



CLP Power

Information Highlights 2023

PREFACE

This information booklet is produced by CLP Power Hong Kong Limited to provide a range of company information to our customers and the wider community to further enhance information transparency and understanding of our electricity business in Hong Kong.

The booklet aims to present the company's annual performance across a number of areas including tariff, supply reliability, safety, environmental management, promotion of renewable energy and energy efficiency and conservation. It also includes a summary of cost data on our operating expenses and financial information. Unless otherwise specified, the information contained in this booklet is based on information available as of 31 December 2023.

In addition to this booklet, our *CLP Information Kit* explains the background of many of our activities and initiatives, which is available on the <u>CLP website</u>.

To understand CLP Group's business performance, please view our *Annual Report* and our *Sustainability Report* on the <u>CLP website</u>.

Contents

1.	Abc	out CLP Power	5
2.	Sch	eme of Control Agreement	7
2	.1	Introduction	7
2	.2	Regulatory Framework and Processes	7
2	.3	Key Features under SCA	8
	2.3.	1 Features Related to Tariff	8
3.	Tari	ff Information	10
3	.1	Tariff Components	
3	.2	2024 Tariff Adjustments	
3	.3	A Reasonable Tariff	11
4.	Sup	ply Reliability	12
4	.1	Reliability Performance	12
4	.2	Sufficient Generating Capacity	13
5.	Env	ironmental Performance	14
5	.1	Emissions Management	14
5	.2	Emissions Performance	15
6.	Ene	rgy Cost and Fuel Procurement	17
6	.1	Energy Cost and Fuel Consumed	17
	6.1.	1 Energy Cost by Year	17
	6.1.	2 Fuel Consumed	17
6	.2	Fuel Procurement	
	6.2.	1 Diversified Fuel Mix	
	6.2.	2 Fuel Cost Management	19
7.	Ren	ewable Energy and Energy Efficiency and Conservation	
7	.1	Promotion of Renewable Energy and Energy Efficiency and Conservation	20
8.	Safe	ety and Health	22
8	.1	Safety Performance	22
9.	Cus	tomer Excellence	23
10.	Fina	ancial Performance	24
1	0.1	Scheme of Control Financial & Operating Statistics	24
	10.1	1.1 Scheme of Control Statement	24
	10.1	1.2 Operating Costs	25

10.2	2 Se	gregated Annual Cost Data	25
1	0.2.1	Operating Expenses	25
1	0.2.2	Net Fixed Assets Movement	25
10.3	3 Ta	riff Stabilisation Fund and Fuel Clause Recovery Account	25
10.4	4 Su	Immary of Loans and Equity	26
10.5	5 Er	nployee Statistics Data	26
10.6	6 Pe	erformance Incentives and Penalties Schemes under the SCA	27
10.7	7 CL	P Community Energy Saving Fund (CESF) Related Performance	29
1	0.7.1	Amount of incentive contributed to CESF by shareholders for last 5 years	29
1	0.7.2	Programmes funded by CESF in 2023	29
10.8	3 Re	elated Party Transactions	30
11. K	ey Pro	ocurement Principles	.31

1. About CLP Power

CLP Power Hong Kong Limited ("CLP Power") is a wholly-owned subsidiary of CLP Holdings Limited. CLP Holdings Limited is a company listed on the Hong Kong Stock Exchange and is one of the largest investor-owned power businesses in Asia.

CLP Power operates a vertically integrated power supply business in Hong Kong, covering electricity generation, transmission and distribution, and marketing and customer services. The generating plants In Hong Kong are owned by Castle Peak Power Company Limited ("CAPCO"), in which CLP Power has a 70% interest.

CLP Power has been serving Hong Kong for over 120 years and supplies highly reliable electricity to over 80% of Hong Kong's population.

Overview of Business and Performance in 2023

As Hong Kong came out of the pandemic in 2023, CLP Power continued to deliver a highly reliable, environmentally sustainable and reasonably priced electricity supply to support the return to normal economic activities.

The gradual economic recovery and record summer temperatures lifted CLP Power's electricity sales by 1.6% to 35,392 gigawatt hours (GWh) from a year earlier. Sales in the Commercial sector rose as the cessation of COVID-19 restrictions, inbound tourism and the return of large-scale events increased consumption in hotels, shops and restaurants.

Higher sales in the Infrastructure and Public Services sector reflected the resumption in government services, education and transport activities. By contrast, demand from the Residential sector dipped as people spent less time at home.

|Electricity Sales in 2023

Year-on-Year Change	Increase/ (Decrease)			
	GWh	%		
Residential	(184)	(1.8)		
Commercial	440	3.3		
Infrastructure and Public Services	333	3.4		
Manufacturing	(21)	(1.3)		

Share of Total Sales



|Electricity Supply by CLP Power

(2023 Figures)



*Unit A1 of Castle Peak Power Station, with capacity of 350MW, was put in reserve to run only in <u>emergency situation</u>, after coming to the end of its asset life on 31 May 2022.

Generation	Transmission	Distribution	Retail
9,648MW [*] installed capacity	>16,900km of transmission and high voltage distribution lines	241 primary and >15,500 secondary substations	35,392 GWh supplied to Hong Kong in 2023 and about 2.79 million customer accounts

*Unit A1 of Castle Peak Power Station, with capacity of 350MW, was put in reserve to run only in emergency situations, after coming to the end of its asset life on

31 May 2022. The installed capacity without A1 would otherwise be 9,298MW

2. Scheme of Control Agreement

2.1 Introduction

CLP Power's electricity business in Hong Kong is regulated by the Hong Kong SAR Government ("the Government") under the Scheme of Control Agreement ("SCA").

Under this regulatory regime, power companies have the obligation to provide sufficient and reliable electricity supply in their service areas. Customers obtain quality electricity supply at a reasonable price and in an environmentally responsible manner, while the power companies earn a reasonable return in relation to the capital invested. The SCA also provides an effective and stringent regulatory framework for the Government to monitor power companies' operating and financial performances. Operating performance covers supply reliability, operational efficiency, customer service and energy efficiency. Financial performance covers power companies' electricity-related capital investment, operating expenditure, fuel costs, rate of permitted return and tariff adjustment.

In April 2017, CLP Power and CAPCO ("the Companies") entered into a new SCA with the Government, effective from 1 October 2018 to 31 December 2033.



2.2 Regulatory Framework and Processes

The Government closely monitors the performances of the power companies under the SCA through the following reviews: Development Plan Review, Annual Tariff Review, Annual Auditing Review and Interim Review.

Development Plan Review

The Companies submit to the Government a detailed 5-year plan to meet electricity demand for the development of Hong Kong. The plan is to be approved by the Executive Council and covers the required capital expenditure, operating and fuel costs, projected electricity sales and the Basic Tariff rates.

Annual Tariff Review

The Companies submit to the Government a tariff proposal for the coming year before end of October each year. The proposal includes sales and maximum demand forecasts, total capital expenditure, total operating expenditure, cost of fuels and projected Basic Tariff rate etc.

Annual Auditing Review

The Companies submit detailed information to the Government before the end of March each year for auditing and reviewing the financial, technical and environmental performance for the preceding financial year.

Interim Review

A review is conducted every 5 years over the term of the SCA on SCA-related matters. Changes can be made by mutual agreement between the Companies and Government.

2.3 Key Features under SCA

2.3.1 Features Related to Tariff

Basic Tariff

It is set at a level to cover the total costs of electricity supply, including operating cost, standard cost of fuels and SCA return.

• Fuel Cost Adjustment

Fuel Cost Adjustment is either a charge or rebate to cover the difference between the actual cost of fuels spent and the standard cost of fuels collected through the Basic Tariff.

• Fuel Clause Recovery Account ("FCRA")

The FCRA which captures the difference between the actual cost of fuels and the fuel costs recovered through the standard cost of fuels included in Basic Tariff and Fuel Cost Adjustment.



• Tariff Stabilisation Fund ("TSF")

The TSF aims to ameliorate tariff increases or stabilize tariff levels. If the gross tariff revenue collected exceeds or is less than the total revenue required, the amount will be added to, or deducted from, the TSF.



• Permitted Rate of Return

Under the SCA, the Companies are permitted to earn a fixed rate of return on the total value of the average net fixed assets for that year. The permitted rate of return under the current SCA is 8%.

3. Tariff Information

3.1 Tariff Components

Tariffs paid by our customers consist of two main components:

- The Basic Tariff which covers the total costs of electricity supply, including operating cost, standard cost of fuels and SCA return.
- The Fuel Cost Adjustment which is either a charge or rebate to cover any fuel costs above or below the standard cost of fuels already included in the Basic Tariff.

Components Unit: HK¢/kWh	January 2024	January 2023	Change
Average Basic Tariff	96.6	93.7	+2.9
Fuel Cost Adjustment	46.3	62.0	-15.7
Rent and Rates Special Rebate *	-	-1.3	+1.3
Average Net Tariff	142 9	154 4	_11 5

3.2 2024 Tariff Adjustments

* In 2023, CLP provided a Rent and Rates Special Rebate at 1.3 cents per unit of electricity to customers. Since the Government refunds of overcharged rents and rates received by CLP were fully rebated to customers on 28 April 2023, the Rent and Rates Special Rebate was discontinued from 29 April 2023.



Figures of Fuel Cost Adjustment shown are the rates announced in the respective annual tariff reviews

|Monthly Fuel Cost Adjustment

Under the current SCA, the Fuel Cost Adjustment is automatically adjusted on a monthly basis to reflect changes in actual price of fuel used. This arrangement is more transparent and reflects fuel price changes in a more timely manner. The below chart shows the actual monthly fuel cost adjustments in 2023.



More information on monthly Fuel Cost Adjustment can be found on our website.

*From April to June, CLP Power provides Special Fuel Rebate to all our customers to cap the Fuel Cost Adjustment at 62.8 cents per unit of electricity

3.3 A Reasonable Tariff

CLP Power's tariff level is reasonable and competitive compared to other key metropolitan cities in the world.



Remarks: Comparison based on monthly domestic consumption of 275kWh Tariff and exchange rate in Jan 2024

4. Supply Reliability

A reliable power supply for our customers at home and at work is important for Hong Kong to maintain its competitiveness and attractiveness for organisations to set up their businesses. Maintaining high reliability is critical for our customers in an economy which is built around service industries that depend on a reliable electricity supply, in a densely populated smart city urban environment.

4.1 Reliability Performance

CLP Power provides reliable electricity supply in Hong Kong at a world-class reliability of over 99.999%.

Supply Reliability Performance Indicators

Supply Reliability Performance Indicators						
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 (2021–2023) was 0.27. This remained the same as last year's three-year rolling average. 					
System Average Interruption Duration Index (SAIDI) The average duration of interruptions each customer may encounter in a given year.	• The three-year average SAIDI (2021–2023) was 0.29 hours, 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 rolling average (2021–2023) of unplanned CML was about 6.0 minutes, which was slightly higher than the 5.7 minutes recorded last year. CLP Power maintains a worldclass supply reliability of over 99.999% in Hong Kong, which is higher than other major international cities in the diagram below. 					

Unplanned Customer Minutes Lost (Unplanned CML)



*2021-2023 average for CLP Power was 6.0 minutes; Taking out the impact due to Major Event Day (such as cable bridge fire incident in Yuen Long in 2022 and Typhoon Saola in 2023), the three-year average was 1.0 minute

2020-2022 average for other cities

^There are no overhead lines in Singapore

4.2 Sufficient Generating Capacity

Reserve capacity is essential to cater for any loss of generating capacity due to planned maintenance and unforeseen outages even at peak load. CLP Power sets the level of reserve margin by making reference to the

maximum electricity demand as one of the most important indicators for planning and operations. This is in line with best practice adopted in the electricity industry all over the world.

5. Environmental Performance

5.1 Emissions Management

Through a combination of emissions reduction technologies and changes to our fuel mix including the introduction of natural gas, nuclear power, low-emission coal and the addition of sophisticated emissions control facilities, we have achieved significant emissions reduction and successfully met the increasingly stringent emissions caps for our power plants set by the Government.

From 2010 to 2011, we retrofitted by phases the largest four units of the coal-fired Castle Peak Power Station with large-scale desulphurisation and nitrogen oxide reduction facilities which have significantly improved the emissions performance of the station.

From 2015 to 2022, eight gas-fired power generation units at the Black Point Power Station received turbine upgrades, resulting in a reduction in nitrogen oxides emissions.

The 550MW Combined Cycle Gas Turbine (CCGT) gas-fired generation unit D1 at Black Point Power Station has been in operation since mid-2020. It has enabled an increase in the use of natural gas to about 50% of our fuel mix in Hong Kong since 2020, and substantially reduced the proportion of coal power used in generating power. The 10MW West New Territories Landfill Gas Power Generation project which has been operating since 2020, has also increased the amount of renewable energy we generate in Hong Kong.

In April 2024, we have completed a new advanced combined-cycle 600MW gas turbine generation unit, unit D2, at Black Point Power Station. We are also enhancing the Clean Energy Transmission System (CETS). When its upgrade is completed in 2025, the CETS will allow for increased imports of zero-carbon energy to the city. Together with unit D2 at Black Point Power Station, it will help facilitate the phase out of coal-fired power generation capacity at Castle Peak A Power Station and support the ongoing lower-carbon transition of Hong Kong's electricity supply.

A reduction of more than 90% in SO₂, NO_x and RSP emissions and 22% in carbon emissions have been achieved since 1990, while electricity demand has grown by over 80% during the same period.

5.2 Emissions Performance



|Emissions Performance of CLP's Power Stations in Hong Kong in 2023

Total Emissions						
Power Station	Carbon Emissions	Air Emissions (kT)				
	(kT)					
	CO ₂ e	SO ₂ NO _x Particulates Particulates				
		(Total) (Respirable)				
Black Point C	5,352	0.02	1.93	0.09	0.09	
Black Point D	1,497	0.012	0.04	0.024	0.024	
Castle Peak A 200 0.15 0.23 0.011		0.007				
Castle Peak B	6,878	0.98 7.62 0.23 0.15				
Penny's Bay	0.75	0.00004 0.001 0.0002 0.0002				

Emissions Intensity						
Power Station	Carbon Emissions	Air Emissions (kg/kWh, sent-out basis)				
	(kg/kWh, sent-out					
	basis)					
	CO ₂ e	SO ₂ NO _x Particulates Particulates				
				(Total)	(Respirable)	
Black Point C	0.392	0.000002	0.00014	0.00001	0.00001	
Black Point D	0.347	0.000003	0.00001	0.00001	0.00001	
Castle Peak A	2.135	0.00165	0.00241	0.00012	0.00007	
Castle Peak B	1.019	0.00015	0.00113	0.00003	0.00002	
Penny's Bay	1.226	0.00001 0.00187 0.00003 0.00003				

CO2e Emissions Intensity of Electricity Sold by CLP Power Hong Kong

CO2e Emissions Intensity of Electricity Sold by	2019	2020	2021	2022	2023
CLP Power Hong Kong ^{1,2} (kg CO ₂ e/ kWh)	0.50	0.37	0.39	0.39	0.39

 1 CO₂e emission intensity was calculated by annual total CO₂e emissions of CAPCO power stations and the total electricity sold to CLP Power Hong Kong's customers before the adjustment of Renewable Energy Certificates.

 2 In accordance with the Greenhouse Gas Protocol, WE Station, which makes use of landfill gas from waste for power generation, is not included in CLP's Scope 1 CO₂ emissions and reported separately in the Asset Performance Statistics. Its non-CO₂ GHG emissions (i.e. CH4 and N₂O) is included in CLP's Scope 1 CO₂e emissions.

5-year Key Operating Statistics

	2019	2020	2021	2022	2023
Installed capacity, MW	8,988	9,573	9,623	9,648*	9,648*
System maximum demand - Local, MW [#]	7,206	7,264	7,477	7,720	7,452
Thermal efficiency, % based on units sent out	37.5	40.8	41.3	40.9	41.6
Plant availability, %	86.4	87.5	84.4	89.1	85.8

*Unit A1 of Castle Peak Power Station, with capacity of 350MW, was put in reserve to run only in emergency situations, after coming to the end of its asset life on 31 May 2022. The installed capacity without A1 would otherwise be 9,298MW.

Without taking into account the effect of the customer programme of demand response pursued to reduce electricity usage, the maximum demand would have been higher at 7,269MW in 2019, 7,369MW in 2020, 7,551MW in 2021, 7,858MW in 2022 and 7,641MW in 2023.

6. Energy Cost and Fuel Procurement

6.1 Energy Cost and Fuel Consumed

6.1.1 Energy Cost by Year

HK\$M





6.1.2 Fuel Consumed

Fuel Consumed, terajoules	2019	2020	2021	2022	2023
Gas	80,695	131,244	132,609	128,453	135,670
Coal	141,830	63,505	75,307	77,172	76,699
Oil	1,711	1,538	1,928	1,875	2,161
Total	224,236	196,287	209,844	207,500	214,530
Cost of fuel, HK\$ per gigajoule - Overall	55.47	65.94	70.25	99.18	91.97

6.2 Fuel Procurement

6.2.1 Diversified Fuel Mix

It is critical for CLP Power to manage the fuel mix carefully to ensure fuel security and as much price stability as possible while providing a reliable electricity supply and meeting environmental standards at reasonable costs.

As an integral part of our fuel procurement strategy, CLP Power maintains a diversified fuel mix using different fuels and different fuel sources including natural gas, coal, and renewable energy, as well as nuclear which is relatively stable in price. Amid the continued surge in international fuel prices, nuclear has played an important role to help smooth out price fluctuations arising from energy market volatility.



Gas Supplies

To meet the Government's target of increasing local gas-fired generation by 2020, CLP Power has taken additional steps to ensure sufficient gas supply and to further increase the diversity and security. In 1996, CLP Power started importing natural gas from Yacheng for power generation. With the gradual depletion of the Yacheng gas field, CLP Power has been importing natural gas from the Second West-East Gas Pipeline (WEPII) and has been receiving additional gas from CNOOC's gas fields in the South China Sea under a new long-term contract using the existing Yacheng pipeline since 2013 and 2020, respectively. In 2023, the launch of the offshore LNG terminal made available a critical new source of natural gas for CLP Power, giving the company access to competitively priced, reliable LNG from diverse sources in the global market and enhancing the territory's gas supply security.



6.2.2 Fuel Cost Management

All of the fuels in Hong Kong required for power generation are imported and they are subject to price volatility in the international fuel markets. Fuel procurement is governed by the same set of company-wide policies and procedures as other procurement, which could be found in Chapter 11 of this booklet, to ensure supply security and regulatory compliance.

In addition, we continuously manage our fuel costs by contracting with different fuel suppliers, as well as using a wide range of commercial terms to secure competitively-priced fuels from the market. For example:



7. Renewable Energy and Energy Efficiency and Conservation

7.1 Promotion of Renewable Energy and Energy Efficiency and Conservation

The current SCA marks another milestone towards a greener, smarter and low-carbon environment. In support of the Government's environmental policy to address climate change, a series of new initiatives have been introduced in the current SCA. These include the Feed-in Tariff Scheme and Renewable Energy Certificates to encourage participation from various sectors of the community to support local Renewable Energy (RE) development. Other initiatives include New Eco Building Fund, Community Energy Saving Fund and energy audits to help our customers achieve demand side management, energy saving, and enhancing public education.

RE Feed-in Tariff (FiT) Scheme

The FiT Scheme encourages the development of RE by allowing customers to connect RE systems to the grid and sell the electricity generated back to CLP Power at favourable rates. It is applicable to electricity produced by solar and wind power systems with a generating capacity of up to 1MW. FiT rates are adjusted based on the review with the Government, after which new rates will be applied to new applications of RE systems.

Renewable Energy Certificates (RECs)

Any residential or commercial and industrial customer with a CLP Power electricity account is eligible to purchase RECs. Each unit of electricity carried in a REC represents electricity produced by local renewable energy sources including solar power, wind power, and waste-to-energy projects, generated or purchased (such as through the Feed-in Tariff scheme) by CLP Power. Revenue generated from the sale of RECs will contribute towards part of the price of purchasing renewable energy through the FiT Scheme, helping minimise the cost of electricity as a whole.

Eco Building Fund

The Eco Building Fund was first set up in 2014 to help residential building owners to carry out energy efficiency improvement works in the communal areas. Under the current SCA, its scope has been extended to cover commercial and industrial buildings as well, and its funding has been increased to subsidise about 400 buildings per year. On top of lighting and air-conditioning systems replacement, the upgraded fund also supports retro-commissioning projects and the use of smart technology.

|CLP Community Energy Saving Fund

Under the current SCA, 65% of the incentives earned by the Companies by helping customers save energy will be allocated to the CLP Community Energy Saving Fund. The fund began operations in January 2019 to carry out a territory-wide energy efficiency and conservation campaign, encouraging residential customers to live low-carbon lifestyles, subsidising business customers to replace electrical equipment with more energy efficient models, and at the same time supporting the underprivileged.

Energy Audit

CLP Power has been conducting energy audits for business customers since the 1990s. It is a free service helping businesses to save energy and operating costs. Energy system performance analysis is performed at customers' premises to identify Energy Management Opportunities (EMOs) and propose energy saving solutions. Under the current SCA, CLP Power quadruples the number of energy audits it offers to business customers from 150 to 600 a year, with total electricity saved expecting to reach 48GWh each year.

Renewable Energy

Over 4,000 new Renewable Energy Systems were connected to CLP Power's electricity grid during the reporting period. Up to the end of the reporting period, the total renewable energy generation in our supply area was around 330 GWh.

8. Safety and Health

Safety is always the Number One priority in CLP Power. Stringent safety guidelines are well in place and strictly enforced by staff and contractors to ensure safety in all work processes and at all facilities. To ensure a safe working environment for our staff and contractors, we proactively conduct safety inspections and risk assessments to upkeep our safety performance.



8.1 Safety Performance

 The Hong Kong Industrial Accident Rate is sourced from Legislative Council Panel on Manpower's Paper on Hong Kong's Occupational Safety and Health Performance in 2023 (published in June 2024)

9. Customer Excellence

CLP Power is committed to providing our customers with the best quality service and value. We continuously improve both our productivity and efficiency for the benefit of our customers.

We assess our performance regularly and report our achievements to establish a performance pledge on a yearly basis. The table below shows our targets and performance in 2023.

Performance Standards	2023 Targets	2023 Results
Reliability of electricity supply	>99.99%	Target met
Notify customers 3 working days in advance of planned outage	>99%	Target met
Average arrival time for loss of supply inspection	<28 minutes#	Target met
Average supply restoration time after fault outage	<2 hours#	Target met
Provide appointments for installation inspections within 3 working days	96.50%	Target met
Carry out site investigations on consumption enquiries within 3 working days	98%	Target met
Keep appointments to visit customers for supply applications within a 1.5-hour time slot	99.4%	Target met
Connect and supply electricity within the same day after satisfactory installation inspection	99.98%	Target met
Reconnect supply within the same day of payment of outstanding charges	95%	Target met
Answer Emergency Service Hotline by Customer Service Officer within 20 seconds (effective in 2022)	90% of answering time	Target met
Answer Enquires Hotline by Customer Service Officer within 20 seconds (effective in 2022)	80% of answering time	Target met
Average queuing time for customer service enquiries at Customer Service Centres	Within 3.5 minutes	Target met

Excluding incidents occurred during major events which are specified in the Scheme of Control Agreement.

10. Financial Performance

10.1 Scheme of Control Financial & Operating Statistics

10.1.1 Scheme of Control Statement

CLP Power Hong Kong Limited and Castle Power Company Limited

	2022	2023
	HK\$M	HK\$M
SoC revenue	51,103	50,455
Expenses		<u>.</u>
Operating costs	5,027	5,336
Fuel	21,939	20,974
Purchases of nuclear electricity	5,822	5,802
Provision for asset decommissioning	73	120
Depreciation	5,313	5,380
Operating interest	800	1,154
Taxation	1,924	1,933
	40,898	40,699
	40.205	
Profit after taxation	10,205	9,756
Interest on increase in customers' deposits	4	37
Interest on borrowed capital	1,115	1,539
Adjustment for performance incentives	(448)	(642)
	10,876	10,690
Transfer from/(to) Tariff Stabilisation Fund	(531)	168
Permitted return	10,345	10,858
Deduct interest on/ Adjustment for		
Increase in customers' deposits as above	4	37
Borrowed capital as above	1,115	1,539
Performance incentives as above	(448)	(642)
Tariff Stabilisation Fund to Rate Reduction Reserve	40	114
	711	1,048
Net return	9,634	9,810
CESF contribution	(218)	(230)
Net return after CESF contribution	9,416	9,580
CLP Power's share of net return after CESF contribution		
CLP Power	6,239	6,351
Interest in CAPCO	2,224	2,261
	8,463	8,612

10.1.2 Operating Costs

For the Year ended 31 Dec (HK\$M)	2022	2023
Operating Costs		
- Cost of Labour, materials & services and supervision	4,091	4,316
- Government Rent & Rates	694	649
- Fixed Asset Disposal	211	340
- Loan Charges	31	31
Sub-total for Operating Costs	5,027	5,336

10.2 Segregated Annual Cost Data

10.2.1 Operating Expenses

Year 2023 (HK\$m)	Generation	Non-Generation [#]
Costs by Segment		
Operating Expenses (Note 1)	5,084	6,906
Fuel	20,974	0
Purchases of nuclear electricity	5,802	0
Total	31,860	6,906

Note 1: includes direct, indirect costs and depreciation

10.2.2 Net Fixed Assets Movement

Year 2023 (HK\$m)	Generation	Non-Generation [#]
Opening balance (1/1/2023)	45,503	87,289
Closing balance (31/12/2023)	47,777	90,880
Total Capital Expenditure for 2023	4,966	6,704

[#] Cost data pertaining to Transmission & Distribution and Customer Services

10.3 Tariff Stabilisation Fund and Fuel Clause Recovery Account

Balance as <u>at</u> 31 Dec (HK\$m)	2019	2020	2021	2022	2023
Tariff Stabilisation Fund	1,478	2,019	3,109	2,928	2,529
Fuel Clause Recovery Account	1,131	346	(1,116)	(3,543)	(328)

10.4 Summary of Loans and Equity

Combined Debt Profile and Equity, HK\$M As at 31 December	2019	2020	2021	2022	2023
Available Facility	49,397	57,345	61,013	60,788	60,792
Bank Loans and Other Borrowings (A)	41,171	43,257	46,351	48,559	47,835
- Short-Term Loans	11,379	6,111	8,023	7,879	11,868
- Long-Term Loans and Other Borrowings	29,792	37,146	38,328	40,680	35,967
Undrawn Facility	8,226	14,088	14,662	12,229	12,957
Equity (B)	46,205	47,807	49,934	52,528	54,364
Gearing Ratio (A/(A+B))	47%	48%	48%	48%	47%

10.5 Employee Statistics Data

Data as at 31 December	2019	2020	2021	2022	2023
No. of SoC employers	3,815	3,861	3,900	4,012	4,101
- Professionals and Administrative Personnel	1,107	1,151	1,159	1,221	1,297
- Engineers and Technical Personnel	1,457	1,454	1,457	1,514	1,538
- Technical Operations Personnel	1251	1,256	1,284	1,277	1,266
Voluntary turnover rate*	2.8%	3.2%	4.9%	6.2%	6.2%

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

Five-Year Summary: Scheme of Control Financial & Operating Statistics

10.6 Performance Incentives and Penalties Schemes under the SCA

Annually

		Adjustment to the Permitted Rate of Return				2023			
Porformanco				2023		Incentive ear	nings	-	
Category	Measurement for Each Year	Maximum incentive for performance above the respective target	Maximum penalty for performance below the respective target	Actual	%	HK\$m	HKŞM (Net Incentive after CESF contribution)	Objectives	
	Supply reliability	+0.015%	-0.015%	99.9976%	+0.015%	20.359	20.359	Drive high supply reliability for customers across the year	
Operational and	Operational efficiency	+0.01%	-0.01%	100.00%	+0.01%	13.572	13.572	Promote efficient customer connection & supply performance	
Customer Services	Customer services	+0.01%	-0.01%	100.00%	+0.01%	13.572	13.572	Encourage a high level of quality of customer services	
	Supply restoration	+0.015%	-0.015%	54 mins	+0.015%	20.359	20.359	Reduce & minimise supply outage duration for customers across the year	
	Energy savings from audits	+0.1%	0.0%	50.22GWh	+0.1%	135.725	47.504	Realise energy savings for customers from energy audits	
	Number of completed energy audits	+0.04%	0.0%	611	+0.04%	54.289	19.001	Encourage customers to identify opportunities for improved efficiency	
Energy Efficiency and	No. of buildings under New Eco-Building Fund	+0.02%	0.0%	715	+0.02%	27.145	9.501	Support buildings in enhancing the energy	
Demand Response	Energy saving from New Eco- Building Fund	+0.1%	0.0%	50.08GWh	+0.1%	135.725	47.504	efficiency of their common areas	
	Demand response reduction	+0.025%	0.0%	76MW	+0.025%	33.931	33.931	Drive and support customer-side electricity demand reduction to minimise future generation and network capacity investment	
	Percentage of electricity generated from Renewable Energy Systems in CLP Power's service areas (excluding systems directly owned by the Government)	+0.05%	0.0%	1.27%	+0.02%	27.145	27.145	Support adoption of renewable energy by customers and the community	
Renewable Energy	Number of new Renewable Energy Systems connections	+0.0025%	0.0%	4,192	+0.0025%	3.393	3.393		
	No. of new Renewable Energy Systems that generate electricity regularly	+0.0025%	0.0%	3,975	+0.0025%	3.393	3.393	Encourage renewable energy generation from connected systems	
	Sales of renewable energy certificates ("RE Certificates")	See N	ote 1	40.207m	See Note 1	4.021	4.021	Encourage greater customer participation in the purchase of renewable energy attributes	

Five Yearly (only applies every 5th year)

		Adjustment to the Re	e Permitted Rate of turn		2023 Incentive earnings				
Performance Category	Measurement for Each Period	Maximum incentive for performance above the respective target	Maximum penalty for performance below the respective target	2023 Actual	%	HK\$m	HK\$m (Net Incentive after CESF contribution)	Objective	
Energy Efficiency and Demand Response	Five-year energy saving	+0.1%	0.0%	5.6%	+0.1%	135.725	135.725	Encourage long-term energy savings performance to reduce emissions and minimise long term costs for customers	
Renewable Energy	No. of new Renewable Energy Systems connections which generate electricity regularly in each five-year period	+0.01%	0.0%	>750	+0.01%	13.5 7 2	13.572	Encourage long-term renewable energy generation from connected systems	

"Renewable Energy System" means an electricity generation system employing solar, wind, biomass, hydro, tidal, wave, geothermal, energy from waste (including landfill gas or sewage gas) or such other energy sources that are secure and inexhaustible (in the sense that there is no problem of reserve being depleted) as may be mutually agreed by the Companies and the Government.

The 2023 Auditing Review is underway and the incentive earnings are yet to be verified

CLP Power and CAPCO make a contribution to the CLP Community Energy Saving Fund each year of an amount equal to 65% of the total energy efficiency incentive amount

Note 1: The RE Certificate Sales Incentive Amount for a year is 10% of the total revenue generated from sales of RE Certificates by CLP Power to customers.

10.7 CLP Community Energy Saving Fund (CESF) Related Performance

as <u>at</u> 31 Dec (HK\$m)	2019	2020	2021	2022	2023
CESF contribution by SoC Companies' shareholders (HK\$M)	195	201	208	218	230

10.7.1 Amount of incentive contributed to CESF by shareholders for last 5 years

The 2023 Auditing Review is underway and the CESF contribution by SoC Companies shareholders are yet to be verified

10.7.2 Programmes funded by CESF in 2023

In 2023, CLP launched a series of community support programmes to support underprivileged people, promote the development of renewable enregy and encourage the community to save energy and reduce carbon emissions. CLP provided one-off fuel cost subsidies to about 100,000 households in need. Electrical Equipment Updgrade Scheme subsidised more than 7000 industrial and commercial customers in 2023. Programme details are as follows:

2023	Fund Spent (HK\$M)
Power Connect Scheme	16.1
Electrical Equipment Upgrade Scheme	56.7
Fuel Cost Subsidy Programme	70.2
CLP Retro-Commissioning Charter Programme	1.1
Professional in-depth Analysis on Energy Saving Potential	2.4
Student E-learning Assistance Programme	5.9
Other programmes including Support for SDUs Household Scheme	18.2

10.8 Related Party Transactions

The following is a summary of significant transactions between CLP Power, CAPCO and related parties, which were carried out in the normal course of business during the year ended 31 December.

	2022 HK\$M	2023 HK\$M
Purchase of electricity from a fellow subsidiary (i)	7,001	6,943
Engineering works rendered by a fellow subsidiary (ii)	397	459
LNG terminal services rendered by a joint venture (iii)	4	308

- (i) CLP Power has arrangements with the fellow subsidiary, Hong Kong Nuclear Investment Company Limited , to purchase the nuclear electricity from Guangdong Daya Bay Nuclear Power Station (GNPS). The base price paid by CLP Power for electricity generated by GNPS is determined by a formula based on GNPS's operating costs and a calculation of profits with reference to the capacity factors of the plant.
- (ii) CLP Power and CAPCO have entered into a number of engineering work contracts with a fellow subsidiary, CLPe Solutions Limited, to develop, construct and maintain the electricity supply facilities of CLP Power and CAPCO. The prices of the contracts are determined with reference to the prevailing market prices.
- (iii) CAPCO has entered into an arrangement with the joint venture, Hong Kong LNG Terminal Limited (HKLTL), to receive LNG terminal use and related LNG storage and regasification services from HKLTL. The fee charged by HKLTL is mainly to cover costs incurred in providing the services.

11. Key Procurement Principles

Procurement is an integral part of our business process. To maintain and develop our electricity supply business to meet our customers' needs, we are committed to providing high-quality, low-cost services to our customers in a responsible manner. This in turn requires that our suppliers meet our expectations in providing the products and services that we procure from them.

Our preferred suppliers will be those who are ethical and committed to sustainable development, have demonstrated safety, health, environment, quality competence, internationally competitive pricing, meeting the expectations of our Responsible Procurement Policy Statement and CLP's Supplier Code of Conduct ("SCoC"), and are compliant with legal and business performance requirements.

Our Values

Our vision is underpinned by values that ensure we behave in a way that is consistent with the mission we have set for ourselves. They begin with how we treat our own people and move through our relations with investors, suppliers, business partners and the Government to the wider communities in which we operate. CLP has a longstanding Value Framework, and Code of Conduct that provides the guiding principles for all company employees, to demonstrate our commitment to act with integrity in all our activities to ensure business success.

|Sustainable Procurement

We encourage all its suppliers to abide by the same values and principles as ourselves, and to adopt the same standards of integrity and transparency in doing business with us. The CLP's SCoC highlights our expectations on the 11 responsible procurement practices. We make reference to the SCoC in our supplier assessment, selection and contract performance monitoring.

|Fair and Objective Evaluations and Supplier Selections

CLP Power has established a fair and consistent approach for conducting tender evaluations. The cross functional project team will be responsible for completing these evaluations based on a balanced framework. This framework offers a guideline for assessing supplier proposals including the aspects, of Safety, Quality, Delivery, Innovation, Support and Commercial (including contractual adherence) considerations, with the aim of ensuring objectivity and fairness throughout the procurement process.

Approval for the Procurement Process

Segregation of authority is diligently enforced within CLP Power. CLP Power defines three types of approval for the procurement process: financial authority to approve the funding; purchasing authority for contract execution; and payment authority for supplier payments. This proactive approach emphasizes the importance of preventing conflicts of interest and maintaining an optional level of internal control within CLP Power.

Regulatory Process

The SCA provides an effective and stringent regulatory framework for the Government to monitor CLP's operating and financial performance (i.e. electricity related capital investment etc.) through the regulatory process. In line with Section A of Schedule 3 of the Scheme of Control Agreement, CLP submits to the Government the Development Plans relating to the provision and future expansion of the electricity supply system. Each Development Plan is subject to review and approval by the Executive Council in accordance with the provisions set out in Schedule 3 of the Agreement. The procedures for the reviews can be found on the <u>CLP</u> website.