaning was scheduled at over 400 locations to reduce fire-related risks. Contingency plans were developed to ensure swift action in case of emergencies, supported by additional manpower during high-risk periods such as Ching Ming Festival. Patrols around countryside graveyards were intensified, and extra staff deployed to ensure prompt responses to any incidents. CLP Power also introduced drones for aerial surveillance and Grid-V system for real-time remote monitoring of transmission infrastructure. Collaboration with the Fire Services Department was strengthened by sharing information to facilitate faster location of hill fires near transmission facilities, while safety warnings were posted near hill fire black spots to raise public awareness and encourage preventive behaviour.

A CLP Power worker carried out pole cleaning, removing nearby weeds and tree branches to minimise their impact on power facilities in the case of a hill fire.

CLP Power's use of technology to enhance its capability to handle hill fires includes real-time remote monitoring by drones.

Our people

Highlights

One recordable fatality occurred during the period. **The lost-time injury rate fell to a record low of 0.04. The total recordable injury rate declined to 0.16, the same as its historic low**

31.6% of leadership roles were held by women

18.8% of women with Science, Technology, Engineering and Mathematics (STEM) qualifications

Outcomes for stakeholders

Over **17%** of training hours dedicated to **upskilling and reskilling**

Refreshed Group Inclusion and Diversity Strategy to holistically address CLP's evolving needs and be more market-aligned

Stakeholders' areas of interest

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

Relevant material topic

Future-ready workforce