

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.
Baseload	An operating regime of power generation at a reasonably constant rate to serve continuous system load, and not designed to respond to peak demands or emergencies.
Capacity purchase	Power generation capacity contracted under long-term 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. Also known as net zero carbon dioxide emissions.
Climate Action Finance Framework (CAFF)	Launched in 2017, CAFF supports the transition to a low-carbon economy by attracting socially-responsible, sustainable financing. It supports CLP's investments in reducing carbon emissions and increasing energy efficiency. CAFF sets out how CLP proposes to raise Climate Action Bonds to invest in projects that are consistent with both the Group's investment and climate strategies.
Climate Vision 2050	CLP's Climate Vision 2050 sets out a series of 10-year targets from 2010 to 2050 compared to 2007 levels. These targets are based on the Company's generation capacity on an equity plus long-term capacity and energy purchase basis. They consist of decarbonisation targets, measured in terms of the Group's carbon intensity, and clean energy targets, based on the renewable and non-carbon emitting energy share of CLP's generation portfolio.
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 primarily refers to the reduction in the greenhouse gas emissions from electricity generation. At CLP, it is measured by the reduction in the carbon intensity, which is expressed in kilograms of carbon dioxide per kWh of electricity sent out.
Default Market Offer (DMO)	The annual maximum total bill amount, also called a reference price, that electricity companies can charge for the standing offer prices based on a set average usage amount for customers in New South Wales, South Australia and south east Queensland. A similar scheme, the Victorian Default Offer (VDO), is in operation in Victoria. See standing offer.
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 Agreement (SoC) in Hong Kong, covers capital projects for the provision and future expansion of electricity supply systems, to be implemented over a given five-year period, subject to the approval of 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.

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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.
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 purchase	Electricity purchased from assets not owned by CLP to meet customer demand as per a long-term contractual agreement.
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.
Energy transition enablers	Non-generation products or services that facilitate the energy transition, including energy storage, transmission and distribution, electric vehicle charging points and smart meters, amongst others.
Feed-in Tariff (FiT)	Payable by Hong Kong power companies under the SoC Agreement to purchase electricity from approved renewable energy projects.
Flue gas desulphurisation (FGD) facility	Equipment used to remove SO ₂ 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 (NF ₃), 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.
Non-carbon energy	Energy from power sources that add no extra carbon to the atmosphere, such as nuclear and renewable energy.

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Offshore LNG terminal	Offshore LNG terminals receive cargos of liquified 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 Power Hong Kong has a permitted rate of return of 8% on average net fixed assets, which is the average of CLP Power Hong Kong's electricity-related fixed assets less depreciation at the beginning and end of a given year.
Photovoltaic (PV) panels	PV panels convert the sun's 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.
Pumped 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, and various forms of biomass.
Renewable Energy Certificates (RECs)	RECs represent all the environmental attributes associated with electricity produced by local renewable sources in Hong Kong including solar, wind and waste-to-energy power projects, purchased or generated by CLP Power Hong Kong.
Scheme of Control Agreement (SoC)	The SoC Agreement with the Hong Kong Government provides a regulatory framework for the city's electricity industry, enabling CLP Power Hong Kong to operate the facilities and plan new investments to meet the electricity demand of customers, as well as environmental objectives.
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.
Standing offer	A standard retail plan for electricity and gas that has no discounts and applies to a customer who does not actively choose an energy plan with an energy company.
Start-up accelerator	A programme that offers support including financing and mentorship to facilitate the development of start-up companies.
Tariff Stabilisation Fund	The fund aims to ameliorate tariff increases or facilitate tariff reduction where appropriate. The difference between the actual profit for SoC operations and the permitted return for the year is transferred to or from the 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.
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.