Glossary

Term	Definition
Air emissions	The emission of air pollutants such as sulphur dioxide (SO_2), nitrogen oxides and particulate matter.
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.
Capacity tariff	The agreed part of the tariff for maintaining a given level of electricity generation capacity for use by the purchaser, as specified in a power purchase agreement.
Carbon neutral	When the greenhouse gas emissions associated with an activity or entity are balanced by carbon removal elsewhere, such as carbon credits, carbon sinks or storage, and Renewable Energy Certificates.
Climate Action Finance Framework (CAFF)	Launched in 2017, CAFF supports the transition to a low-carbon economy by attracting socially responsible, sustainable financings, and to support CLP's investments that reduce the carbon content of energy generated and increase the efficiency of energy usage. The CAFF formalises and governs project evaluation, management of proceeds and 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 decision-making.
Combined-cycle gas turbine (CCGT)	A technology used in gas-fired generation to enable significantly higher efficiency by utilising residual heat from gas turbine exhaust to run steam turbine and generating additional electricity.
Decarbonisation	Decarbonisation of the power sector refers to the reduction in the greenhouse gas emissions from electricity generation, and providing lower-carbon energy services and solutions to customers.
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	The Development Plan, part of the Scheme of Control (SoC) agreement in Hong Kong, covers capital projects for the provision and future expansion of electricity supply systems of CLP, to be implemented over a given five-year period, 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 electricity 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.

Term	Definition
Electricity sent out	Gross electricity generated by a power plant less self-generated auxiliary power consumption, measured at connecting point between 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 and solutions such as consultancy, energy management and distributed energy resources to customers, in addition to basic utility services.
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	Transformation of the global energy sector from fossil-fuel based energy systems to low- or zero-carbon sources.
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.
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 (NF₃), the seventh mandatory gas added under the second Kyoto Protocol was deemed immaterial to CLP's operations after an evaluation.
Grid curtailment	Reduction in the output of a generator from what it could otherwise produce given available resources, typically on an involuntary basis. Curtailment is usually induced by a grid operator because of transmission congestion.
Incremental distribution network (IDN)	To open up the distribution market in an orderly manner as part of the ongoing reforms of the electricity market in Mainland China, the Government is encouraging power companies to set up IDNs to provide safe and reliable electricity services using a newly-added distribution network and to meet demand from users in designated areas such as business and industrial parks.
Independent Power Producers (IPPs)	IPPs are private entities which own and / or operate facilities to generate electricity and sometimes heat and then sell it to utilities, government buyers and end users.
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, forgoing the expenses 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.
Net-zero greenhouse gas emissions	When greenhouse gas emissions are reduced, and the residual emissions are balanced by the removal of an equivalent amount of greenhouse gases from the atmosphere.

Term	Definition
Non-carbon energy	Energy from power sources that add no extra carbon to the atmosphere, such as wind, solar, hydro and nuclear energy. It does not include waste-to-energy and other forms of biomass.
Offshore LNG terminal	Offshore LNG terminals receive cargos of LNG for processing into fuel. The Floating Storage and Regasification Unit (FSRU) is where the LNG cargo is unloaded, stored and regasified for transport to a power station or other users.
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.
Permitted rate of return	Under the SoC agreement with the Hong Kong Government, CLP has a permitted rate of return of 8% on the total value of average net fixed assets for a given year, which is the average of the cost of CLP's electricity-related fixed assets less depreciation at the beginning and end of that year, calculated in accordance with the SoC agreement.
Photovoltaic (PV) panels	PV panels convert the sun's energy into direct current 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.
Pumped hydro energy storage	A method used for large-scale storage of power. During non-peak times, electricity is used to pump water to a reservoir. During peak times, the reservoir releases water for hydroelectric generation.
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)	RECs are designed to allow customers to purchase certificates which represent locally-generated renewable energy purchased or generated by CLP.
Scheme of Control (SoC) Agreement	The SoC agreement sets out the electricity regulatory framework, procedures and policies for the 1st October 2018 – 31st December 2033 period. It governs and applies to the financial affairs of CLP, the manner in which CLP is 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	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.
Start-up accelerator	A programme that offers support including financing and mentorship to facilitate the development of start-up companies.

Term	Definition
Tariff Stabilisation Fund	Under the SoC Agreement, if the gross tariff revenue in a period is less than or exceeds the total of the SoC operating costs, permitted return and taxation charges, such deficiency shall be deducted from, or such excess shall be added to, the Tariff Stabilisation Fund.
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.
Waste-to-energy	A form of renewable energy generation using waste such as landfill gas.
Wholesale electricity price	The given price for a bulk quantity of electricity in a wholesale market paid by energy retailers or distributors to generators, reflecting prevailing supply and demand.