

CLP Holdings

# 2023 Interim Results Presentation

7 August 2023

*Energy for Brighter Tomorrows*

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# Agenda

## Overview

Richard Lancaster, Chief Executive Officer

## Financial Performance and Outlook

Nicolas Tissot, Chief Financial Officer

## Strategy and Roadmap

Richard Lancaster, Chief Executive Officer

## Questions and answers

## Appendices



Opening ceremony of CLP Pulse (Clock Tower at Argyle Street)

# Overview



The Floating Storage and Regasification Unit (FSRU), LNG carrier and offshore LNG terminal in Hong Kong

# Group summary and outlook

## Solid financial performance

Hong Kong and Mainland China dependable

Progressive normalisation of EnergyAustralia has started

Apraava Energy benefits from sound performance and positive one-off

## Investing in energy transition while delivering value to shareholders

Momentum in growth investments and robust pipeline across the Group

Capital focus on Hong Kong & Mainland China and leveraging partnerships

Continuing our reliable dividend track record

## Ensuring energy security and a sustainable future

Climate Vision 2050 on track

Supporting Hong Kong Government's development and infrastructure plans

Embracing energy transition across the rest of the portfolio

# 1H2023 highlights

## Financial Highlights

		Change
<b>Operating Earnings</b> (before fair value)	<b>HK\$4,955 million</b>	<b>↑ 19%</b>
<b>Total earnings</b>	<b>HK\$5,060 million</b>	<b>↑ n/a</b>
<b>Dividend &amp; Yield</b>		
2nd interim dividend	<b>HK\$0.63 per share</b>	-
Total 1H2023 dividend	<b>HK\$1.26 per share</b>	-
Dividend yield <sup>(1)</sup>	<b>5.1%</b>	

## Operational Highlights

		Change
<b>Safety &amp; Customers</b>		
Total recordable injury rate <sup>(2)</sup>	<b>0.17</b>	<b>↓ 0.10</b>
Unplanned customer minutes lost in Hong Kong <sup>(3)</sup>	<b>5.72 mins</b>	<b>↑ 0.01</b>
<b>Customer Accounts</b>		
Hong Kong	<b>2.8 million</b>	<b>↑ 44k</b>
Australia	<b>2.4 million</b>	<b>↓ 9k</b>
<b>Generation</b>		
Electricity sent out <sup>(4)</sup>	<b>38.2 TWh</b>	<b>↓ 7%</b>
Capacity <sup>(4)</sup>	<b>23.1 GW</b>	<b>↓ 2 GW</b>

(1) Dividend yield is calculated as dividend for the recent four quarters divided by closing share price on 30 June 2023

(2) Total recordable injury rate refers to the number of total recordable injuries per 200,000 work hours in the period

(3) Unplanned customer minutes lost is based on the average of the past 36 months

(4) On an equity plus long-term capacity and energy purchase basis. Covers CLP's generation and energy storage portfolio





# Financial Performance and Outlook



CLP Pulse (Clock Tower at Argyle Street)

# 1H2023 Financial overview

Steady progress in 2023

## EBITDAF <sup>(1)</sup>

**HK\$11,380 million** ↑ 5%

## Operating Earnings <sup>(1)</sup>

Operating Earnings

**HK\$4,955 million** ↑ 19%

Operating Earnings (incl. fair value)

**HK\$4,972 million** ↑ n/a

## Total Earnings / EPS

Total Earnings

**HK\$5,060 million** ↑ n/a

Earnings Per Share (EPS)

**HK\$2.00** ↑ n/a

## Capital Investment <sup>(2)</sup>

**HK\$6,146 million** ↓ 20%

## Total Interim DPS

Total Interim Dividends Per Share (DPS) Declared

**HK\$1.26**

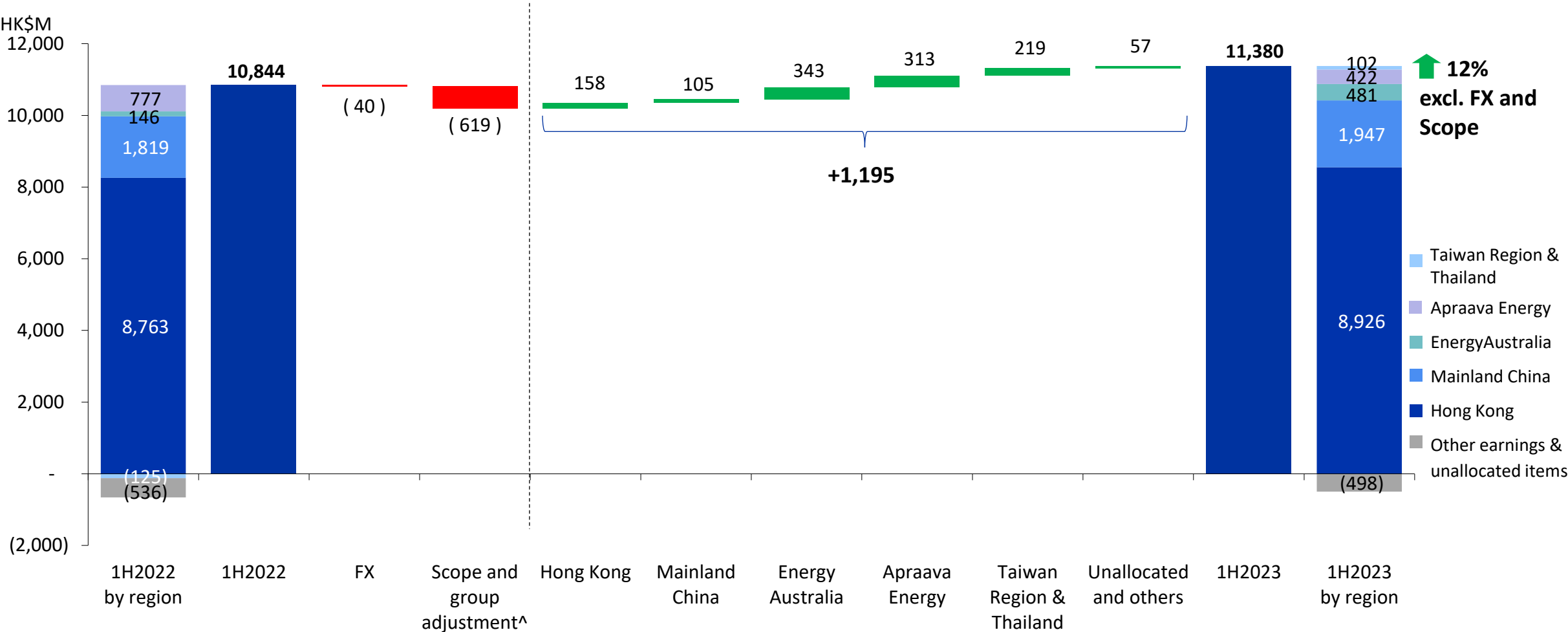
(1) EBITDAF = Earnings before interest, taxes, depreciation and amortisation, and fair value movements. Recurring EBITDAF and Operating Earnings exclude items affecting comparability

(2) On cash basis



# EBITDAF by business unit

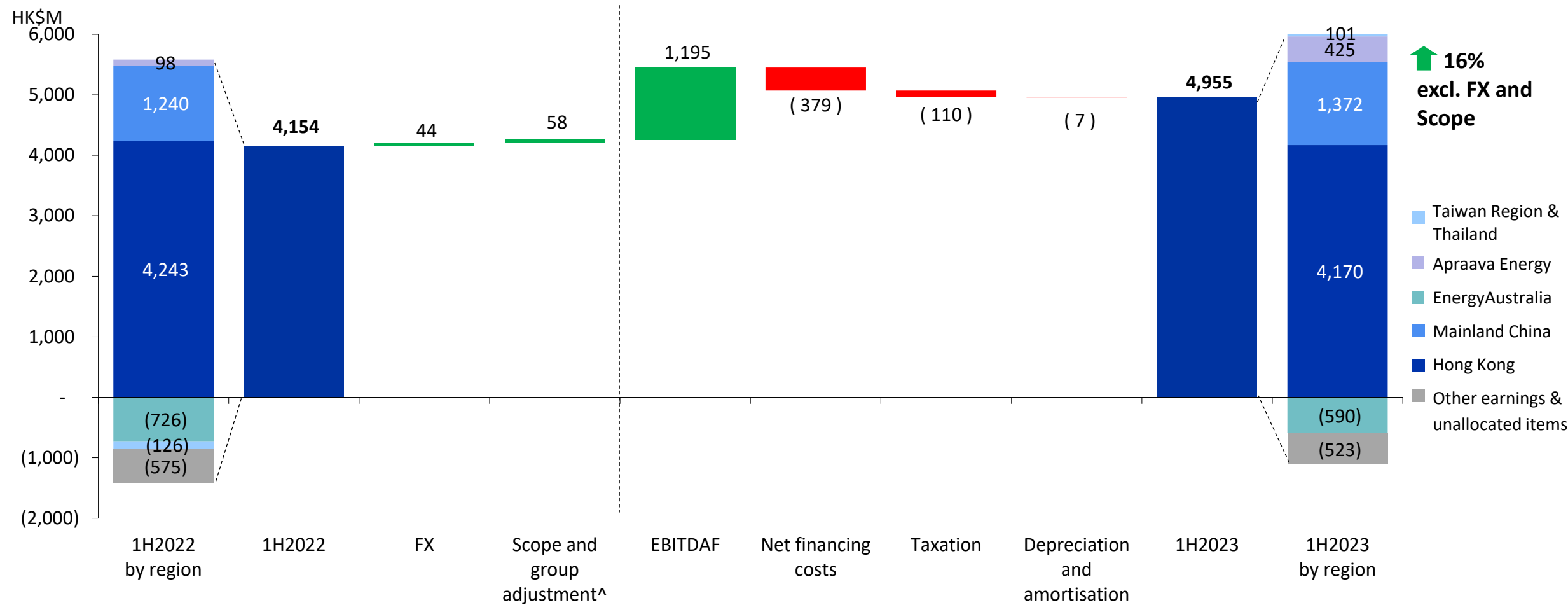
EBITDAF growth across our markets



Note: Recurring EBITDAF exclude items affecting comparability

^ Impact of divestment of Fangchenggang in Mainland China as well as the deconsolidation of Apraava Energy (including group adjustment after the sell-down of Apraava Energy)

# Operating earnings before fair value movements variance



^ Impact of divestment of Fangchenggang in Mainland China as well as the deconsolidation of Apraava Energy (including group adjustment after the sell-down of Apraava Energy)

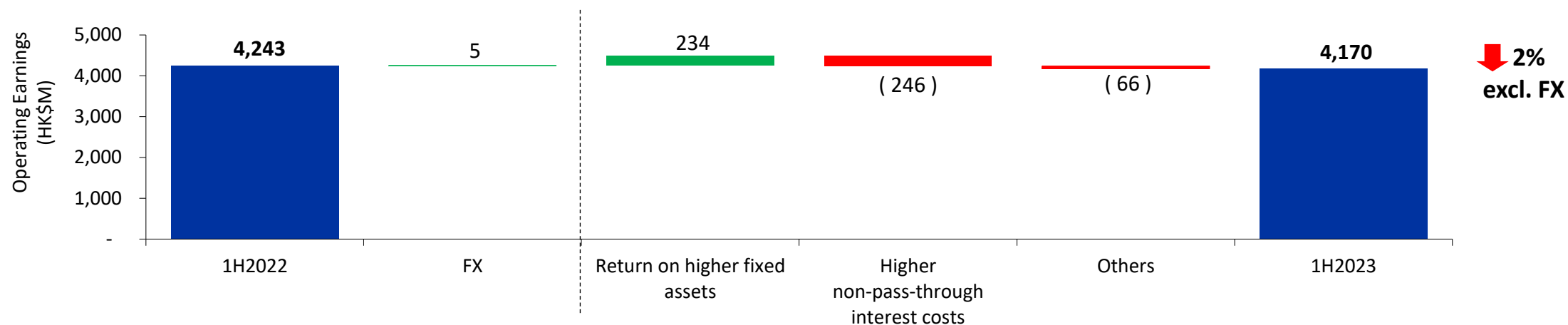
# Operating earnings by business unit

HK\$M	1H2023	1H2022	Change	
Hong Kong energy and related activities	4,170	4,243	↓ 2%	Higher return from average net fixed assets offset by higher interest costs
Mainland China	1,372	1,240	↑ 11%	Higher output from nuclear fleet
EnergyAustralia	(590)	(726)	↑ 19%	Improved Energy segment offset by higher energy procurement costs for retail
Apraava Energy	425	98	↑ 334%	
Taiwan Region and Thailand	101	(126)	↑ n/a	One-off income for disputed amounts owed to Jhajjar
Other earnings and unallocated items	(523)	(575)	↑ 9%	Improved margin at Ho-Ping under the revised tariff mechanism
<b>Operating Earnings</b> (before Fair Value Movements)	<b>4,955</b>	<b>4,154</b>	<b>↑ 19%</b>	
Fair value movements	17	(8,000)		Slight favourable fair value movements of EA forward energy contracts (after tax)
<b>Operating Earnings</b>	<b>4,972</b>	<b>(3,846)</b>	<b>↑ n/a</b>	
Items affecting comparability	88	(1,009)		Profit from the sale of Argyle Street properties in 2023 (after tax)
<b>Total Earnings</b>	<b>5,060</b>	<b>(4,855)</b>	<b>↑ n/a</b>	

Details on slide 27

# Hong Kong

## Stable contribution reflect progress of major projects



### Performance

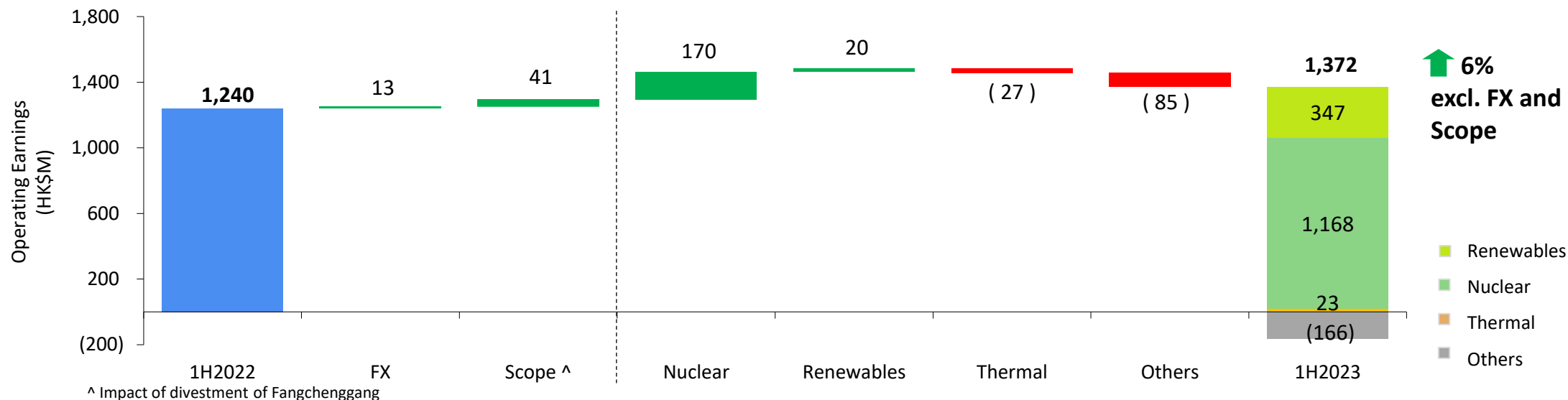
- **Operating earnings:** Stable contribution driven by permitted return on higher fixed assets, though impacted by higher non-pass-through interest costs.
- **SoC Capex progress:** HK\$4.7b; T&D HK\$2.8b; Generation HK\$1.9b.
- **Offshore LNG terminal in operation** with regasified LNG being sent to Black Point Power Station in July.
- **Local electricity sales:** +3.7% reflecting consumption growth and reopening of economy.
- **Customer energy solutions:** Expanding portfolio of decarbonisation solutions including renewable energy certificates, EV charging, battery energy storage systems, cooling-as-a service.
- **Financing:** Higher market interest rates and higher debt balance mainly to support decarbonisation.

### Outlook

- **Continued investment in current Development Plan** to meet Hong Kong's development and decarbonisation roadmap (Aggregate capex in 2018 DP: HK\$49.1b / Approved capex in 2018 DP: HK\$56.1b).
- **CCGT D2 generation unit** in commercial operation in 2024.
- **2024-2028 Development Plan:** Progressing discussions with government to support Hong Kong's long term economic and infrastructure development.
- **Interim Review:** 5-yearly review of the 15 year SoC Agreement with the government.
- **Manage fuel cost pressure** from elevated international energy prices and global market volatility to alleviate tariff impact.
- **Developing Hong Kong's future low carbon infrastructure:** Low carbon transportation, data centres, energy-efficient buildings.

# Mainland China

## Solid performance from non-carbon portfolio



### Performance

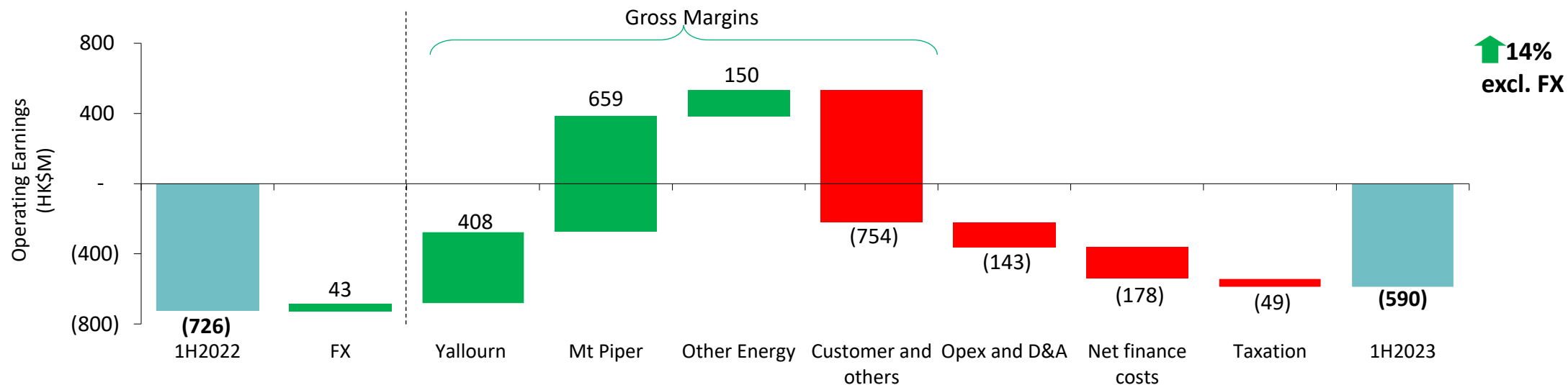
- **Nuclear:** Over HK\$1.1b of contributions driven by higher electricity output and less planned outage days.
- **Renewables:** Higher wind and solar resources offset by lower hydro resources. Xundian II wind project in Yunnan commissioned in March 2023.
- **Thermal:** Lower generation and tariff from Guohua minority owned portfolio.
- **Financing:** Lower finance costs driven by favourable interest rates.
- **Taxation:** Mainly due to higher profits from Yangjiang nuclear (withholding tax) and wind assets.

### Outlook

- **Macro recovery:** Electricity consumption expected to increase by 6%.
- **Nuclear:** Expected to remain main earnings driver. Scheduled outages for both Yangjiang and Daya Bay in 2H.
- **Healthy renewables development pipeline:** Several grid parity renewables energy projects in the near term in focus regions (e.g. Jiangsu, Guangxi).
- **Decarbonisation:** Support Government's ambition to grow total RE capacity to ~1,200GW by 2030, and demand from corporate clients for green attributes.

# EnergyAustralia

## Measures taken and stabilising market conditions set up for progressive recovery



### Performance

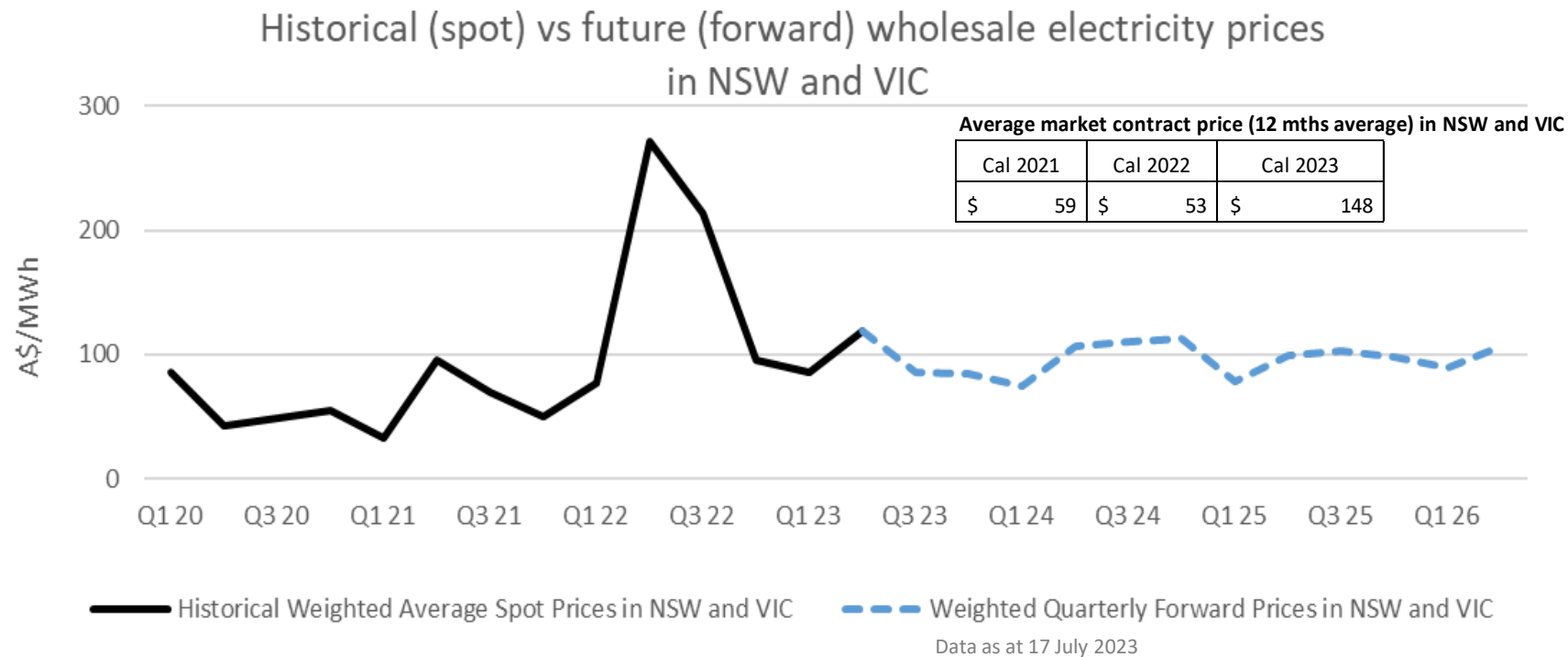
- **Yallourn:** Improved plant availability and generation (1H2023: 77% 1H2022: 68%).
- **Mt Piper:** Lower costs to settle forward sold contracts. Coal quality issues persisted.
- **Other Energy:** Lower generation across the gas fired assets offset by higher contributions from renewable PPAs.
- **Customer:** Higher energy procurement costs. Ongoing margin pressure from competition and time lag in passing through wholesale costs.
- **Opex and D&A:** Higher bad debt expenses and higher Yallourn opex.
- **Net finance costs:** Increased due to higher average loan balances.
- **Taxation:** Lower tax credits in line with reduced losses.

### Outlook

- **Generation:** Accelerated and targeted **Yallourn** maintenance programme to support generator reliability. New coal contract for **Mt Piper** for improved coal supply. Lower volumes hedged to rebalance generation and price risk.
- **Continued pressure on retail gross margins** due to rising wholesale costs, regulation and competition.
- **Supporting residential and business customers** in a high cost of living environment. Improving customer experience and offering new products and services including solar and batteries storage.
- Continue to invest in **firming capacity projects and partnerships** in support of Australia's energy transition.



# EnergyAustralia outlook



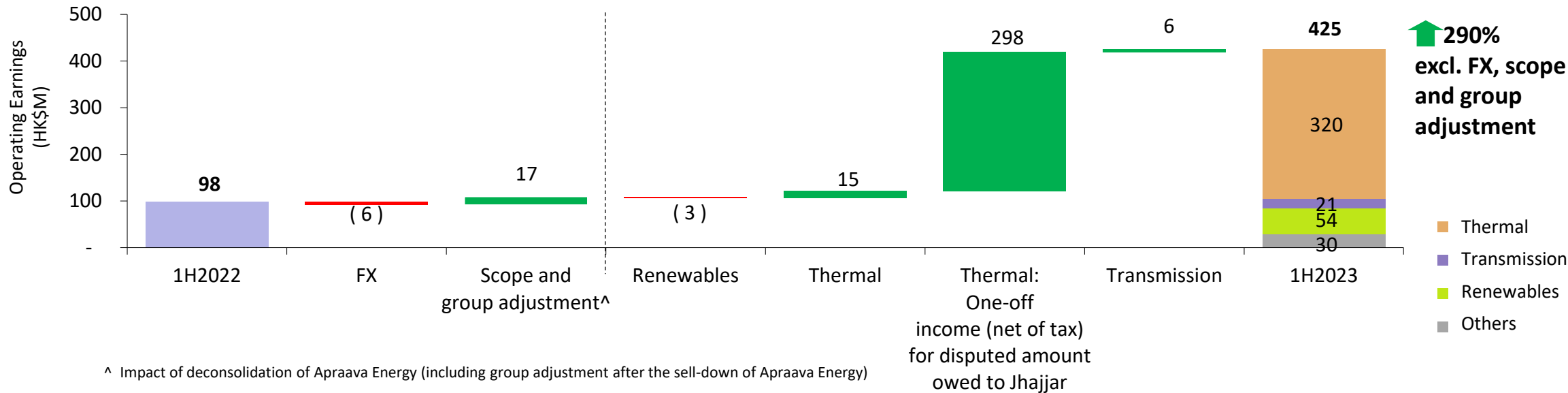
Forward market trading at higher levels than historical average

- Reduction in volatility from 2022.
- Australia targeting 82% of renewable energy by 2030.

- Investing in reliability of coal fleet.
- Retail pricing rising.
- Investing in firming capacity ahead of injection of renewable energy.

# Apraava Energy

## CDPQ partnership building momentum and benefits from Jhajjar one-off



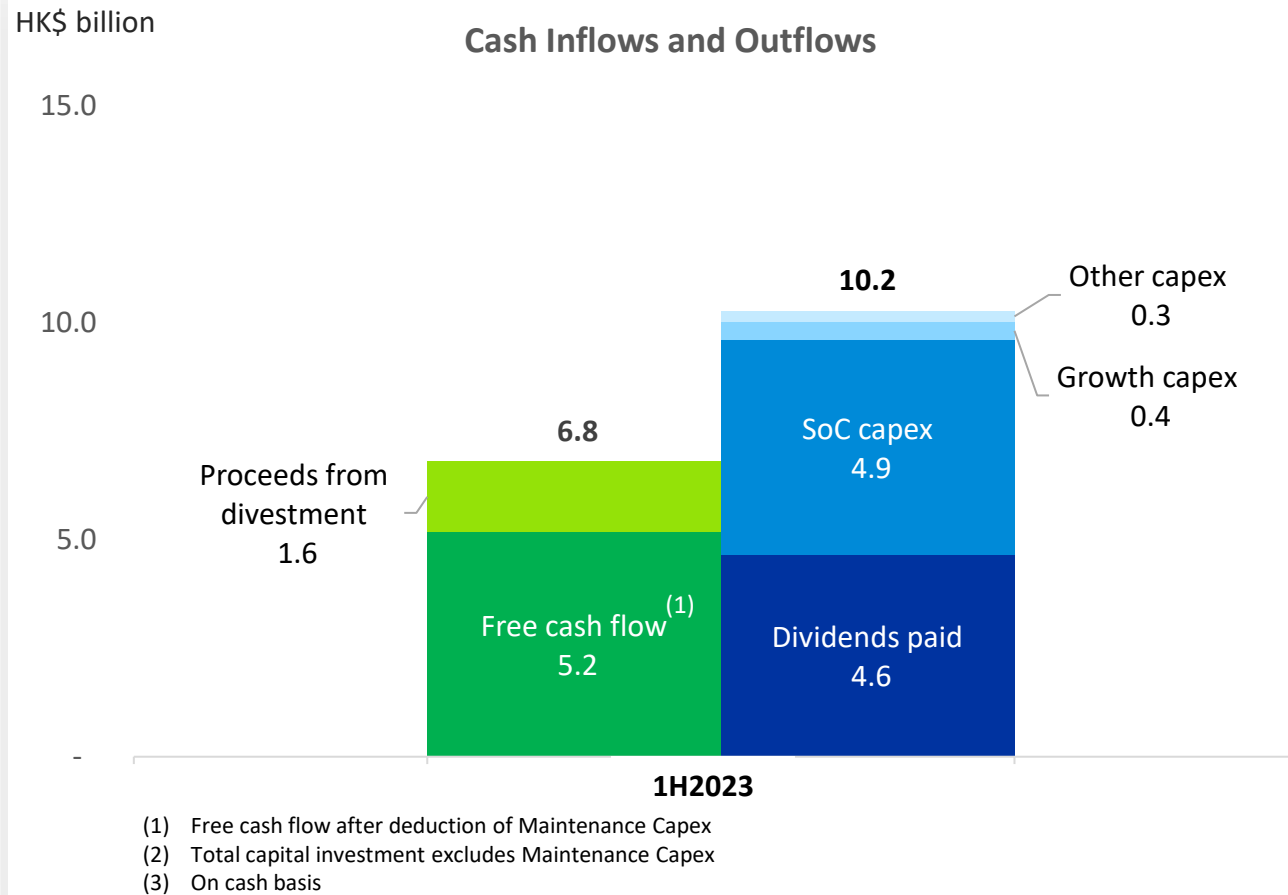
### Performance

- **Renewables:** Lower wind resources, partially offset by higher solar generation.
- **Thermal:** Higher earnings due to one-off income for disputed amounts owed to Jhajjar (+HK\$0.3 billion) and favourable operational performance.
- **Transmission:** Lower interest cost (one-time refinancing cost in 2022).
- **Receivables:** Overdue receivables reduced from HK\$191m (Dec 2022) to HK\$51m (Jun 2023).

### Outlook

- **Growth investments:** Secured ~900MW of non-carbon projects in auctions in 2023, including 300MW wind projects in the State of Karnataka, 2 transmission projects and 1 advanced metering infrastructure project.
- Completion of 251MW capacity in **Sidhpur wind farm**.

# Cash inflows and outflows



## Returning to sound cash flow generation

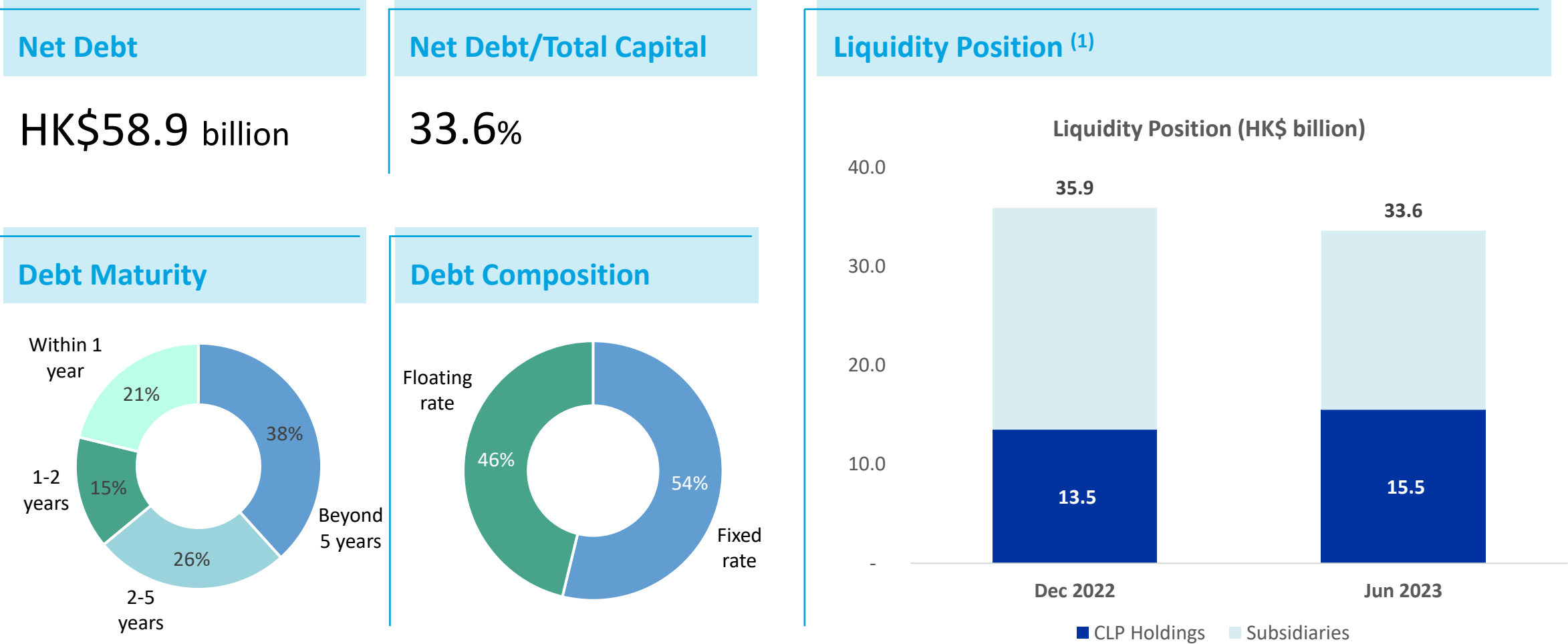
Cash flow generation back to a more usual yearly profile after the exceptional 2022.

Total capital investment<sup>(2)</sup> of HK\$5.6 billion consist of mainly:

- HK\$4.9 billion SoC capex<sup>(3)</sup> to support decarbonisation and growth in Hong Kong;
- HK\$0.4 billion growth capex for the continuous construction of renewable projects in Mainland China and Tallawarra B in Australia.

Dividend paid at HK\$4.6 billion.

# Debt structure and liquidity remain healthy



(1) Liquidity position comprise of undrawn bank facilities and cash balance

# Strategy and Roadmap

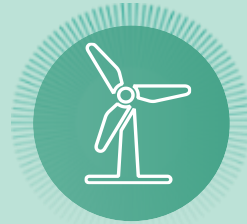


Yangzhou Gongdao Solar, Jiangsu, Mainland China

# Areas of strategic focus



**Grow** in energy transition and electrification



**Decarbonise** our operations

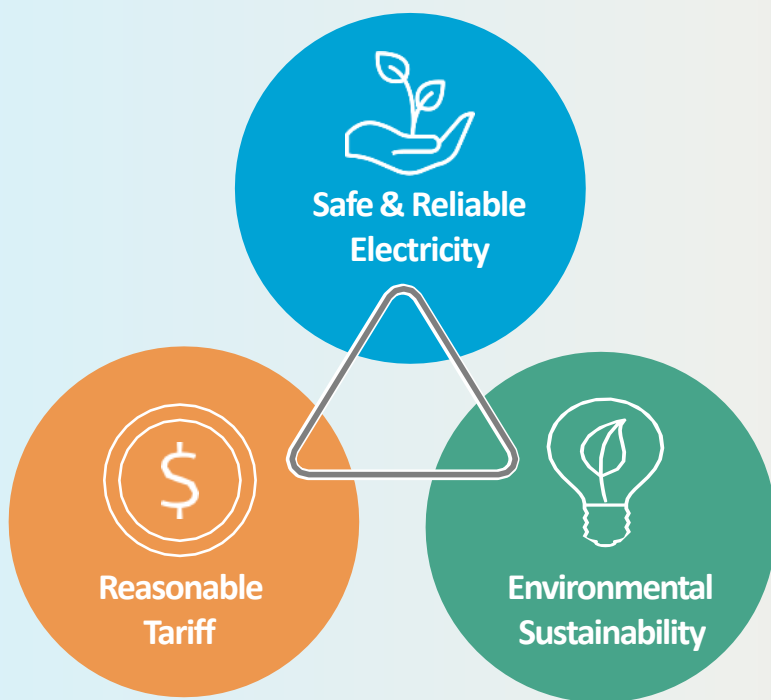


**Transform** to a utility of the future

Continued integration of sustainability into our business



# Supporting Hong Kong Government's policy priorities and customers



**Maintaining an appropriate balance across the energy trilemma of Government objectives**

## Economic and societal development

- Support customer demand growth and housing development.
- Establish power supply to new data centres.
- Enable infrastructure developments and supply to new development areas.

## Carbon emissions reduction

- More non-carbon energy.
- Unlock transport decarbonisation.

## World class reliability

- Uphold safety and reliability.
- Strengthen resilience.

## Smart, liveable city

- Continuously enhance the customer experience.
- Promote demand management and energy efficiency.
- Facilitate smart city.

# Expanding diversified non-carbon fleet in Mainland China to meet demand

## ~3GW in RE project pipeline

- Renewable energy pipeline growing significantly.
- Leveraging partnerships and capitalise on expansion opportunities.
- Developing in high-demand economic load centres.

## Diversified non-carbon generation across regions

- Diversified business across energy sources and regions.
- Access to corporate customer segment.
- Strong operational execution track record.

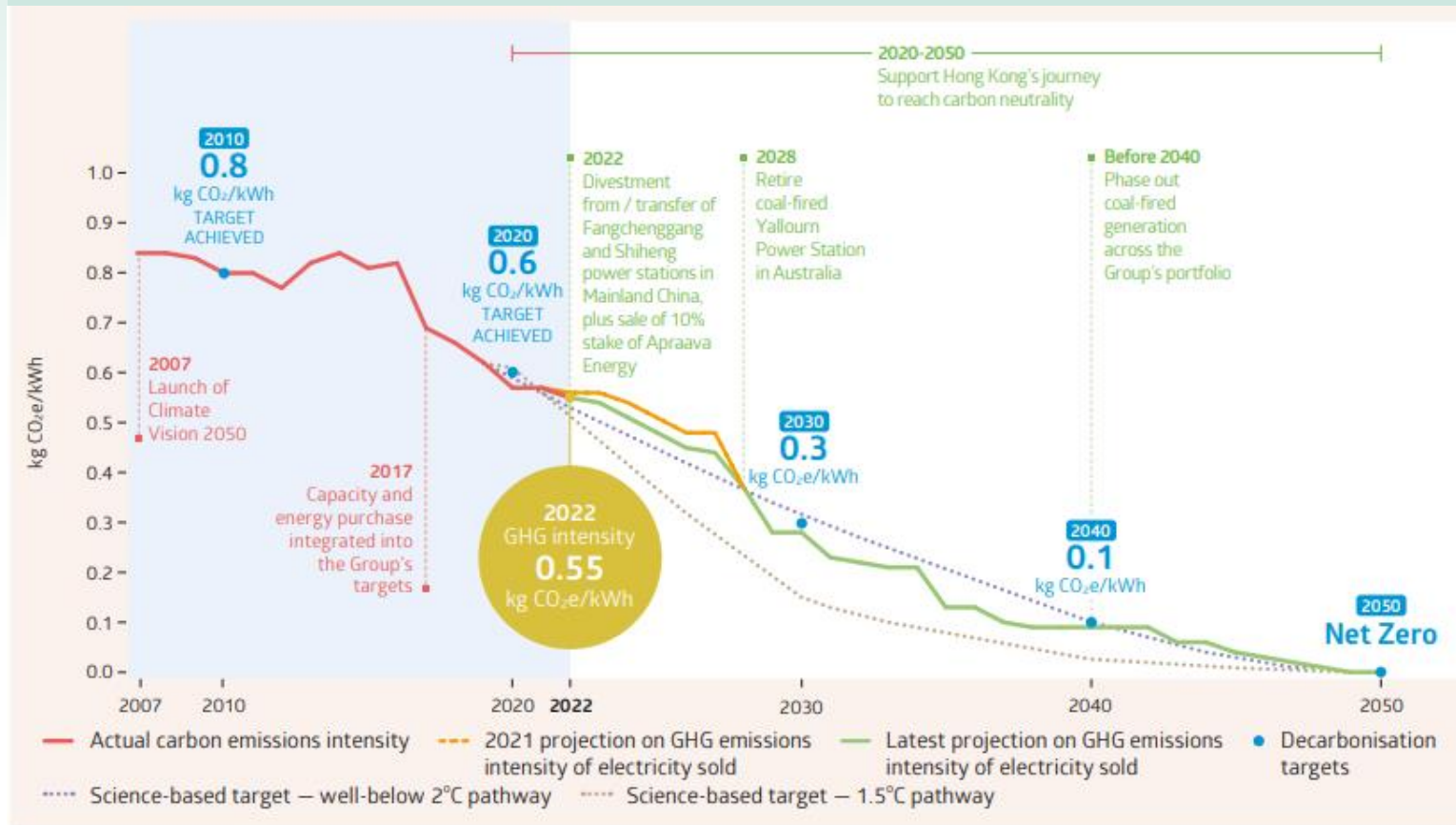
## Long term strategy

- Capture opportunities from China's renewables target of 1,200GW by 2030, and net zero by 2060.
- Scale up offerings of green products to capture demand from businesses seeking to decarbonise.
- Leverage high potential key economic regions and Northeast and Northwest China.



# Decarbonising our operations

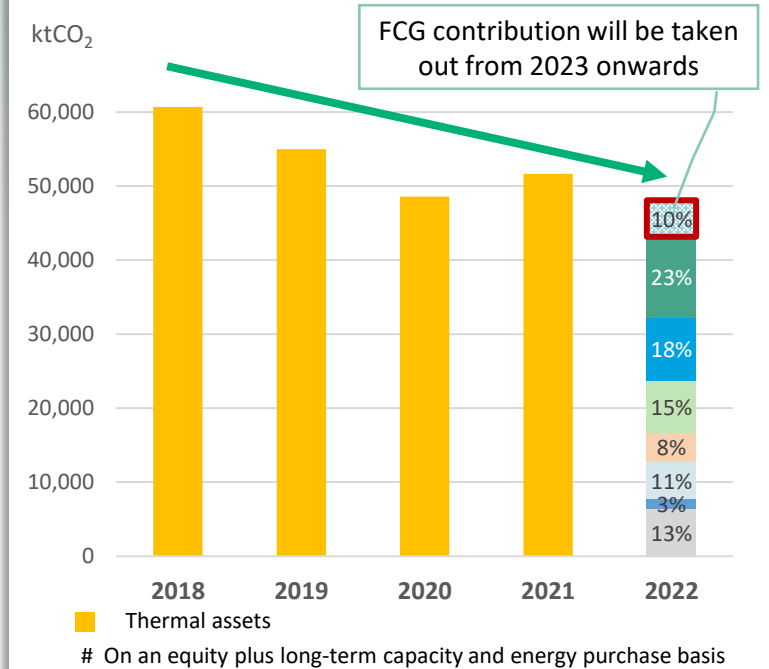
CLP's Past and Projected Greenhouse Gas Emissions Intensity <sup>(2)</sup>



## Notes:

- CLP's trajectory from 2007 to 2020 is based on the Group's carbon emissions intensity (kg CO<sub>2</sub>/kWh). Since 2021, in line with global best practices, CLP has reported its GHG emissions intensity based on kg CO<sub>2</sub>e/kWh.
- CLP's trajectory from 2017 to 2050 is on an equity plus long-term capacity and energy purchase basis.

Absolute Scope 1 and Scope 2 emissions of CLP's thermal generation assets #



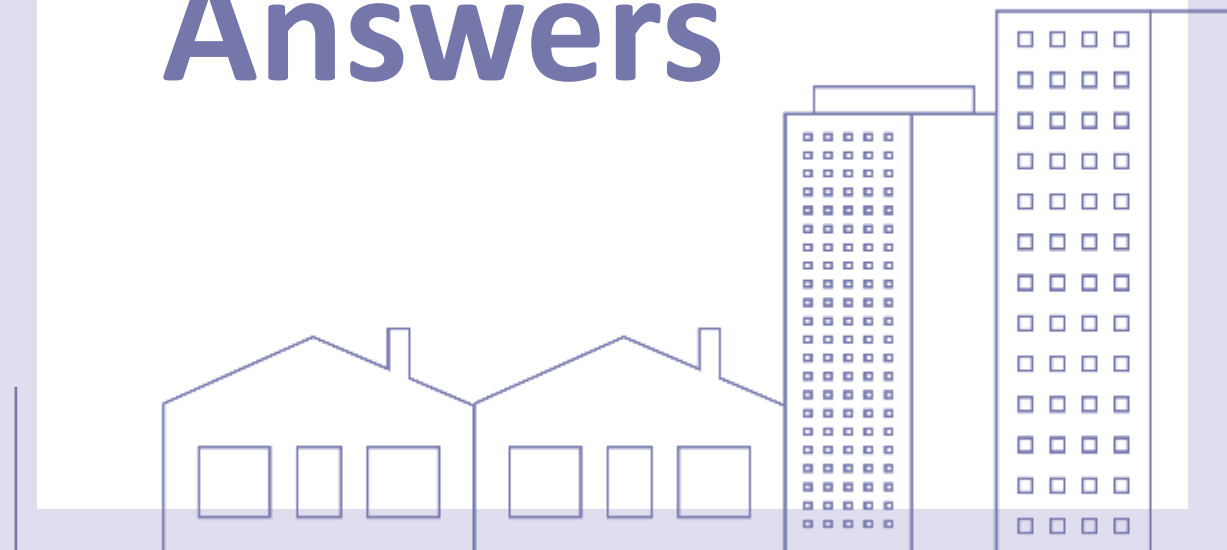
## Schedule for thermal assets phase-out

- Before 2030:**
  - Fangchenggang Power Station – Divestment in Dec 2022
  - Yallourn Power Station – To be phased out in mid-2028
  - Minority owned coal assets in Mainland China & Taiwan Region – To be phased out before 2030
  - Castle Peak Power Station – A Units to be phased out around mid-2020s and B Units to cease using coal for daily power generation by 2035
  - Jhajjar Power Station – To be phased out in mid-to-late 2030s
- Before 2040:**
  - Mount Piper Power Station – To be phased out by 2040 at the latest
  - EnergyAustralia's gas-fired assets – Case by case analysis to meet net zero by 2050
  - Black Point Power Station – Studying decarbonisation options including the use of zero-carbon hydrogen

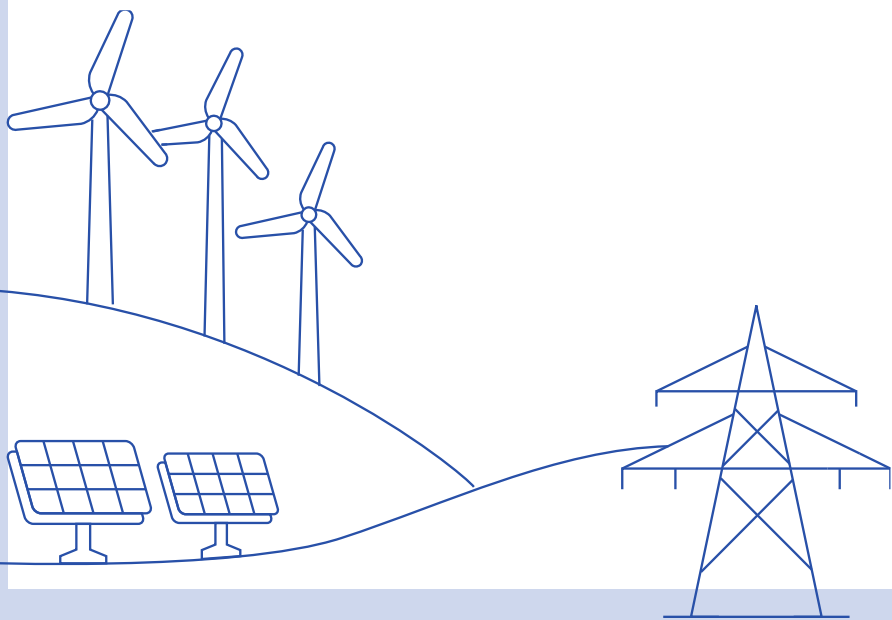


CLP 2023 Annual General Meeting on 5 May 2023

# Questions and Answers



# Appendices



# Financial highlights

	1H2023	1H2022	Change
Revenue (HK\$M)	43,302	47,594	-9%
Operating Earnings (before Fair Value Movements) (HK\$M)	4,955	4,154	+19%
Operating Earnings (HK\$M)	4,972	(3,846)	n/a
Total Earnings (HK\$M)	5,060	(4,855)	n/a
Operating Earnings per share (HK\$)	1.97	(1.52)	n/a
Total Earnings per share (HK\$)	2.00	(1.92)	n/a
Dividends per share (HK\$)			
First interim dividend	0.63	0.63	-
Second interim dividend	0.63	0.63	-
Total interim dividends	1.26	1.26	-
Capital Investments (HK\$M) - Cash basis			
SoC Capex	4,949	5,081	-3%
Other Capital Investments	1,197	2,585	-54%
Leverage	30 Jun 2023	31 Dec 2022	
Net Debt (HK\$M)	58,861	54,931	+7%
Net Debt/Total Capital (%)	33.6%	32.0%	+1.6pts



# Operating highlights

	1H2023	1H2022	Change
<b>Safety</b> (Total recordable injury rate) <sup>(1)</sup>	0.17	0.27	-0.10
<b>Reliability in Hong Kong</b> (minutes lost pa) <sup>(2)</sup>	5.72	5.71	+0.01
<b>Customer accounts</b> (Thousand)			
Hong Kong	2,771	2,727	+44
Australia	2,439	2,448	-9
<b>Electricity sent out</b> (TWh) <sup>(3)</sup>	38.2	41.1	-7.0%
<b>Generation and energy storage capacity</b> (GW) <sup>(3)</sup>			
Total in operation	21.9	24.0	-2.1
Non-carbon emitting <sup>(4)</sup>	6.1	6.1	-0.1
Under construction	1.1	1.1	+0.1

(1) Total recordable injury rate refers to the number of total recordable injuries per 200,000 work hours in the year

(2) Unplanned customer minutes lost is based on the average of the past 36 months

(3) On an equity plus long-term capacity and energy purchase basis

(4) Non-carbon emitting includes wind, hydro, solar and nuclear

# Items affecting comparability

HK\$M	1H2023	1H2022
Hong Kong – Profit from sale of properties	88	-
Hong Kong – Revaluation loss on investment property	-	(23)
India – Loss on sell down of Apraava Energy	-	(986)
<b>Items affecting comparability</b>	<b>88</b>	<b>(1,009)</b>

## Hong Kong Profit from sale of properties

Sale of Argyle Street properties.

## Hong Kong Revaluation loss on investment property

Retail portion of the Laguna Mall in Hong Kong.

## India Loss on sell down of Apraava Energy

The amount represented measurement loss recognised upon reclassification of the assets and liabilities of Apraava Energy as held for sale in June 2022. Sell down of 10% of Apraava Energy was completed in December 2022.

# Reconciliation of EBITDAF, ACOI and Operating Earnings

HK\$M	1H2023	1H2022	Change
<b>Recurring EBITDAF</b>	<b>11,380</b>	<b>10,844</b>	<b>↑ 5%</b>
Less:			
Depreciation and amortisation	(4,358)	(4,719)	
<b>ACOI</b>	<b>7,022</b>	<b>6,125</b>	<b>↑ 15%</b>
Less:			
Net finance costs <sup>(1)</sup>	(973)	(861)	
Income tax expense	(677)	(625)	
Non-controlling interests	(417)	(485)	
<b>Operating earnings before fair value movements</b>	<b>4,955</b>	<b>4,154</b>	<b>↑ 19%</b>
Fair value movements	17	(8,000)	
<b>Operating Earnings</b>	<b>4,972</b>	<b>(3,846)</b>	<b>↑ n/a</b>

## Adjusted Current Operating Income or ACOI

- ACOI equals EBIT excluding items affecting comparability and fair value movements, and includes the Group's share in earnings from joint ventures and associates.

## Net finance costs <sup>(1)</sup>

- Increase in net finance cost attributable to higher market interest rates in Hong Kong and Australia and higher average debt.

## Income tax expense

- In line with operating profit.

## Non-controlling interests

- CSG's 30% share of CAPCO.
- CDPQ's share of Apraava Energy in 1H2022 (40%).

## Fair value movements

- Favourable fair value movements of EnergyAustralia's forward energy contracts impacted by softening of forward electricity prices compared to unprecedented high price in the same period last year.

# Reconciliation of EBITDAF, ACOI and Operating Earnings by business units

HK\$M	Hong Kong energy and related activities	Mainland China	EnergyAustralia	Apraava Energy	Taiwan Region and Thailand	Other earnings & unallocated items	Group total
<b>2023 Interim</b>							
<b>Recurring EBITDAF</b>	<b>8,926</b>	<b>1,947</b>	<b>481</b>	<b>422</b>	<b>102</b>	<b>(498)</b>	<b>11,380</b>
Depreciation and amortisation	(2,920)	(267)	(1,147)	-	-	(24)	(4,358)
<b>ACOI</b>	<b>6,006</b>	<b>1,680</b>	<b>(666)</b>	<b>422</b>	<b>102</b>	<b>(522)</b>	<b>7,022</b>
Net finance (costs)/income <sup>(1)</sup>	(631)	(99)	(249)	4	-	2	(973)
Income tax (expense)/credit	(793)	(204)	325	(1)	(1)	(3)	(677)
Non-controlling interests	(412)	(5)	-	-	-	-	(417)
<b>Operating Earnings before fair value movements</b> (as per this presentation pack)	<b>4,170</b>	<b>1,372</b>	<b>(590)</b>	<b>425</b>	<b>101</b>	<b>(523)</b>	<b>4,955</b>
Fair value movements <sup>(2)</sup>	(14)	-	31	-	-	-	17
<b>Operating Earnings</b>	<b>4,156</b>	<b>1,372</b>	<b>(559)</b>	<b>425</b>	<b>101</b>	<b>(523)</b>	<b>4,972</b>
Reallocation of PSDC & HK Branch Line	(120)	120	-	-	-	-	-
<b>Operating Earnings</b> (as per Segment Information in Interim Report)	<b>4,036</b>	<b>1,492</b>	<b>(559)</b>	<b>425</b>	<b>101</b>	<b>(523)</b>	<b>4,972</b>
<b>2022 Interim</b>							
<b>Recurring EBITDAF</b>	<b>8,763</b>	<b>1,819</b>	<b>146</b>	<b>777</b>	<b>(125)</b>	<b>(536)</b>	<b>10,844</b>
Depreciation and amortisation	(2,947)	(267)	(1,195)	(283)	-	(27)	(4,719)
<b>ACOI</b>	<b>5,816</b>	<b>1,552</b>	<b>(1,049)</b>	<b>494</b>	<b>(125)</b>	<b>(563)</b>	<b>6,125</b>
Net finance costs <sup>(1)</sup>	(406)	(122)	(75)	(250)	-	(8)	(861)
Income tax (expense)/credit	(757)	(183)	398	(78)	(1)	(4)	(625)
Non-controlling interests	(410)	(7)	-	(68)	-	-	(485)
<b>Operating Earnings before fair value movements</b> (as per this presentation pack)	<b>4,243</b>	<b>1,240</b>	<b>(726)</b>	<b>98</b>	<b>(126)</b>	<b>(575)</b>	<b>4,154</b>
Fair value movements <sup>(2)</sup>	(43)	-	(7,957)	-	-	-	(8,000)
<b>Operating Earnings</b>	<b>4,200</b>	<b>1,240</b>	<b>(8,683)</b>	<b>98</b>	<b>(126)</b>	<b>(575)</b>	<b>(3,846)</b>
Reallocation of PSDC & HK Branch Line	(127)	127	-	-	-	-	-
Reallocation of Other earnings	(29)	-	-	-	-	29	-
<b>Operating Earnings</b> (as per Segment Information in Interim Report)	<b>4,044</b>	<b>1,367</b>	<b>(8,683)</b>	<b>98</b>	<b>(126)</b>	<b>(546)</b>	<b>(3,846)</b>

(1) Including net fair value loss/(gain) on debt related derivative financial instruments, and other net exchange loss/(gain) on financing activities and distribution to perpetual capital securities holder

(2) Including net fair value loss/(gain) on non-debt derivative financial instruments relating to transactions not qualified for hedge accounting and ineffectiveness and discontinuation of cash flow hedges

# Cash flow and financial structure

## Free Cash Flow

- Australia: Improved free cash flow mainly attributable to the cash deposits refunded (HK\$2.4 billion) from the future margin account of EnergyAustralia as compared to cash deposits made (HK\$6.3 billion) a year ago in line with softening of forward prices in 2023, offset by cash payment for settlement of out-of-the-money energy contracts as they roll-off.
- Hong Kong: Improvement in operating inflow from SoC operations (+HK\$2.8 billion) mainly due to recovery of fuel clause charges in 2023.

## Capital Investments

- HK\$4.9 billion SoC capex related to decarbonisation in generation fleet and continuous enhancement / development of the network infrastructure in Hong Kong.
- Decrease in growth capex mainly due to the deconsolidation of Apraava Energy (HK\$0.7 billion). Growth capex for 1H2023 represents our construction in renewable projects in Mainland China, as well as Tallawarra B in Australia.
- Maintenance capex mainly represented works at Yallourn and Mt Piper in Australia.

(1) Capital investments include fixed assets, right-of-use assets, investment property, intangible assets, investments in and advances to joint ventures and associates, and acquisitions of asset / business

(2) Capital expenditure on fixed assets and right-of-use assets are analysed into

- SoC capex - capital expenditure related to the SoC business
- Growth capex - capital expenditure for additional generation capacity
- Maintenance capex - capital expenditure other than the above

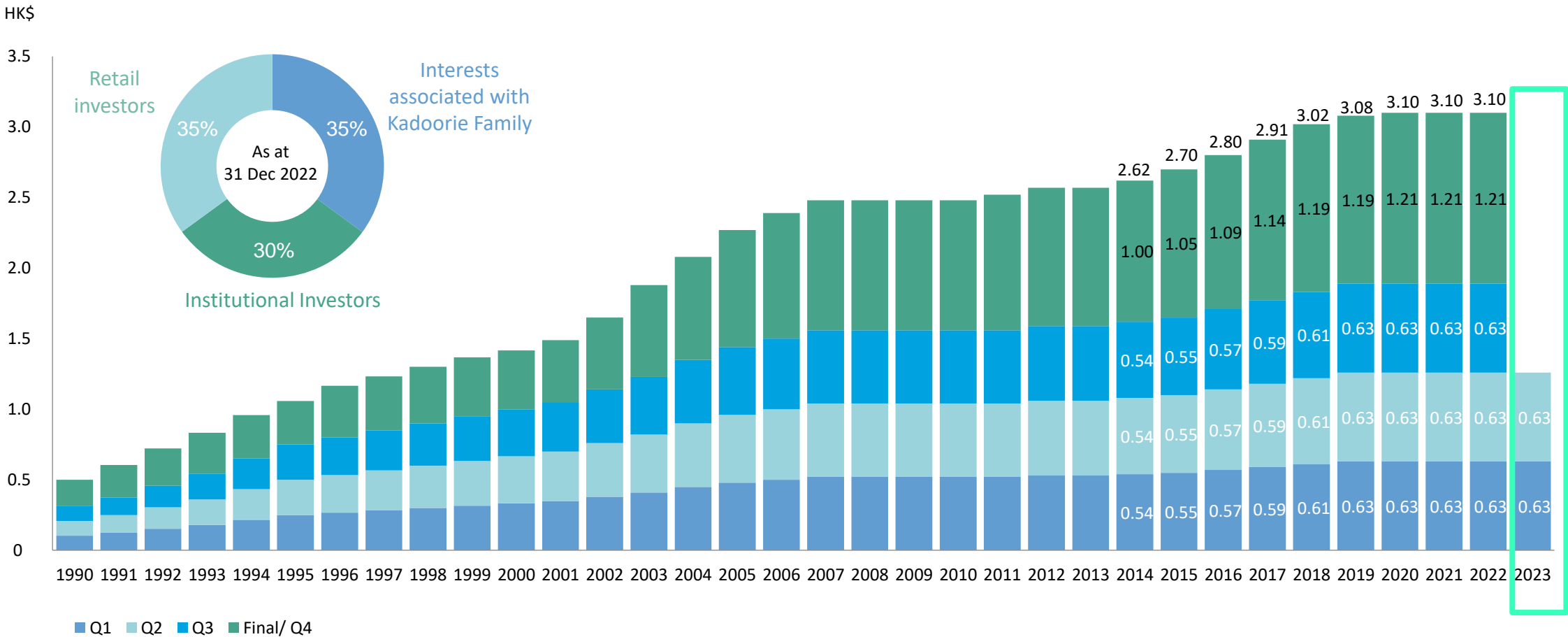
(3) Others include capital investments on intangible assets and investments in / advance to joint ventures

HK\$M	1H2023	1H2022	Change
<u>Cash Flow</u>			
<b>Consolidated EBITDAF</b>	<b>11,485</b>	<b>9,186</b>	2,299
Less: Items affecting comparability	(105)	1,658	(1,763)
<b>Recurring Consolidated EBITDAF</b>	<b>11,380</b>	<b>10,844</b>	536
Less: Share of results of joint ventures & associates	(1,931)	(1,168)	(763)
<b>Cash inflow/(outflow) from:</b>			
SoC items	859	(1,851)	2,710
Movement in future margin accounts	2,412	(6,333)	8,745
Other movement in working capital & others	(5,220)	(3,190)	(2,030)
<b>Funds from operations</b>	<b>7,500</b>	<b>(1,698)</b>	9,198
Less: Tax paid	(1,654)	(1,127)	(527)
Less: Net finance costs paid	(1,221)	(1,090)	(131)
Less: Maintenance capex	(529)	(720)	191
Add: Dividends from joint ventures & associates	1,072	1,252	(180)
<b>Free Cash Flow</b>	<b>5,168</b>	<b>(3,383)</b>	8,551
Proceeds from divestment	1,623	-	1,623
<u>Capital Investments</u> <sup>(1)</sup>			-
• SoC capex <sup>(2)</sup>	4,949	5,081	(132)
• Maintenance capex <sup>(2)</sup>	529	720	(191)
• Growth capex <sup>(2)</sup>	415	1,357	(942)
• Others <sup>(3)</sup>	253	170	83
• Acquisitions of asset / business	-	338	(338)
<b>Total (including Maintenance capex)</b>	<b>6,146</b>	<b>7,666</b>	(1,520)
<b>Total (excluding Maintenance capex)</b>	<b>5,617</b>	<b>6,946</b>	(1,329)
<u>Dividend paid</u>	<b>4,649</b>	<b>4,649</b>	-

# Dividends

A history of returning cash to shareholders

CLP Ordinary Dividend 1990 – 1H2023 and Shareholding by Category



For more information:





# Financial obligations at a glance

HK\$M	30 Jun 2023	31 Dec 2022
<b>HONG KONG</b>		
Total borrowings of CLPH, CLPP, CAPCO & PSDC	51,287	48,702
Minus: Bank balances and liquid funds	(1,286)	(1,915)
<b>Net debt – Hong Kong</b>	<b>50,001</b>	<b>46,787</b>
<b>OUTSIDE HONG KONG</b>		
Total borrowings of subsidiaries (non-recourse to CLPH)	9,941	10,515
Minus: Bank balance and liquid funds	(1,081)	(2,371)
<b>Net debt – Outside Hong Kong</b>	<b>8,860</b>	<b>8,144</b>
<b>CONSOLIDATED</b> total borrowings	61,228	59,217
Minus: Consolidated bank balance and liquid funds	(2,367)	(4,286)
<b>Consolidated Net Debt</b>	<b>58,861</b>	<b>54,931</b>
<b>Total Debt/Total Capital</b>	<b>34.5%</b>	<b>33.7%</b>
<b>Net Debt/Total Capital</b>	<b>33.6%</b>	<b>32.0%</b>

Increase in the Group's net debt to total capital was driven by higher net debt mainly to finance decarbonisation projects and business growth in Hong Kong.

# Credit ratings

	CLP Holdings		CLP Power		CAPCO		EnergyAustralia
	S&P	Moody's	S&P	Moody's	S&P	Moody's	Moody's
<b>Long-term Rating</b>							
Foreign Currency	A	A2	A+	A1	AA-	A1	Baa2
Outlook	Stable	Stable	Stable	Stable	Stable	Stable	Stable
Local Currency	A	A2	A+	A1	AA-	A1	Baa2
Outlook	Stable	Stable	Stable	Stable	Stable	Stable	Stable
<b>Short-term Rating</b>							
Foreign Currency	A-1	P-1	A-1	P-1	A-1+	P-1	-
Local Currency	A-1	P-1	A-1	P-1	A-1+	P-1	-

The credit ratings and rating outlooks had remained unchanged in the first half of 2023.

In May, S&P affirmed the A, A+ and AA- credit ratings of CLP Holdings, CLP Power and CAPCO respectively, with stable outlooks.

# Highlights of financing activities



For more information on  
CLP Climate Action  
Finance Framework

## CLP Holdings: Ample liquidity in the Group at 30 June 2023

- The Group maintained adequate liquidity with undrawn bank facilities of HK\$31.2 billion and bank balances of HK\$2.4 billion.
- CLP Holdings had HK\$15.5 billion of liquidity at the end of June, compared with HK\$13.5 billion six months earlier.

## Scheme of Control: Cost effective financing

- CLP Power arranged a total of HK\$3.4 billion debt facilities to meet its business requirements, comprising HK\$2.3 billion one-year bank loan facilities, and a HK\$1.1 billion of two-year emissions reduction-linked bank loan facility.
- CAPCO took early action in December 2022 to arrange HK\$2 billion of one-year and two-year emissions reduction-linked bank loan facilities for its funding requirements in 2023.
- CAPCO executed HK\$1.3 billion of one-year and two-year energy transition bank loan facilities in May and June, with features in line with CLP's Climate Action Finance Framework, to refinance some expiring commercial loans for the offshore LNG terminal project.
- CAPCO executed a two-year offshore RMB300 million (HK\$339 million) fixed rate private placement bond in April, and swapped the proceeds to floating rate Hong Kong dollar debt to partially refinance some commercial bank loans for the D1 gas-fired generation project at Black Point Power Station. This was the first offshore RMB bond issuance for a CLP Group business, enabling further diversification in financing, and was completed with preferential terms.

## Mainland China: Reduced interest rate and continued financing

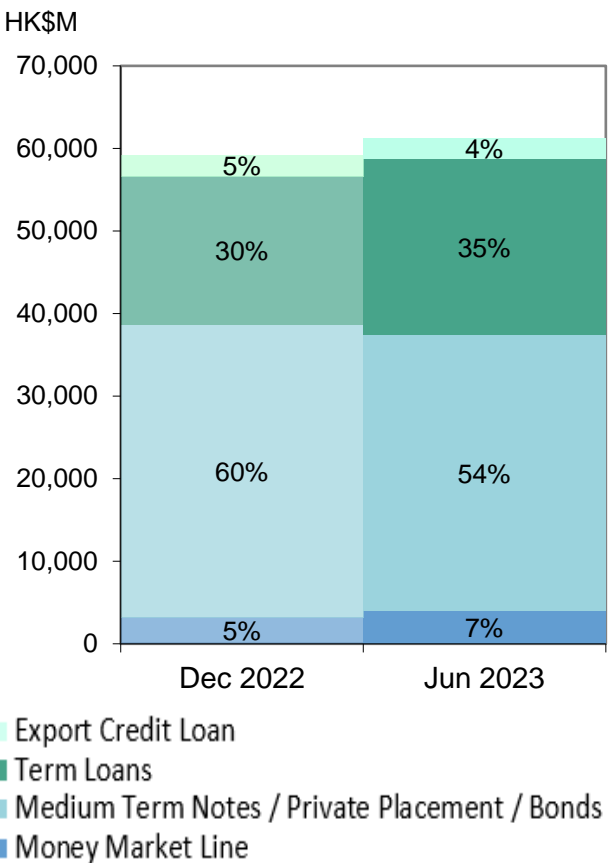
- Lowered the interest rates of non-recourse project loans for three renewable energy projects totalling RMB718 million (HK\$774 million).
- Executed a RMB293 million (HK\$316 million) onshore non-recourse project loan facility for a solar energy project at a competitive interest rate.

## EnergyAustralia: Adequate liquidity and timely refinancing

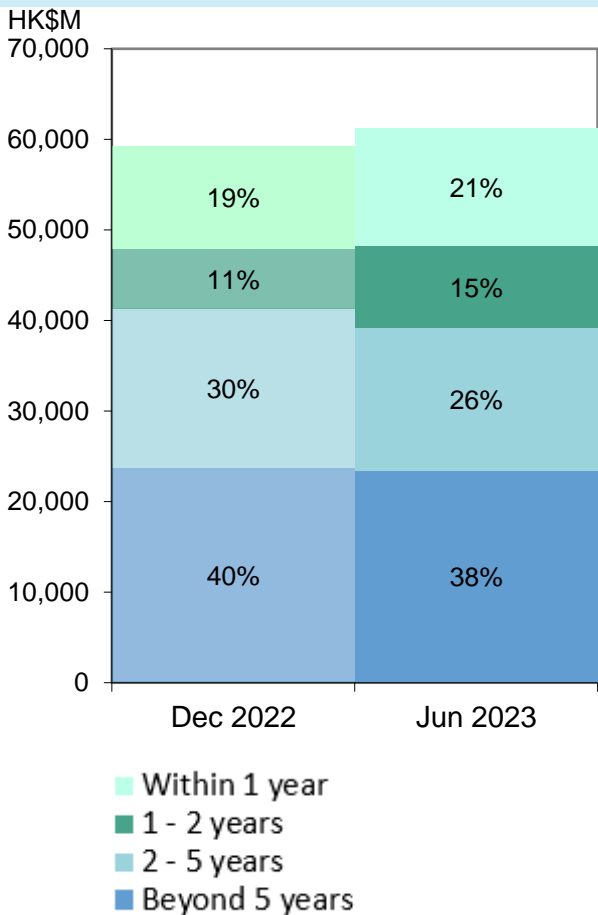
- Maintained an adequate liquidity position for its business operations with sufficient buffer for contingencies.
- Executed a A\$630 million (HK\$3.3 billion) three-year loan facility with nine banks on competitive terms to refinance an existing facility.

# Loan balances by type and maturity

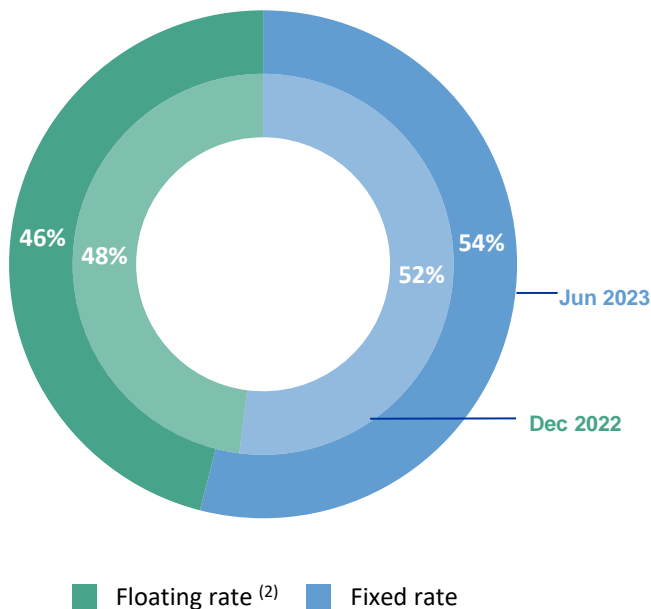
Loan Balance - Type



Loan Balance – Maturity <sup>(1)</sup>



Proportion of Debt on Fixed and Floating Rate



(1) The maturity of revolving loans is in accordance with the maturity dates of the respective facilities instead of the current loan drawdown tenors

(2) For floating rate borrowings, if assuming 1% increase in interest rate and based on outstanding debt balance as at 30 June 2023, the additional interest payment is around HK\$283 million per annum

(3) CLP continues to obtain debt (re)financing at very cost-effective interest rates. Some representative examples in the first half of 2023 are highlighted on the previous slide (“Highlights of financing activities”)

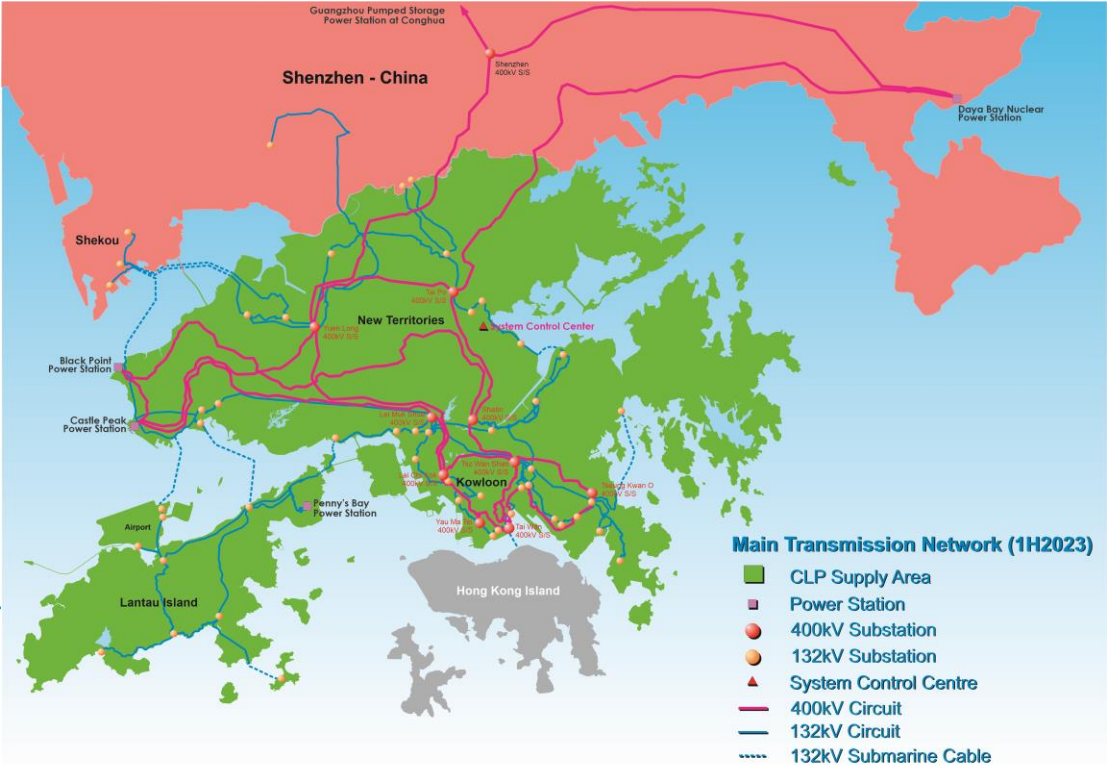
# Hong Kong – Growing business scale

Generation	Transmission	Distribution	Retail
10,445 MW generation portfolio	> 16,800 km of transmission and high voltage distribution lines	241 primary and > 15,400 secondary substations	16,319 GWh sold and 2.771 million customer accounts

**During 1H2023:**

- Local electricity sales increased 3.7% to 16,319GWh as compared with 1H2022.
- No. of customer accounts increased by 44k to 2,771k as compared with June 2022.
- Major infrastructure projects ongoing.
- From 1 June 2022 Castle Peak Unit A1 (350 MW) has been put in reserve with intention only to run in emergency situations.
- Construction of the offshore LNG Terminal completed and has gone into operation in mid-2023. Construction of a second CCGT unit at Black Point progressed with major construction milestones achieved. The new unit is scheduled for operation in 2024.
- Over 140 km of new transmission and high voltage distribution lines & 60 new substations added.

We generate, transmit and distribute electricity to over 80% of Hong Kong’s population supplying Kowloon, the New Territories and Lantau Island.



# Hong Kong – Electricity sales, earnings and capex

## Electricity sales

GWh	1H2023	1H2022	Change	Proportion
Residential	4,216	4,332	↓ 2.7%	26%
Commercial	6,481	6,081	↑ 6.6%	40%
Infrastructure & Public Services	4,858	4,563	↑ 6.5%	30%
Manufacturing	764	767	↓ 0.4%	4%
<b>Total Local Sales</b>	<b>16,319</b>	<b>15,743</b>	<b>↑ 3.7%</b>	<b>100%</b>

Note: Data centres represent 5.9% of load in 1H2023 (1H2022: 5.9%)

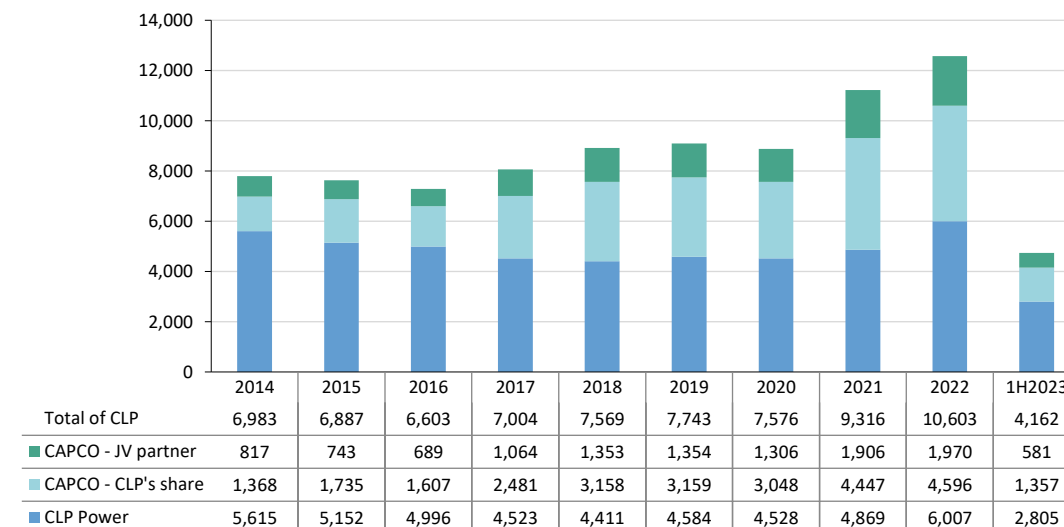
## Operating Earnings for Hong Kong

HK\$M	1H2023	1H2022	Change
Hong Kong energy business	4,089	4,123	↓ 0.8%
PSDC and Hong Kong Branch Line	120	127	↓ 5.5%
CLPe	(53)	(50)	↓ 6.0%
<b>Hong Kong energy &amp; related activities</b>	<b>4,156</b>	<b>4,200</b>	<b>↓ 1.0%</b>

## Capital expenditure (Accrual basis)

HK\$M	1H2023	1H2022	Change
CLP Power Hong Kong	2,805	2,116	↑ 32.6%
CAPCO *	1,938	2,766	↓ 29.9%
<b>Total Capex</b>	<b>4,743</b>	<b>4,882</b>	<b>↓ 2.8%</b>

\* Including CAPCO's 70% share of fixed asset additions in Hong Kong LNG Terminal Limited

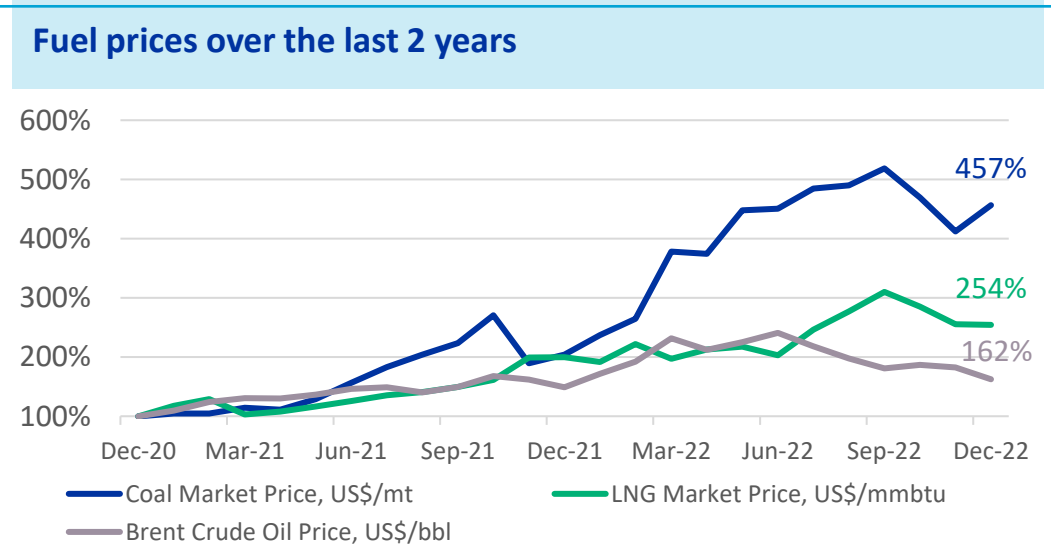
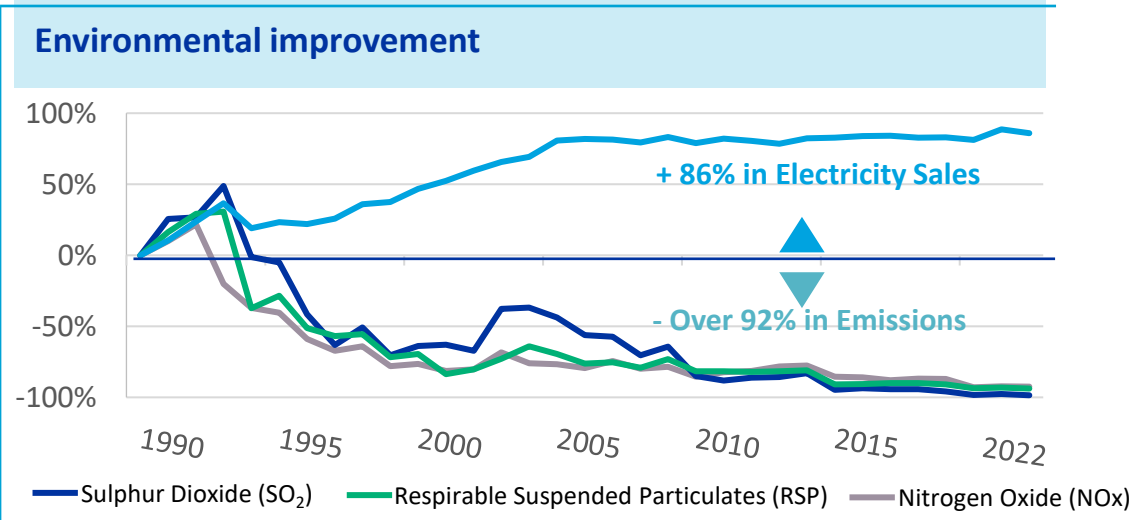
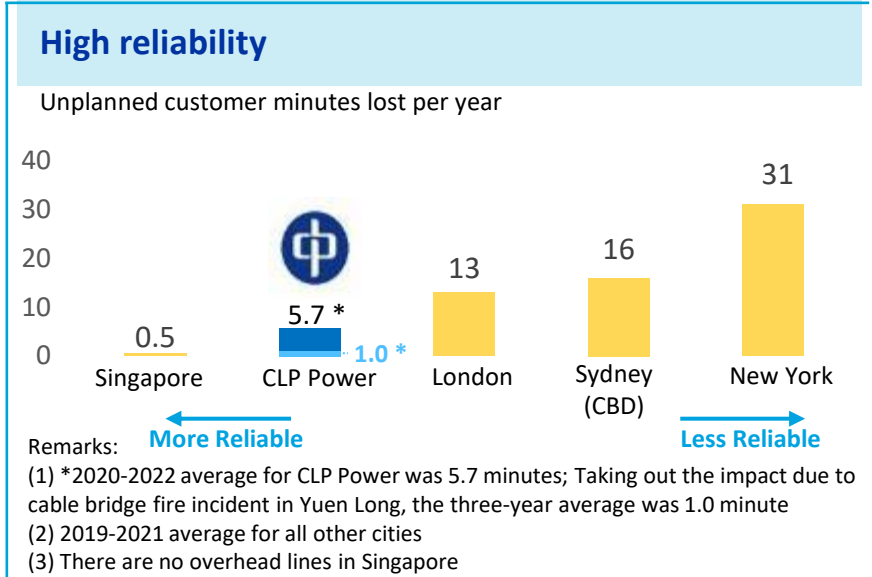
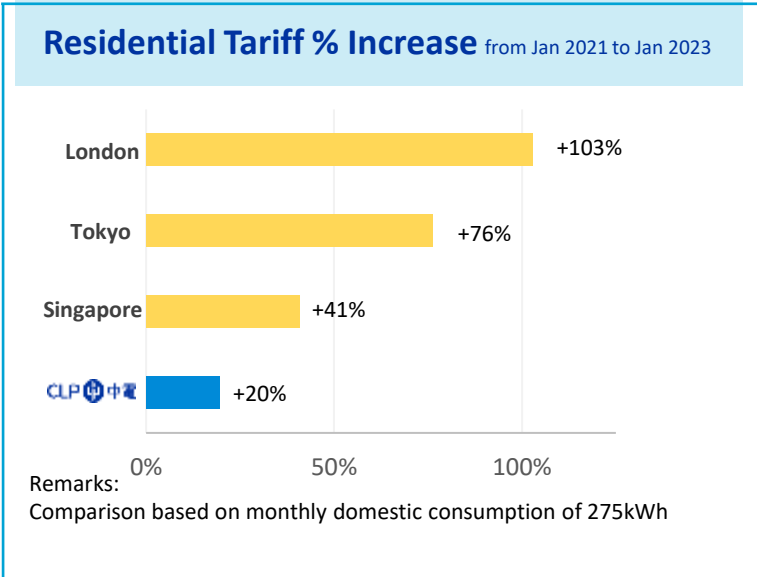
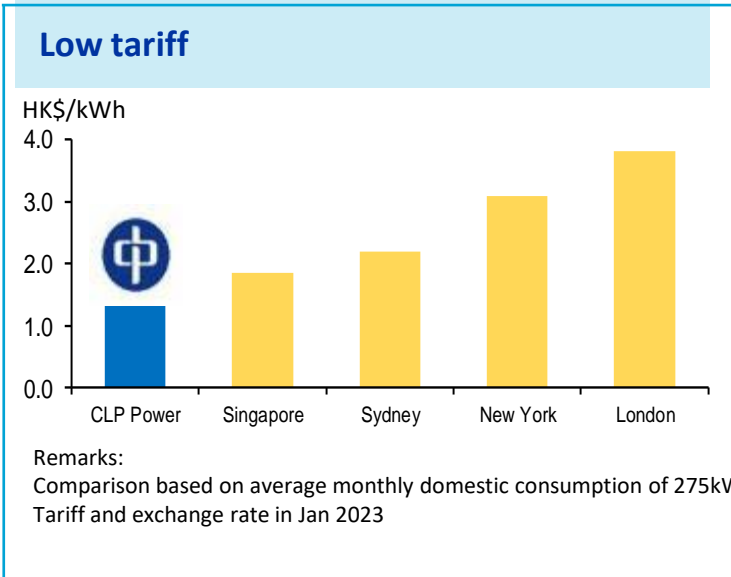


Total Capital Expenditure in line with Development Plan (DP)

Capex incurred in 2018 DP from Oct 2018 to Jun 2023: HK\$49.1bn

Capex approved under the 2018 DP from Oct 2018 to Dec 2023: HK\$56.1bn

# Hong Kong – Tariff, reliability, fuel prices and environmental improvement



# Mainland China – Financials (HK\$)

HK\$M	Operating/Total Earnings		ACOI	
	1H2023	1H2022	1H2023	1H2022
<b>Renewables</b>	<b>347</b>	<b>347</b>	<b>548</b>	<b>566</b>
- Wind	226	205	321	299
- Hydro	12	41	54	94
- Solar	109	101	173	173
<b>Nuclear</b>	<b>1,168</b>	<b>1,042</b>	<b>1,271</b>	<b>1,136</b>
- Daya Bay	520	466	547	491
- Yangjiang	648	576	724	645
<b>Thermal</b>	<b>23</b>	<b>12</b>	<b>25</b>	<b>11</b>
- Shandong	2	3	2	3
- Guohua	21	50	23	51
- Fangchenggang	-	(41)	-	(43)
<b>Operating &amp; development expenditure</b>	<b>(127)</b>	<b>(156)</b>	<b>(125)</b>	<b>(156)</b>
<b>CLPe</b>	<b>(39)</b>	<b>(5)</b>	<b>(39)</b>	<b>(5)</b>
<b>Operating earnings / ACOI</b>	<b>1,372</b>	<b>1,240</b>	<b>1,680</b>	<b>1,552</b>
<b>Total earnings</b>	<b>1,372</b>	<b>1,240</b>		



Mainland China



# Mainland China – Financials (RMB)

RMB M	Operating/Total Earnings		ACOI	
	1H2023	1H2022	1H2023	1H2022
<b>Renewables</b>	<b>308</b>	<b>289</b>	<b>487</b>	<b>471</b>
- Wind	201	171	285	249
- Hydro	10	34	48	78
- Solar	97	84	154	144
<b>Nuclear</b>	<b>1,039</b>	<b>866</b>	<b>1,131</b>	<b>945</b>
- Daya Bay	463	387	487	408
- Yangjiang	576	479	644	537
<b>Thermal</b>	<b>21</b>	<b>10</b>	<b>22</b>	<b>9</b>
- Shandong	2	2	2	2
- Guohua	19	42	20	43
- Fangchenggang	-	(34)	-	(36)
<b>Operating &amp; development expenditure</b>	<b>(113)</b>	<b>(130)</b>	<b>(111)</b>	<b>(130)</b>
<b>CLPe</b>	<b>(34)</b>	<b>(4)</b>	<b>(34)</b>	<b>(4)</b>
<b>Operating earnings / ACOI</b>	<b>1,221</b>	<b>1,031</b>	<b>1,495</b>	<b>1,291</b>
<b>Total earnings</b>	<b>1,221</b>	<b>1,031</b>		



Mainland China

# Mainland China – Earnings, performance and opportunities

## Earnings and performance

- Higher earnings from Nuclear was mainly due to higher generation of Daya Bay and Yangjiang.
- Solid performance for overall renewable portfolio, mainly benefited from the commissioning of Xundian II Wind and overall better performance in the Wind segment with higher wind availabilities, offsetting by less water resources.
- In line with CLP's commitment to phase out coal-based assets by 2040, divestment of our minority-owned coal-fired assets being explored.
- Total receivables relating to the unpaid renewables national subsidy from our subsidiaries increased to HK\$2,411 million (Dec 2022: HK\$2,111 million).

## Business development opportunities

- Solar: The ~80MW Yangzhou Gongdao solar project in Jiangsu, target to complete grid connection in 2H2023.
- Wind: The 150MW Bobai wind project in Guangxi Zhuang Autonomous Region, target to commence site works in 2H2023.
- Several grid-parity RE projects in various CLP China's focused areas (e.g. Jiangsu, Guangxi) are targeted for construction in the coming year.

# Mainland China – Market sales in 1H2023



Note: Daya Bay Nuclear not included in the calculation of market sales ratio

Province	Projects with Market Sales (Equity MW)
Yunnan	Xundian Wind (99.5MW) Xicun Solar (84MW) Dali Yang_er Hydro (50MW)
Inner Mongolia	Zhungeer Thermal (257MW)
Hebei	Sanhe Thermal (220MW)
Tianjin	Panshan Thermal (207MW)
Liaoning	Lingyuan Solar (17MW) Suizhong Thermal (564MW)
Gansu	Jinchang Solar (85MW)
Sichuan	Jiangbian Hydro (330MW)
Shandong	Penglai Wind (48MW) CLP Laizhou Wind (99MW) Laiwu Wind (149MW) Weihai Wind (31MW) Laizhou Wind (18MW) Guohua Wind (194MW) Heze Thermal (176MW) Liaocheng Thermal (353MW)
Jilin	Qian'an I II and III Wind (199MW) Changling II Wind (22MW) Datong Wind (24MW) Shuangliao Wind (48MW)
Guangdong	Yangjiang Nuclear (1,108MW)

Projects not participating in market sales this year - Sandu Wind, Huaiji Hydro, Nanao Wind, Meizhou Solar, Chongming Wind, Sihong Solar, Huai'an Solar

# EnergyAustralia – Financials

	HK\$M		Local Currency	
	1H2023	1H2022	1H2023	1H2022
	HK\$M	HK\$M	A\$M	A\$M
EBITDAF (before items affecting comparability)				
Customer (Retail) <sup>(1)</sup>	94	942	18	168
Energy (Wholesale) <sup>(1)</sup>	988	(144)	188	(26)
Enterprise (Corporate) <sup>(1)</sup>	(601)	(652)	(115)	(116)
<b>Total EBITDAF</b>	<b>481</b>	<b>146</b>	<b>91</b>	<b>26</b>
Depreciation & Amortisation	(1,147)	(1,195)	(217)	(214)
<b>ACOI</b>	<b>(666)</b>	<b>(1,049)</b>	<b>(126)</b>	<b>(188)</b>
Net finance costs	(249)	(75)	(47)	(13)
Income tax credit	325	398	61	71
<b>Operating earnings (before fair value movements)</b>	<b>(590)</b>	<b>(726)</b>	<b>(112)</b>	<b>(130)</b>
Fair value movements <sup>(2)</sup>	31	(7,957)	6	(1,422)
<b>Operating / Total earnings</b>	<b>(559)</b>	<b>(8,683)</b>	<b>(106)</b>	<b>(1,552)</b>

(1) 1H2022 segment results have been restated to reflect changes in business structure

(2) Fair value movements in 1H2022 were mainly driven by substantial increases in forward prices compared to 2021 which unfavourably impacted contracts to sell energy

The average foreign exchange rates used to convert EnergyAustralia earnings to Hong Kong dollars are 5.59637 for 1H2022 and 5.26331 for 1H2023. Note that in the operating earnings before fair value movements variance analysis presented in the body of the presentation 1H2022 earnings are adjusted for changes in foreign exchange before year-on-year variance in underlying performance is illustrated



EnergyAustralia

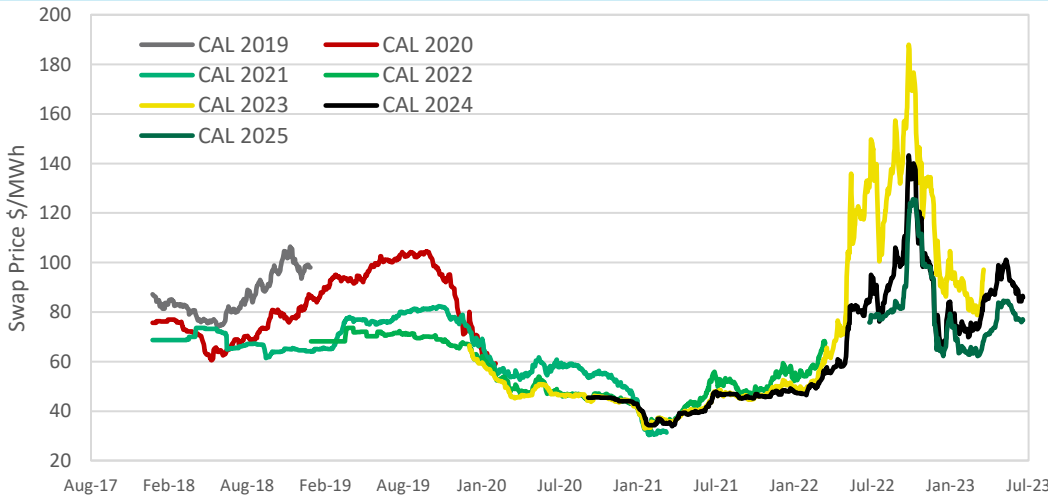
# EnergyAustralia – Wholesale market conditions

Year Ahead Swap Prices (1)

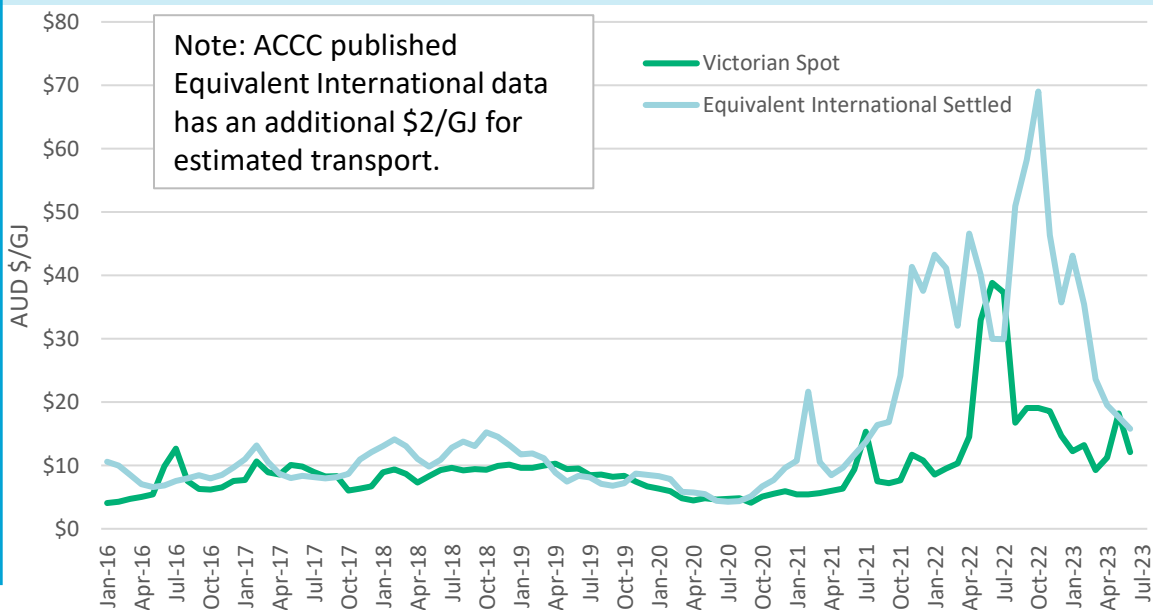


- Following the unprecedented increases in the cost of energy in 2022 (Ukraine war, extreme weather events, fleet availability and fuel supply), Australia has seen prices ease significantly in Q1 2023 (improved availability and stabilised market and global conditions), before slightly rebounding in Q2 2023 (closure of Liddell and increased winter demand).
- Focus remains on asset availability, reliability, efficiency and flexibility of existing fleet, alongside new flexible generation ahead of major coal retirements (progressing construction of Tallawarra B and development for Wooreen battery).

Victoria Swap Prices



International vs Victorian Gas Prices



# EnergyAustralia – Customer operations

## Customer Account Numbers

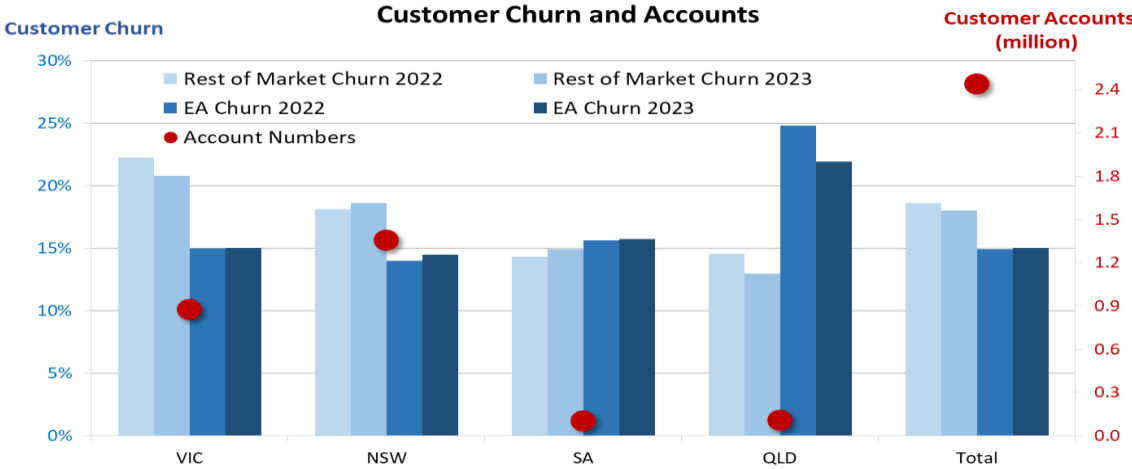
Customer Account Numbers (000s)	HY 2023			HY 2022		
	Electricity	Gas	Total	Electricity	Gas	Total
Mass Market	1,591.3	843.6	2,434.8	1,591.3	845.8	2,437.1
Commercial & Industrial	4.2	0.2	4.4	10.1	0.2	10.3
Total Account Numbers	1,595.4	843.8	2,439.2	1,601.4	846.0	2,447.5
Weighted Average Mass Market <sup>(1)</sup>	1,593.0	848.0	2,441.0	1,581.4	846.2	2,427.6

(1) Weighted Average Mass Market is the average accounts of our mass market customer base during the period

## Sales Volume & Revenue

Sales Volume & Revenue	HY 2023		HY 2022	
	Electricity (TWh)	Gas (PJ)	Electricity (TWh)	Gas (PJ)
Mass Market	4.5	13.1	4.5	13.4
Commercial & Industrial	2.8	1.2	3.7	2.1
Total Sales Volume	7.3	14.3	8.3	15.5
Sales Revenue (A\$m)	1,840.8	506.6	1,761.5	402.2

## Customer Churn and Accounts



- Residential mass market customer accounts has been reasonably stable and fallen 0.1ppts, with losses of 2,325.
- EA's churn rate increased 0.1ppts compared to HY 2022 but remains well below the rest of market churn rate of 18.0%, mainly driven by lower churn rate in VIC and NSW.
- EA's churn rate is now 2.96ppts lower than the rest of market, compared to 3.69ppts lower in HY 2022.

# EnergyAustralia – Customer operations

## Supporting customers experiencing hardship

- 40k customers utilising EnergyAssist programme



## 20 Ombudsman complaints/10k accounts

- 69% reduction since 2015
- 29% increase since 1H2022

## Go Neutral, largest certified carbon neutral programme for electricity customers

- 393k Go Neutral electricity customers, 10% increase on 1H2022
- 175k Go Neutral gas customers, which is 29% increase on 1H2022



## 67% of bills issued in 1H2023 were E-bills

- Compared with 5% in 2015
- Improving 3pts since 1H2022



## 24pts improvement in customer satisfaction since 2015



## Behind the meter supply

- 227MW Demand Response capacity with Commercial & Industrial customers
- Scaling home energy transition offering





# Apraava Energy – Financials

	HK\$M		Local Currency	
	1H2023	1H2022	1H2023	1H2022
	HK\$M	HK\$M	Rs M	Rs M
Renewables	54	270	566	2,638
Thermal (Jhajjar)	332	159	3,478	1,553
Thermal (Paguthan & Corporate)	(12)	(41)	(126)	(401)
Transmission	21	110	220	1,075
Others <sup>(1)</sup>	27	(4)	283	(39)
<b>ACOI</b>	<b>422</b>	<b>494</b>	<b>4,421</b>	<b>4,826</b>
Renewables	54	73	566	713
Thermal (Jhajjar)	332	28	3,478	274
Thermal (Paguthan & Corporate)	(12)	(18)	(126)	(176)
Transmission	21	19	220	186
Others <sup>(1)</sup>	30	(4)	314	(39)
<b>Operating earnings</b>	<b>425</b>	<b>98</b>	<b>4,452</b>	<b>958</b>
Loss on sell down of Apraava Energy	-	(986)	-	(9,634)
<b>Total earnings</b>	<b>425</b>	<b>(888)</b>	<b>4,452</b>	<b>(8,676)</b>

(1) Others include group level adjustments and group operating expenses in Hong Kong

The average foreign exchange rates used to convert Apraava Energy's earnings to Hong Kong dollars are 0.102345 for 1H2022 and 0.095470 for 1H2023. Note that in the operating earnings variance analysis presented in the body of the presentation 1H2022 earnings are adjusted for changes in foreign exchange and scope before year-on-year variance in underlying performance is illustrated





# Apraava Energy – Performance and projects

## Performance

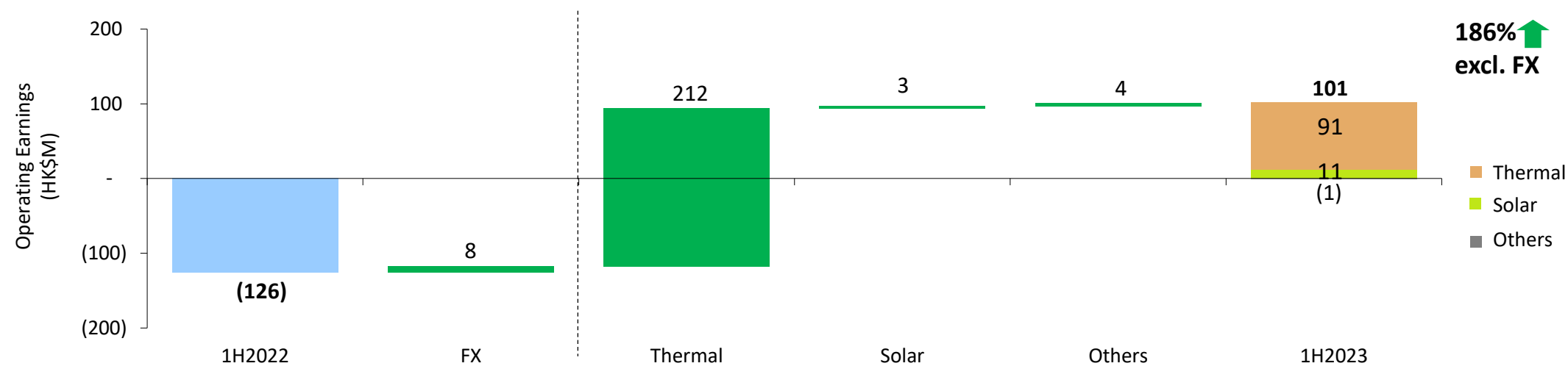
- Continued strong performance of solar and transmission portfolios partially offset by lower wind generation.
- Solid operations at Jhajjar to meet growing power demand in India (Best NSHR 2,329 kCal/kWh of 1H2023 since inception; Best Auxiliary Power Consumption (i.e. 6.15%) in 1H2023 after FGD commissioning; Successful completion of Annual Overhauling of U#1 within stipulated time); JPL has been awarded the Merit Winner of the British Safety Council, International Safety Award 2023. It was also recognised as the joint winner for TERI-IWA-UNDP Water Sustainability Awards 2022-23 under the category of "Excellence in Water Use Efficiency - Industrial Sector".
- In the process of evaluating deployment of new green technologies at the Paguthan Combined Cycle Power Plant in Gujarat state which ceased operations in 2018.

## Expanding our renewable generation portfolio

- Continued progress on construction of the new 251MW Sidhpur wind project in Gujarat, expected to be fully commissioned by end of 2023.
- In order to acquire a 250MW solar asset in Rajasthan, Apraava Energy has sought approval under Press Note 3 Regulations, a government directive which requires for investment by an entity, which shares land border with India to seek prior approval before acquisitions of shares of another Indian company.
- Won two interstate greenfield transmission projects in Rajasthan, enabling the development and operations of about 250km of new 400kV overhead transmission lines and a 2,500 megavolt ampere (MVA) pooling substation. The projects are being developed for the evacuation of 20GW power from Renewable Energy Zones (REZs) in Rajasthan.
- In June 2023 Apraava Energy won 300MW wind project under SECI XIV bid.

# Taiwan Region and Thailand – Operating Earnings

Coal margin at Ho-Ping improved by revised tariff adjustment mechanism effective from 1 July 2022



## Performance

- **Higher Operating Earnings:** Increased contributions from Ho-Ping & Lopburi.
- **Renewables:** Higher tariff for Lopburi.
- **Thermal:** Solid operational performance from Ho-Ping. Coal margin was improved in 2023 following the amendment to the energy tariff reimbursement mechanism from 1 July 2022.

## Outlook

- **Thermal:** Focus on managing fuel costs and supply. Continue to manage operations to deliver reliable return.

# Taiwan Region and Thailand – Financials

	HK\$M		Local Currency	
	1H2023	1H2022	1H2023	1H2022
	HK\$M	HK\$M	M	M
Thermal	91	(129)	NT\$356	(NT\$474)
Renewables	12	9	THB48	THB39
Others	(1)	(5)		
<b>ACOI</b>	<b>102</b>	<b>(125)</b>		
Thermal	91	(129)	NT\$356	(NT\$474)
Renewables	11	8	THB48	THB35
Others	(1)	(5)		
<b>Operating earnings / Total earnings</b>	<b>101</b>	<b>(126)</b>		

The average foreign exchange rates used to convert Taiwan Region and Thailand Segment earnings to Hong Kong dollars are 0.2722 and 0.2314 for 1H2022 and 0.2563 and 0.2282 for 1H2023 for New Taiwan Dollars and Thai Baht respectively. Note that in the variance analysis presented in the previous slide 1H2022 earnings are adjusted for changes in foreign exchange before year-on-year variance in underlying performance is illustrated



# CLP Group – Generation and energy storage portfolio<sup>(i)</sup> – 30 Jun 2023

17,979 Equity MW and 5,098 MW Long Term Purchase (total 23,077 MW)



ENERGYAUSTRALIA	total	5,789MW*
<b>Operational</b>		
Yallourn	1,480 / 1,480	(c)
Mount Piper	1,430 / 1,430	(c)
Hallett	235 / 235	(g)
Newport	500 / 500	(g)
Jeeralang	440 / 440	(g)
Tallawarra	420 / 420	(g)
Wind Projects	691 / 615*	(w)
Solar Projects #	362 / 294*	(s)
Battery Projects <sup>(iii)</sup>	55 / 55*	(bs)
<b>Construction Project</b>		
Tallawarra – B	320 / 320	(g)
APRAAVA ENERGY	total	1,699 MW
<b>Operational</b>		
Jhajjar	1,320 / 660	(c)
Paguthan	655 / 328	(g)
Wind Projects	923 / 461	(w)
Solar Projects #	250 / 125	(s)
<b>Construction Projects</b>		
Wind Project	251 / 125	(w)
TAIWAN REGION	total	264 MW
<b>Operational</b>		
Ho-Ping	1,320 / 264	(c)
THAILAND	total	21 MW
<b>Operational</b>		
Lopburi Solar #	63 / 21	(s)

HONG KONG	total	8,268MW*
<b>Operational</b>		
Castle Peak A&B	4,108 / 4,108*	(c)
Black Point – C & D1	3,250 / 3,250*	(g)
Penny's Bay	300 / 300*	(d)
Energy-from-Waste	10 / 10*	(ws)
<b>Construction Project</b>		
Black Point – D2	600 / 600*	(g)
MAINLAND CHINA	total	7,036 MW*
<b>Operational <sup>(iii)</sup></b>		
Daya Bay	1,968 / 1,577*	(n)
Yangjiang	6,516 / 1,108	(n)
Pumped Storage	1,200 / 600*	(p)
SZPC	1,800 / 529	(c)
Guohua	7,470 / 1,248	(c)
Hydro Projects	509 / 489	(h)
Wind Projects <sup>(iii)</sup>	1,501 / 1,059	(w)
Solar Projects #	328 / 328	(s)
Battery Project <sup>(iv)</sup>	5 / 5	(bs)
<b>Construction Projects</b>		
Solar Project #	80 / 80	
Battery Project <sup>(iv)</sup>	13 / 13	

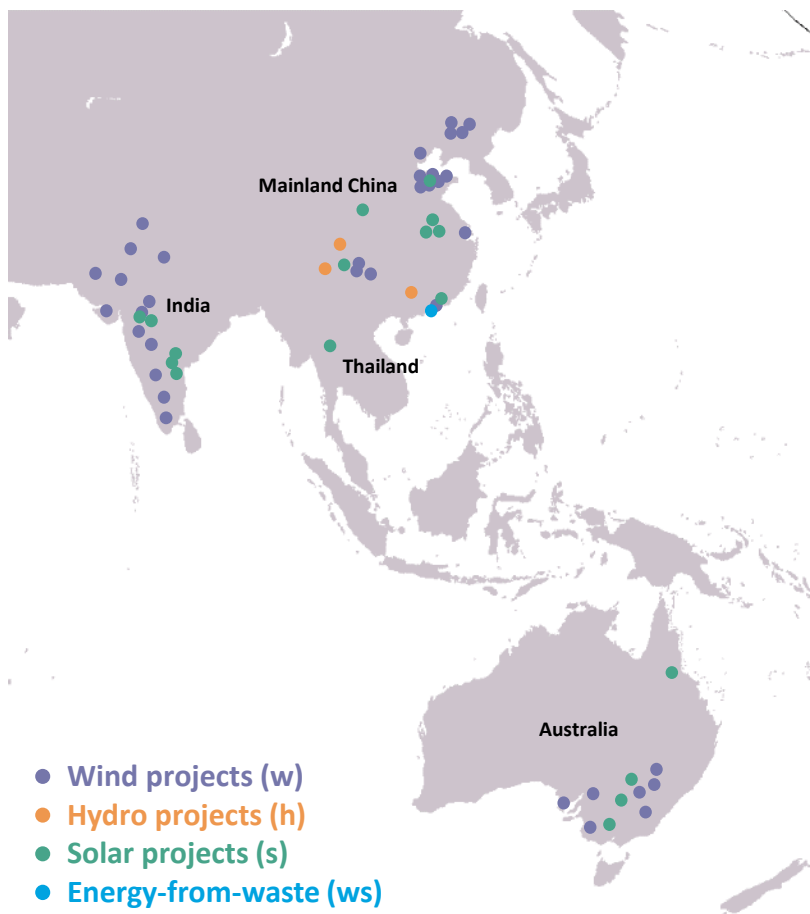
• Station Name Gross MW / CLP Equity MW \* including long-term capacity and energy purchase # Solar projects in AC output

(i) On an equity plus long-term capacity and energy purchase basis  
(ii) Including Gannawarra (25MW/50MWh) and Ballarat (30MW/30MWh)

(iii) Xundian II achieved commercial operation in Mar 2023.  
(iv) In operation: Qian'an III (5MW/5MWh); under construction: Xundian II (5MW/5MWh) and Gongdao (8MW/16MWh)

# CLP Group – Renewable generation portfolio<sup>(i)</sup> – 30 Jun 2023

2,727 Equity MW and 881 MW Long Term Purchase (total 3,608MW) - 15.6% of CLP total generation portfolio



MAINLAND CHINA	1,957 MW
Operational	
Wind	1,059 MW
Hydro	489 MW
Solar	328 MW
Weihai I & II	69 / 31
Nanao II & III	60 / 15
Shuangliao I & II	99 / 48
Datong	50 / 24
Laizhou I	38 / 17
Changling II	50 / 22
Guohua Wind	395 / 194
Qian'an I, II & III	199 / 199
Penglai I	48 / 48
Chongming I	48 / 14
Laiwu I, II & III	149 / 149
Xundian I & II	100 / 100
Sandu I	99 / 99
CLP Laizhou I & II	99 / 99
Jiangbian Hydro	330 / 330
Huaiji Hydro	129 / 110
Dali Yang_er Hydro	50 / 50
Jinchang Solar #	85 / 85
Xicun I & II Solar #	84 / 84
Sihong Solar #	93 / 93
Huai'an Solar #	13 / 13
Lingyuan Solar #	17 / 17
Meizhou Solar #	36 / 36
Under Construction	
Solar	80 MW
Gongdao Solar #	80 / 80

ENERGYAUSTRALIA	909 MW*
Operational	
Wind	615 MW
Solar	294 MW
Waterloo	111 / 111*
Cathedral Rocks	62 / 31
Boco Rock	113 / 113*
Taralga	107 / 107*
Mortons Lane	20 / 20*
Gullen Range I	166 / 166*
Bodangora	113 / 68*
Gannawarra Solar #	50 / 50*
Ross River Solar #	116 / 93*
Manildra Solar #	46 / 46*
Coleambally Solar #	150 / 105*

THAILAND	total	21 MW
Operational		
Lopburi Solar #	63	21

HONG KONG	total	10 MW
Operational		
West New Territories Landfill	10	10*

APRAAVA ENERGY	712 MW
Operational	
Wind	461 MW
Solar	125 MW
Khandke	50 / 25
Samana I & II	101 / 50
Saundatti	72 / 36
Theni I & II	97/ 49
Harapanahalli	40 / 20
Andhra Lake	106 / 53
Sipla	50 / 25
Bhakrani	102 / 51
Mahidad	50 / 25
Jath	60 / 30
Tejuva	101 / 50
Chandgarh	92 / 46
Veltoor Solar #	100 / 50
Gale Solar #	50 / 25
Tornado Solar #	20 / 10
CREPL Solar #	30 / 15
DSPL Solar #	50 / 25
Under Construction	
Wind	125 MW
Sidhpur	251 / 125

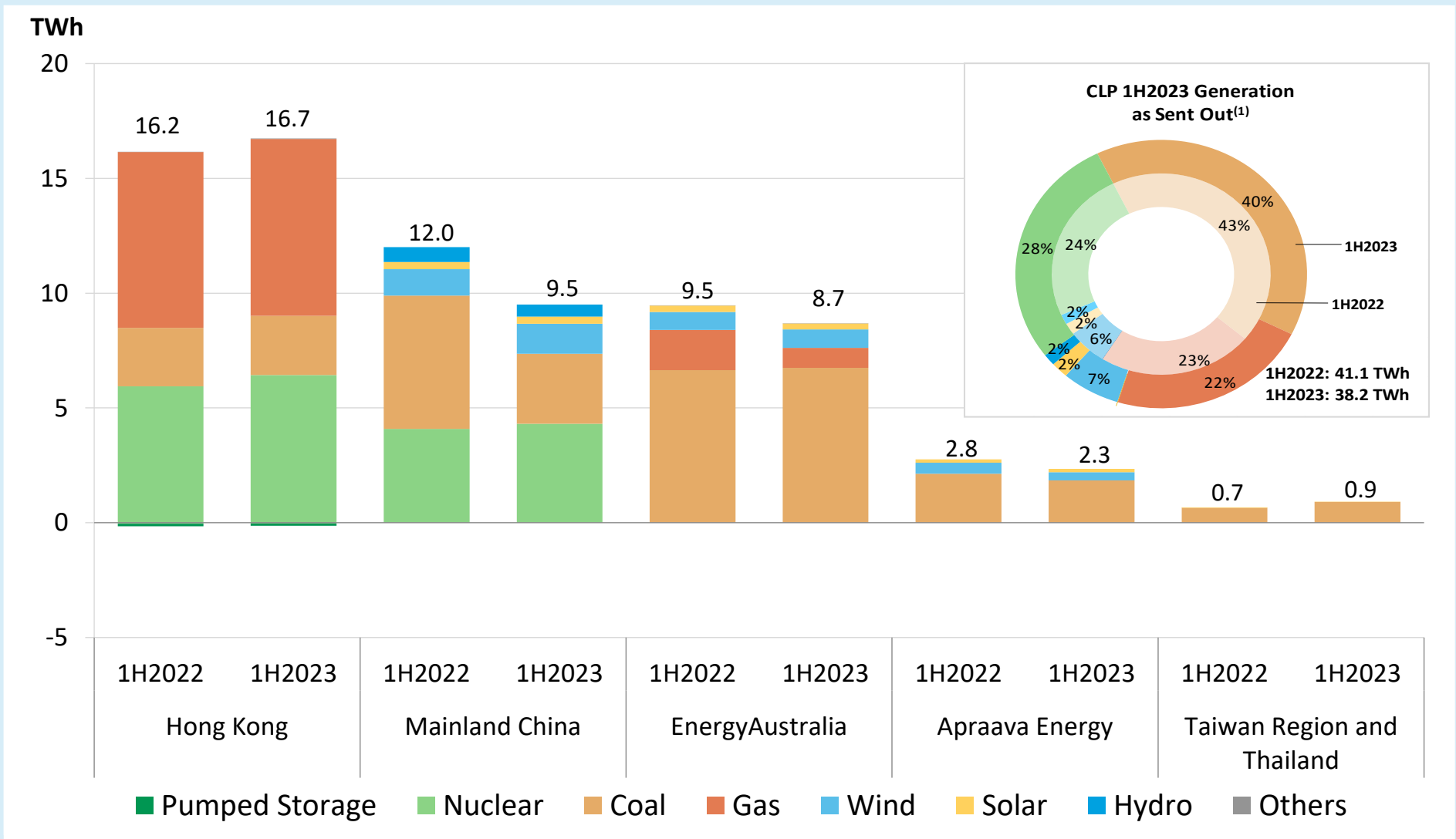
• Station Name      Gross MW / CLP Equity MW  
 \* including long-term capacity and energy purchase  
 # Solar projects in AC output

# CLP Group – Generation and energy storage capacity<sup>(i)</sup> by fuel mix

23,077 MW Attributable to CLP Group

Capacity by Energy Type	Total MW (a) + (b)	%	Operational MW (a)	%	Under construction MW (b)	%
Coal	9,719	42%	9,719	42%	-	-
Gas	6,093	26%	5,173	22%	920	4%
Nuclear	2,685	12%	2,685	12%	-	-
Wind	2,260	10%	2,135	9%	125	<1%
Hydro	489	2%	489	2%	-	-
Solar	848	4%	768	3%	80	<1%
Others	983	4%	970	4%	13	<1%
<b>Total</b>	<b>23,077</b>	<b>100%</b>	<b>21,938</b>	<b>95%</b>	<b>1,138</b>	<b>5%</b>

# CLP Group – Energy sent out – 1H2023





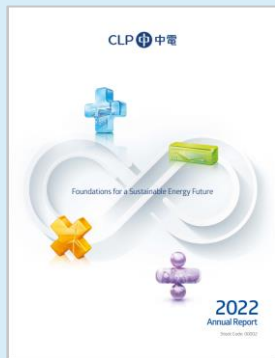
# Additional Resources

Scan or click on the QR codes to go to appropriate pages

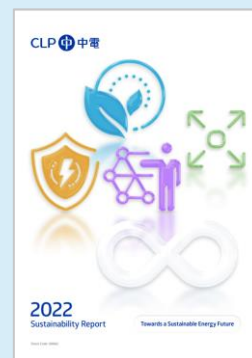
## Interim Report 2023\*



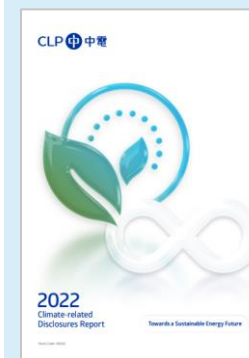
## Annual Report 2022



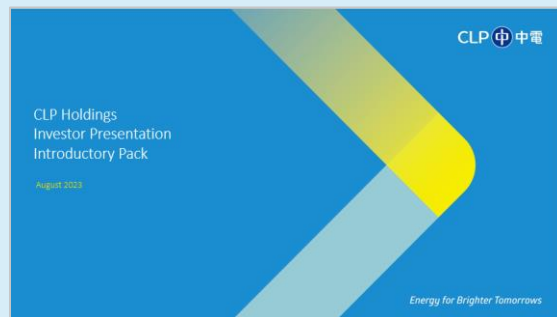
## Sustainability Report 2022



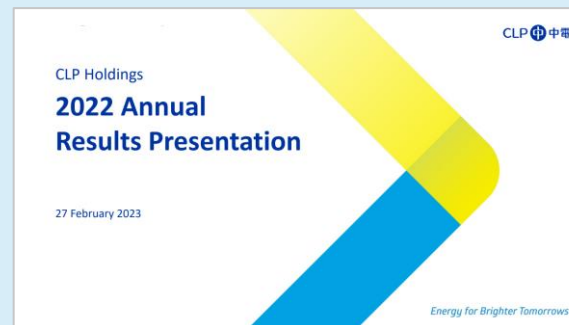
## Climate-related Disclosures Report 2022



## Introductory Pack August 2023



## Annual Results Presentation Annual 2022



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