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**CGN NEW ENERGY HOLDINGS CO., LTD.**

**中國廣核新能源控股有限公司**

*(incorporated in Bermuda with limited liability)*

**(Stock code: 1811)**

**Interim Results Announcement  
for the Six Months Ended 30 June 2022**

**HIGHLIGHTS OF THE UNAUDITED CONSOLIDATED INTERIM  
RESULTS FOR THE SIX MONTHS ENDED 30 JUNE 2022**

- Revenue for the six months ended 30 June 2022 amounted to US\$1,133.7 million, representing an increase of 35.5% from US\$837.0 million for the six months ended 30 June 2021.
- Profit before taxation for the six months ended 30 June 2022 amounted to US\$226.6 million, representing an increase of 3.2% from US\$219.6 million for the six months ended 30 June 2021.
- Profit attributable to equity shareholders of the Company for the six months ended 30 June 2022 amounted to US\$177.9 million, representing a decrease of 4.1% from US\$185.4 million for the six months ended 30 June 2021.
- As a result of retrospective restatements due to amendments to IAS 16, the revenue of the Group, the profit of the Group and the profit attributable to equity shareholders of the Company for the six months ended 30 June 2021 increased by US\$40.4 million, US\$23.1 million and US\$23.1 million, respectively, from the comparative figures previously reported for the six months ended 30 June 2021.
- If the effect of such retrospective restatements is not taken into account, the revenue of the Group for the six months ended 30 June 2022 would have increased by 42.3% and the profit of the Group, the profit attributable to equity shareholders of the Company and earnings per share for the six months ended 30 June 2022 would have increased by 10.8%, 9.6% and 9.6%, respectively, from the comparative figures previously reported for the six months ended 30 June 2021.
- The change in profit for the six months ended 30 June 2022 was mainly attributable to the combined impact of (1) contribution from increase in power generation from wind projects; (2) increase in coal price resulting in the share of losses of associates; and (3) contribution of profit from Korea projects.
- Earnings per share for the six months ended 30 June 2022 amounted to 4.15 US cents, representing a decrease of 4.1% from 4.32 US cents for the six months ended 30 June 2021.
- The Board resolved not to declare an interim dividend for the six months ended 30 June 2022.

The Board announces the unaudited consolidated interim results of the Group for the six months ended 30 June 2022 together with comparative figures for the corresponding period in 2021.

## **CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME**

*For the six months ended 30 June 2022 – unaudited*

	<b>Six months ended 30 June</b>	
	<b>2022</b>	<b>2021</b>
	<b>US\$'000</b>	<b>US\$'000</b>
		<b>(Restated)</b>
		<b>(Note)</b>
Revenue	<b>1,133,718</b>	836,986
Operating expenses:		
Coal, oil, gas and wood pellet	<b>538,179</b>	350,293
Depreciation of property, plant and equipment	<b>170,575</b>	121,370
Repair and maintenance	<b>15,526</b>	13,919
Staff costs	<b>54,324</b>	47,193
Others	<b>25,529</b>	27,475
Total operating expenses	<b>804,133</b>	560,250
Operating profit	<b>329,585</b>	276,736
Other income	<b>27,675</b>	14,737
Other gains and losses	<b>(2,542)</b>	4,216
Finance costs	<b>(120,274)</b>	(85,649)
Share of results of associates	<b>(7,813)</b>	9,551
Profit before taxation	<b>226,631</b>	219,591
Income tax	<b>(33,259)</b>	(21,961)
Profit for the period	<b>193,372</b>	197,630

	<b>Six months ended 30 June</b>	
	<b>2022</b>	<b>2021</b>
	<b>US\$'000</b>	<b>US\$'000</b>
		<b>(Restated)</b>
		<b>(Note)</b>
Other comprehensive income		
Items that are/may be reclassified subsequently to profit or loss:		
Exchange difference arising on translation of foreign operations	<b>(143,297)</b>	(12,222)
Effective portion of changes in fair value of hedging instruments recognized during the period	<b>3,281</b>	12,082
Deferred tax charged arising from fair value change in hedging instruments	<b>(794)</b>	(2,923)
Reclassification adjustments for amounts transferred to profit or loss		
– release of hedging reserve	<b>(57)</b>	(63)
– deferred tax credit arising on release of hedging reserve	<b>14</b>	15
Other comprehensive income for the period	<b>(140,853)</b>	(3,111)
Total comprehensive income for the period	<b>52,519</b>	194,519
Profit for the period attributable to:		
Equity shareholders of the Company	<b>177,911</b>	185,436
Non-controlling interests	<b>15,461</b>	12,194
	<b>193,372</b>	197,630
Total comprehensive income for the period attributable to:		
Equity shareholders of the Company	<b>43,902</b>	182,501
Non-controlling interests	<b>8,617</b>	12,018
	<b>52,519</b>	194,519
Earnings per Share		
– Basic ( <i>US cents</i> )	<b>4.15</b>	4.32
– Diluted ( <i>US cents</i> )	<b>4.15</b>	4.32

*Note:* The Group has initially applied the amendments to IAS 16 at 1 January 2022. Under the amendments, the comparative information is restated. See Note 2.

# CONSOLIDATED STATEMENT OF FINANCIAL POSITION

As at 30 June 2022 – unaudited

	30 June 2022 US\$'000	31 December 2021 US\$'000 (Restated) (Note)
<b>NON-CURRENT ASSETS</b>		
Property, plant and equipment	5,965,163	6,255,323
Right-of-use assets	97,371	100,315
Goodwill	160,514	168,798
Interests in associates	134,495	149,238
Derivative financial instruments	6,685	8,645
Deferred tax assets	21,485	23,322
Financial assets designated at fair value through other comprehensive income	3,543	5,238
Other non-current assets	275,291	363,664
	<u>6,664,547</u>	<u>7,074,543</u>
<b>CURRENT ASSETS</b>		
Inventories	57,986	54,209
Trade receivables	785,392	744,471
Contract assets	272,630	186,735
Other receivables and prepayments	122,276	123,141
Amounts due from fellow subsidiaries	42,157	6,321
Tax recoverable	698	214
Derivative financial instruments	12,737	8,454
Pledged bank deposits	129,005	157,730
Short-term bank deposits	14,911	3,137
Cash and cash equivalents	419,999	374,999
	<u>1,857,791</u>	<u>1,659,411</u>

	<b>30 June 2022 US\$'000</b>	31 December 2021 US\$'000 (Restated) (Note)
<b>CURRENT LIABILITIES</b>		
Trade payables	<b>99,685</b>	129,505
Contract liabilities	<b>3,504</b>	4,719
Other payables and accruals	<b>561,225</b>	614,581
Amounts due to fellow subsidiaries	<b>143,535</b>	108,806
Amounts due to non-controlling shareholders		
– due within one year	<b>1,391</b>	2,153
Loans from fellow subsidiaries		
– due within one year	<b>870,039</b>	1,162,467
Bank borrowings – due within one year	<b>1,077,744</b>	763,503
Lease liabilities – due within one year	<b>4,126</b>	6,899
Government grants	<b>201</b>	212
Tax payable	<b>12,601</b>	12,299
	<b>2,774,051</b>	2,805,144
<b>NET CURRENT LIABILITIES</b>	<b>(916,260)</b>	(1,145,733)
<b>TOTAL ASSETS LESS CURRENT LIABILITIES</b>	<b>5,748,287</b>	5,928,810
<b>NON-CURRENT LIABILITIES</b>		
Other payables and accruals – due after one year	<b>3,646</b>	3,835
Amount due to a non-controlling shareholder		
– due after one year	<b>1,125</b>	1,183
Loans from fellow subsidiaries – due after one year	<b>878,471</b>	856,821
Bank borrowings – due after one year	<b>3,237,036</b>	3,482,388
Lease liabilities – due after one year	<b>31,890</b>	28,648
Government grants	<b>8,595</b>	9,345
Net defined benefit retirement scheme obligations	<b>1,811</b>	1,683
Deferred tax liabilities	<b>55,371</b>	49,696
	<b>4,217,945</b>	4,433,599
<b>NET ASSETS</b>	<b>1,530,342</b>	1,495,211

	<b>30 June 2022 US\$'000</b>	31 December 2021 US\$'000 (Restated) (Note)
<b>CAPITAL AND RESERVES</b>		
Share capital	55	55
Reserves	<u>1,381,650</u>	<u>1,373,635</u>
Total equity attributable to equity shareholders of the Company	<b>1,381,705</b>	1,373,690
Non-controlling interests	<u>148,637</u>	<u>121,521</u>
<b>TOTAL EQUITY</b>	<b><u>1,530,342</u></b>	<b><u>1,495,211</u></b>

*Note:* The Group has initially applied the amendments to IAS 16 at 1 January 2022. Under the amendments, the comparative information is restated. See Note 2.

### **Revenue and Segment Information**

The Group has three reportable segments as follows:

- (1) Power plants in the PRC – Generation and supply of electricity;
- (2) Power plants in Korea – Generation and supply of electricity; and
- (3) Management companies – Provision of management services to power plants operated by CGN and its subsidiaries.

The following is an analysis of the Group's revenue and results by reportable segment:

**Six months ended 30 June 2022**

	Power plants in the PRC <i>US\$'000</i>	Power plants in Korea <i>US\$'000</i>	Management companies <i>US\$'000</i>	Total <i>US\$'000</i>
Segment revenue – external	<u>532,434</u>	<u>591,380</u>	<u>9,904</u>	<u>1,133,718</u>
Segment results	<u>210,515</u>	<u>37,843</u>	<u>472</u>	248,830
Unallocated other income				30
Unallocated operating expenses				(841)
Unallocated finance costs				(13,575)
Share of results of associates				<u>(7,813)</u>
Profit before taxation				<u>226,631</u>

**Six months ended 30 June 2021 (Restated)**

	Power plants in the PRC <i>US\$'000</i>	Power plants in Korea <i>US\$'000</i>	Management companies <i>US\$'000</i>	Total <i>US\$'000</i>
Segment revenue – external	<u>428,288</u>	<u>396,600</u>	<u>12,098</u>	<u>836,986</u>
Segment results	<u>197,706</u>	<u>24,048</u>	<u>576</u>	222,330
Unallocated other income				519
Unallocated finance costs				(12,809)
Share of results of associates				<u>9,551</u>
Profit before taxation				<u>219,591</u>

# NOTES

## 1. GENERAL

The Company is incorporated in Bermuda as an exempted company with limited liability under the Companies Act 1981 of Bermuda and its Shares are listed on the Main Board of the Stock Exchange in October 2014. The registered office of the Company is at Victoria Place, 31 Victoria Street, Hamilton HM 10, Bermuda. The principal place of business of the Company is at 15/F, Harbour Centre, 25 Harbour Road, Wanchai, Hong Kong. Its immediate holding company is CGN Energy International, a company incorporated in Hong Kong with limited liability and its ultimate holding company is CGN, a state-owned enterprise established in the PRC.

The financial information set out in this announcement does not constitute the unaudited interim financial report of the Group for the six months ended 30 June 2022 but is extracted from that unaudited interim financial report which has been prepared in accordance with the International Accounting Standard (“IAS”) 34, *Interim Financial Reporting* issued by the International Accounting Standards Board (“IASB”) as well as with the applicable disclosure provisions of the Listing Rules.

The preparation of an interim financial report in conformity with IAS 34 requires management to make judgements, estimates and assumptions that affect the application of accounting policies and reported amounts of assets and liabilities, income and expenses on a year to date basis. Actual results may differ from these estimates.

The financial information relating to the financial year ended 31 December 2021 set out in this announcement does not constitute the Group’s statutory consolidated financial statements for the year ended 31 December 2021, but is derived from those financial statements.

The consolidated financial statements have been prepared in accordance with the same accounting policies adopted in the 2021 annual financial statements, except for the accounting policy changes that are expected to be reflected in the 2022 annual financial statements. Details of any changes in accounting policies are set out in Note 2.

The consolidated financial statements have been prepared on the historical cost basis except for certain financial instruments, which are measured at fair values.

## 2. CHANGES IN ACCOUNTING POLICIES

The Group has applied the following amendments to International Financial Reporting Standards (“IFRSs”) issued by the IASB to these interim consolidated financial statements for the current accounting period:

- Amendments to IAS 16, *Property, plant and equipment: Proceeds before intended use*
- Amendments to IAS 37, *Provisions, contingent liabilities and contingent assets: Onerous contracts – cost of fulfilling a contract*



The Group has not applied any new standard or interpretation that is not yet effective for the current accounting period. Impacts of the adoption of the amended IFRSs are discussed below:

***Amendments to IAS 16, Property, plant and equipment: Proceeds before intended use***

The amendments prohibit an entity from deducting the proceeds from selling items produced before that asset is available for use from the cost of an item of property, plant and equipment. Instead, the sales proceeds and the related costs should be included in profit and loss. An entity shall apply the amendments retrospectively, but only to items of property, plant and equipment made available for use on or after the beginning of the earliest period presented in the financial statements in which the entity first applies the amendments.

The Group has initially applied the amendments as from 1 January 2022. The Group has applied the amendments retrospectively and has therefore restated the comparative information to items of property, plant and equipment made available for use on or after 1 January 2021. The following table gives a summary of restatement adjustments recognized for each line item in the consolidated statement of financial position and consolidated statement of profit or loss and other comprehensive income.

	<b>As previously reported US\$'000</b>	<b>Impact on application of amendments to IAS 16 US\$'000</b>	<b>As restated US\$'000</b>
<b>Consolidated statement of financial position at 31 December 2021</b>			
Property, plant and equipment	6,195,027	60,296	6,255,323
<b>Total non-current assets</b>	7,014,247	60,296	7,074,543
<b>Total assets less current liabilities</b>	5,868,514	60,296	5,928,810
Deferred tax liabilities	49,415	281	49,696
<b>Total non-current liabilities</b>	4,433,318	281	4,433,599
<b>Net assets</b>	1,435,196	60,015	1,495,211
Reserves	1,313,497	60,138	1,373,635
Total equity attributable to equity shareholders of the Company	1,313,552	60,138	1,373,690
Non-controlling interests	121,644	(123)	121,521
<b>Total equity</b>	1,435,196	60,015	1,495,211

	As previously reported US\$'000	Impact on application of amendments to IAS 16 US\$'000	As restated US\$'000
<b>Consolidated statement of profit or loss and other comprehensive income for the six months ended 30 June 2021</b>			
<b>Revenue</b>	796,607	40,379	836,986
Coal, oil, gas and wood pellet	342,812	7,481	350,293
Depreciation of property, plant and equipment	121,134	236	121,370
Staff costs	42,608	4,585	47,193
Others	22,822	4,653	27,475
<b>Total operating expenses</b>	543,295	16,955	560,250
<b>Operating profit</b>	253,312	23,424	276,736
<b>Profit before taxation</b>	196,167	23,424	219,591
Income tax	(21,657)	(304)	(21,961)
<b>Profit for the period</b>	174,510	23,120	197,630
Exchange difference arising on translation of foreign operations	(12,261)	39	(12,222)
<b>Other comprehensive income for the period</b>	(3,150)	39	(3,111)
<b>Total comprehensive income for the period</b>	171,360	23,159	194,519
Profit for the period attributable to: Equity shareholders of the Company	162,316	23,120	185,436
Total comprehensive income for the period attributable to: Equity shareholders of the Company	159,342	23,159	182,501

***Amendments to IAS 37, Provisions, contingent liabilities and contingent assets: Onerous contracts – cost of fulfilling a contract***

The amendments clarify that for the purpose of assessing whether a contract is onerous, the cost of fulfilling the contract includes both the incremental costs of fulfilling that contract and an allocation of other costs that relate directly to fulfilling contracts. The amendments do not have a material impact on these financial statements.

# MANAGEMENT DISCUSSION AND ANALYSIS

## I. Operating Results and Analysis

As a result of retrospective restatements due to amendments to IAS 16, the revenue of the Group, the profit of the Group and the profit attributable to equity shareholders of the Company for the six months ended 30 June 2021 increased by US\$40.4 million, US\$23.1 million and US\$23.1 million, respectively, from the comparative figures previously reported for the six months ended 30 June 2021.

If the effect of such retrospective restatements is not taken into account, the revenue of the Group for the six months ended 30 June 2022 would have increased by 42.3% and the profit of the Group, the profit attributable to equity shareholders of the Company and earnings per share for the six months ended 30 June 2022 would have increased by 10.8%, 9.6% and 9.6%, respectively, from the comparative figures previously reported for the six months ended 30 June 2021.

In the first half of 2022, the revenue of the Group amounted to US\$1,133.7 million, representing an increase of US\$296.7 million or 35.5% compared with US\$837.0 million for the first half of 2021. The profit attributable to equity shareholders of the Company amounted to US\$177.9 million, representing a decrease of US\$7.5 million or 4.1% compared with US\$185.4 million for the first half of 2021.

The profit for the period of the Group amounted to US\$193.4 million, representing a decrease of US\$4.2 million or 2.2% compared with US\$197.6 million for the first half of 2021.

### ***Revenue***

In the first half of 2022, the revenue of the Group amounted to US\$1,133.7 million, representing an increase of 35.5% compared with US\$837.0 million for the first half of 2021. The revenue derived from wind and solar projects in the PRC amounted to US\$436.8 million, representing an increase of 28.9% compared with US\$338.9 million for the first half of 2021, which was mainly attributable to the newly commissioned installed capacity and the increase in power generation from wind and solar projects. The revenue derived from Korea projects amounted to US\$591.4 million, representing an increase of 49.1% compared with US\$396.6 million for the first half of 2021, which was mainly attributable to the substantial increase in electricity tariff and the contribution from the 109.5 MW Daesan biomass project which commenced commercial operation in April 2021.

### ***Operating Expenses***

In the first half of 2022, the operating expenses of the Group amounted to US\$804.1 million, representing an increase of 43.5% compared with US\$560.3 million for the first half of 2021. The increase in operating expenses was mainly due to the increase in gas costs of Yulchon I Power Project and Yulchon II Power Project and the surge in market coal prices. In addition, the commencement of operation of the new wind and solar projects has resulted in the increase of depreciation and staff costs.

### ***Operating Profit***

In the first half of 2022, the operating profit of the Group, which is equal to revenue minus operating expenses, amounted to US\$329.6 million, representing an increase of 19.1% compared with US\$276.7 million for the first half of 2021. The increase in operating profit was mainly caused by the increase in power generation from wind projects and the contribution of profit from Korea projects.

### ***Other Income***

Other income of the Group mainly represented income on sales of generating rights, technical service income and government grants. In the first half of 2022, other income of the Group amounted to US\$27.7 million, representing an increase of US\$13.0 million compared with US\$14.7 million for the first half of 2021.

### ***Finance Costs***

In the first half of 2022, the finance costs of the Group amounted to US\$120.3 million, representing an increase of 40.4% compared with US\$85.6 million for the first half of 2021. The increase in finance costs was mainly attributable to the increase in weighted average balances of bank borrowings and decrease in capitalization of finance costs in the first half of 2022.

### ***Share of Results of Associates***

In the first half of 2022, the share of losses of associates amounted to US\$7.8 million, representing a decrease of US\$17.4 million compared with the share of profits of associates of US\$9.6 million in the first half of 2021. The change from profits to losses of associates was mainly attributable to the increase in coal price compared with the corresponding comparative period.

### ***Loss on Disposal of a Subsidiary***

In June 2022, the Group entered into an equity transfer agreement to dispose of the entire equity interest in CGN Hubei to CGN Wind Energy at a consideration of RMB200.5 million (equivalent to US\$29.9 million). The disposal was completed in June 2022, the Group disposed of its entire equity interest in CGN Hubei and recognized a loss on disposal of US\$67,000 under other gains and losses in the first half of 2022.

### ***Income Tax***

In the first half of 2022, the income tax expenses of the Group amounted to US\$33.3 million, representing an increase of US\$11.3 million compared with US\$22.0 million for the first half of 2021.

### ***Liquidity and Capital Resources***

The Group's cash and cash equivalents increased from US\$375.0 million as at 31 December 2021 to US\$420.0 million as at 30 June 2022, which was primarily due to the effect of changes in foreign exchange rates and the cash generated from operating activities being offset by the cash used in investing and financing activities.

### ***Net Debt/Equity Ratio***

The Group's net debt/equity ratio decreased from 3.94 as at 31 December 2021 to 3.69 as at 30 June 2022, which was mainly due to the decrease in loans from fellow subsidiaries.

### ***Interim Dividend***

The Board resolved not to declare an interim dividend for the six months ended 30 June 2022.

## ***Earnings per Share***

	<b>Six months ended 30 June</b>	
	<b>2022</b>	2021
	<b><i>US cents</i></b>	<i>US cents</i>
		(Restated)
Earnings per share, basic and diluted – calculated based on the number of ordinary shares for the period	<b>4.15</b>	4.32
	<b><i>US\$'000</i></b>	<i>US\$'000</i>
Earnings for the purposes of calculating basic and diluted earnings per share (profit for the period attributable to ordinary equity shareholders of the Company)	<b>177,911</b>	185,436
	<b><i>'000</i></b>	<i>'000</i>
Number of ordinary shares for the purposes of calculating basic and diluted earnings per share	<b>4,290,824</b>	4,290,824

## ***Trade Receivables***

	<b>30 June 2022</b>	31 December 2021
	<b><i>US\$'000</i></b>	<i>US\$'000</i>
Trade receivables – contracts with customers	<b>801,099</b>	760,992
Less: allowance for credit losses	<b>(15,707)</b>	(16,521)
	<b>785,392</b>	744,471

The following is an ageing analysis of trade receivables net of allowance for credit losses presented based on the invoice date at the end of the reporting period, which approximated the revenue recognition dates.

	<b>30 June 2022</b>	31 December 2021
	<b><i>US\$'000</i></b>	<i>US\$'000</i>
0 – 60 days	<b>204,025</b>	221,325
61 – 90 days	<b>37,984</b>	30,168
91 – 180 days	<b>61,419</b>	88,368
Over 180 days	<b>481,964</b>	404,610
	<b>785,392</b>	744,471

As at 30 June 2022, the Group's trade receivables balances included debtors with aggregate carrying amount of US\$170.7 million (31 December 2021: US\$209.3 million) from the sales of electricity and other services, which are due within 30 to 90 days from the date of billing.

As at 30 June 2022, the Group's trade receivables balances included debtors with aggregate carrying amount of US\$614.7 million (31 December 2021: US\$535.2 million) from the tariff income receivables. These receivables are tariff income receivables from relevant government authorities pursuant to the Cai Jian [2020] No.5 Notice on the Measures for Administration of Subsidy Funds for Tariff of Renewable Energy (財建[2020]5號《可再生能源電價附加補助資金管理辦法》). The collection of tariff income receivables is subject to settlement by state grid companies upon finalization of the allocation of funds by relevant PRC government authorities to the state grid companies. As a result, the tariff income receivables are not considered as overdue or in default. The tariff income receivables have been approved by the relevant government authorities and are expected to be recovered within the Group's normal operating cycle but maybe beyond 12 months from the reporting date. Based on the historical settlement record and forward-looking information that was available without undue cost and effort as at 30 June 2022, the Directors consider that the receivables are not credit-impaired and not considered as in default.

The Group does not hold any collateral over the trade receivables balances.

### ***Contract Assets***

	<b>30 June 2022 US\$'000</b>	31 December 2021 US\$'000
Tariff income from sales of renewable energy	<b>277,087</b>	191,453
Less: allowance for credit losses	<b>(4,457)</b>	(4,718)
	<b><u>272,630</u></b>	<b><u>186,735</u></b>

The contract assets represented tariff income receivables from sales of renewable energy to the local state grid in the PRC, with such amounts pending approval for registration in the Renewable Energy Tariff Subsidy List (the “List”) by the relevant government authorities. The contract assets are transferred to trade receivables when the relevant right becomes unconditional, upon the registration of the Group's respective operating power plants in the List.

### ***Trade Payables***

The following is an ageing analysis of trade payables presented based on the invoice date at the end of the reporting period.

	<b>30 June 2022 US\$'000</b>	<b>31 December 2021 US\$'000</b>
0 – 60 days	<b>97,850</b>	127,066
61 – 90 days	<b>236</b>	318
Over 90 days	<b>1,599</b>	2,121
	<hr/>	<hr/>
Total	<b>99,685</b>	129,505
	<hr/>	<hr/>

The average credit period on purchases of goods was 21 days (31 December 2021: 22 days) for the six months ended 30 June 2022. The Group has financial risk management policies in place to ensure all payables are settled within the credit period.

### ***Financial Position***

Non-current assets decreased from US\$7,074.5 million as at 31 December 2021 to US\$6,664.5 million as at 30 June 2022. The decrease was mainly due to the depreciation of property, plant and equipment and the effect of changes in foreign exchange rates during the six months ended 30 June 2022.

Current assets increased from US\$1,659.4 million as at 31 December 2021 to US\$1,857.8 million as at 30 June 2022. The increase was mainly attributable to the increase in trade receivables and contract assets.

Current liabilities decreased from US\$2,805.1 million as at 31 December 2021 to US\$2,774.1 million as at 30 June 2022. The decrease was mainly due to the decrease in loans from fellow subsidiaries and other payables and accruals, which was partially offset by the increase in short-term bank borrowings.

Non-current liabilities decreased from US\$4,433.6 million as at 31 December 2021 to US\$4,217.9 million as at 30 June 2022. The decrease was mainly due to the decrease in long-term bank borrowings.



### ***Bank Borrowings***

The Group's total bank borrowings increased from US\$4,245.9 million as at 31 December 2021 to US\$4,314.8 million as at 30 June 2022. Details of bank borrowings are as follows:

	<b>30 June 2022 US\$'000</b>	<b>31 December 2021 US\$'000</b>
Secured	<b>3,007,963</b>	3,188,682
Unsecured	<b>1,306,817</b>	1,057,209
	<b><u>4,314,780</u></b>	<b><u>4,245,891</u></b>

The maturity profile of bank borrowings is as follows:

Within 1 year	<b>1,077,744</b>	763,503
After 1 year but within 2 years	<b>389,013</b>	399,027
After 2 years but within 5 years	<b>1,121,896</b>	1,191,136
Over 5 years	<b>1,726,127</b>	1,892,225
	<b><u>3,237,036</u></b>	<u>3,482,388</u>
	<b><u>4,314,780</u></b>	<b><u>4,245,891</u></b>

As at 30 June 2022, the Group had unutilized banking facilities of US\$2,330.9 million.

## ***Loans from Fellow Subsidiaries***

As at 30 June 2022, the amounts represent:

		<b>30 June 2022 US\$'000</b>	<b>31 December 2021 US\$'000</b>
	<i>Notes</i>		
Loans from fellow subsidiaries			
– due within 1 year			
CGN Finance	<i>i(a)</i>	<b>35,028</b>	174,340
CGN Wind Energy	<i>ii</i>	<b>835,011</b>	988,127
		<b>870,039</b>	1,162,467
Loans from fellow subsidiaries			
– due after 1 year			
CGN Finance	<i>i(b)</i>	<b>178,471</b>	156,821
CGNPC Huasheng	<i>iii</i>	<b>250,000</b>	250,000
China Clean Energy Development Limited (“China Clean Energy”)	<i>iv</i>	<b>450,000</b>	450,000
		<b>878,471</b>	856,821

### *Notes:*

- (i)(a) Loans from CGN Finance of RMB212.9 million (equivalent to US\$31.7 million) (31 December 2021: RMB1,111.5 million (equivalent to US\$174.3 million)) are unsecured, interest bearing ranged from 3.25% to 4.16% (31 December 2021: 3.45% to 4.21%) per annum and repayable within one year; and

Loan from CGN Finance of RMB22.0 million (equivalent to US\$3.3 million) (31 December 2021: Nil) is unsecured, interest bearing at RMB Loan Prime Rate announced by the PRC National Interbank Funding Center (“**RMB Loan Prime Rate**”) minus 1% per annum and repayable within one year.

- (i)(b) Loans from CGN Finance of RMB60.3 million (equivalent to US\$9.0 million) (31 December 2021: RMB50.1 million (equivalent to US\$7.8 million)) are unsecured, interest bearing ranged from 3.60% to 4.16% (31 December 2021: 4.21%) per annum and repayable in 2031 to 2035 (31 December 2021: 2035); and

Loans from CGN Finance of RMB1,136.6 million (equivalent to US\$169.5 million) (31 December 2021: RMB949.8 million (equivalent to US\$149.0 million)) are unsecured, interest bearing at the RMB Loan Prime Rate minus 0.65% to 1% (31 December 2021: RMB Loan Prime Rate minus 0.39% to 0.66%) per annum and repayable in 2031 to 2040 (31 December 2021: 2037 to 2040).

- (ii) Loans from CGN Wind Energy of RMB1,000.0 million (equivalent to US\$156.8 million) and RMB1,100.0 million (equivalent to US\$172.5 million) in 31 December 2021 were repaid during the period.

Loan from CGN Wind Energy of RMB5,600.0 million (equivalent to US\$835.0 million) (31 December 2021: RMB4,200.0 million (equivalent to US\$658.8 million)) is unsecured, interest bearing at 3.50% (31 December 2021: 3.50%) per annum and repayable in 2022.

- (iii) Loan from CGNPC Huasheng of US\$250.0 million (31 December 2021: US\$250.0 million) is unsecured, interest bearing at 3 months London Interbank Offered Rate plus 1.30% (31 December 2021: 3 months London Interbank Offered Rate plus 1.30%) per annum and repayable in 2024.
- (iv) Loan from China Clean Energy of US\$450.0 million (31 December 2021: US\$450.0 million) is unsecured, interest bearing at 4.50% (31 December 2021: 4.50%) per annum and repayable in 2025.

### ***Capital Expenditures***

The Group's capital expenditures decreased by US\$500.3 million to US\$245.0 million in the first half of 2022 from US\$745.3 million in the first half of 2021, which was mainly due to the decrease in capital expenditures incurred by the wind and solar power projects.

### ***Contingent Liabilities***

As at 30 June 2022 and 31 December 2021, the Group had no material contingent liabilities.

### ***Pledged Assets***

The Group pledged certain property, plant and equipment, trade receivables, contract assets and bank deposits for credit facilities granted to the Group. As at 30 June 2022, the total book value of the pledged assets of the Group amounted to US\$1,901.3 million (31 December 2021: US\$2,202.6 million).

### ***Employees and Remuneration Policy***

As at 30 June 2022, the Group had about 1,947 full-time employees, the majority of which were based in China. The Group provides its employees with salaries and bonuses, as well as employee benefits, including retirement schemes, medical and life insurance schemes.

Employees located in China are covered by the mandatory social security schemes required by local practice and regulations of the PRC, which are essentially defined contribution schemes. The Group is required by the PRC law to contribute a certain percentage of the average salaries of the employees to various schemes in accordance with the respective regulatory requirements of each city in China. The PRC government is directly responsible for the payment of the benefits to these employees.

In Hong Kong, the Group participates in a mandatory provident fund scheme established under the Mandatory Provident Fund Schemes Ordinance (Chapter 485 of the Laws of Hong Kong). Employees contribute 5.0% of their relevant income to the mandatory provident fund scheme and the Group contributes 10.0% of each employee's monthly base salary.

In Korea, the Group is required by law to contribute 4.5% of the employees' monthly average salaries for the national pension, 3.43% for national health insurance (11.52% of the national health insurance contribution for long term care insurance), 1.05% for unemployment insurance, 1.06% (Seoul Office)/0.803% (Yulchon)/0.803% (Daesan) for the industrial accident compensation insurance and 0.06% for a wage claim guarantee fund.

## **II. Industry Overview**

In the first half of 2022, the safe and steady operation of electricity systems across China and the overall balanced supply and demand in electricity provided strong security in electricity supply, for pandemic prevention and control as well as economic and social development. From January to June 2022, the electricity consumption of the society was 4,097.7 TWh, representing an increase of 2.9% as compared to the same period of last year.

The transformation to green and low carbon in China continued to achieve significant results, with an increase in the proportion of installed capacity of non-fossil energy power generation over total installed capacity. As of the end of June 2022, the national installed capacity was approximately 2,441.0 GW, representing a year-on-year increase of 8.1%, among which, the installed capacity of wind power generation was approximately 342.2 GW, representing a year-on-year increase of 17.2%; while the installed capacity of solar power generation was approximately 336.8 GW, representing a year-on-year increase of 25.8%.

On 24 January 2022, the Central Political Bureau of the Communist Party of China ("CPC") held the 36th collective study session for achieving the goal of carbon peaking and carbon neutrality. During the study session, President Xi Jinping emphasized that, achieving carbon peaking and carbon neutrality was the intrinsic requirement of fully implementing new development philosophies, establishing a new development landscape and promoting high-quality development, as well as a major strategic decision made by the Central Committee of the CPC for coordinating the overall domestic and international situation.

In February 2022, China initiated the planning and arrangement of the second batch of large-scale wind power and photovoltaic power bases focusing on deserts, Gobi areas and remote areas, pursuant to which the aggregate scale of projects will be 455 GW in 2030: the total installed capacity of wind and photovoltaic power bases to be planned and constructed during the "14th Five-Year Plan" period will be approximately 200 GW; and the total installed capacity of wind and photovoltaic power bases to be planned and constructed in the "15th Five-Year Plan" period will be approximately 255 GW.

In May 2022, the NDRC and the NEA issued the “Implementation Plan on Promoting the High-Quality Development of New Energy in the New Era” (《關於促進新時代新能源高質量發展的實施方案》). The Plan stated explicitly that the total installed capacity of wind power and solar power will reach more than 1,200 GW by 2030 and called for the acceleration of construction of a clean, low-carbon, safe and efficient energy system.

During the first half of 2022, China continuously issued programmatic documents for the “14th Five-Year Plan” period to provide guidance for the development of the industry.

In January 2022, the State Council released the “Comprehensive Work Plan for Energy Conservation and Emission Reduction during the 14th Five-Year Plan Period” (《「十四五」節能減排綜合工作方案》). The Work Plan required that, by 2025, China’s energy consumption per unit of GDP will drop by 13.5% as compared to 2020 and the total energy consumption will be reasonably controlled. The electricity consumption of renewable energy of each region newly added during the “14th Five-Year Plan” period would be excluded from the assessment of total local energy consumption. Raw material energy consumption would be excluded from the assessment of national and local dual-control of energy consumption.

In January 2022, the NDRC and the NEA issued the “Implementation Plan for the Development of New Energy Storage during the 14th Five-Year Plan Period” (《「十四五」新型儲能發展實施方案》). The Plan required that, by 2025, the new energy storage should enter into the large-scale development stage from the initial period of commercialization with conditions for large-scale commercialized application. Of which, the technical performance of the electrochemical energy storage will be further enhanced, and the system cost will be reduced by over 30%. By 2030, the new energy storage will achieve comprehensive market-driven development.

In March 2022, the NDRC and the NEA issued the “Plan for Modern Energy System during the 14th Five-Year Plan Period” (《「十四五」現代能源體系規劃》). According to the target on installed capacity, from 2022 to 2025, the new installed capacity of hydropower will increase by 25 GW and the new installed capacity of nuclear power will increase by 17 GW. By 2025, the scale of flexibility transformation of coal power generating units will exceed 200 GW cumulatively, the installed capacity of pumped storage will reach over 62 GW and the installed capacity currently under construction will reach approximately 60 GW.

In June 2022, nine governmental authorities including the NDRC, the NEA and the Ministry of Finance issued the “Development Plan of Renewable Energy during the 14th Five-Year Plan Period” (《「十四五」可再生能源發展規劃》). The targets of the Plan are: according to the 2025 requirement of the percentage of non-fossil energy consumption being approximately 20%, in 2025, the total energy consumption of renewable energy will reach approximately 1 billion tons of standard coal, representing approximately 18% of primary energy consumption; the annual power generation of renewable energy will reach around 3,300 TWh, and wind power generation and solar power generation will be doubled; the weight of responsibility for total national renewable energy power consumption and the weight of responsibility for non-hydropower consumption of electricity from renewable energy will reach around 33% and 18% respectively, and the utilization rate of renewable energy will be maintained at a reasonable level; the non-electricity utilization scale including solar thermal application, biomass heat supply and biomass fuel will reach over 60 million tons of standard coal.

During the “14th Five-Year Plan” period, China no longer provided subsidies for offshore wind power and entered the era of grid parity. It was forecasted that full price parity could be achieved by the end of the “14th Five-Year Plan” period. Before that, local supportive policies shall be introduced in various areas as appropriate. In 2022, the newly-approved offshore wind power projects were still parity projects with no subsidies. At the same time, China encouraged all regions to implement targeted supportive policies to support high-quality development of the wind power and photovoltaic power industry.

During the second half of 2022, Shandong Province implemented provincial subsidy policy targeting at offshore wind power. On 1 April, during the press conference of Shandong Provincial Government Information Office, the deputy director of the Shandong Provincial Energy Administration responded to press reporters, that the development and construction of offshore wind power projects shall be vigorously supported. In respect of those offshore wind power projects during the “14th Five-Year Plan” period which were completed and connected to the grid during 2022 to 2024, the provincial Ministry of Finance shall provide subsidies at the standard of RMB800, RMB500 and RMB300 per kWh and the scale of subsidies shall not exceed 2 GW, 3.4 GW and 1.6 GW respectively. In respect of those offshore wind power projects which will be completed and connected to the grid by the end of 2023, those projects will be exempted from building or leasing energy storage facilities. Power generation enterprises are allowed to invest in and construct ancillary projects and power grid enterprises can buyback such projects in accordance with laws and regulations, so as to promote the early completion and early production of projects.



During the first half of 2022, the competent departments of China continuously introduced policies targeting at the transformation of energy structure of rural areas. Clean energy utilization of rural areas during the “14th Five-Year Plan” period will be one of the priorities, which mainly includes distributed photovoltaic power generation in rural areas, decentralized wind power projects, clean heat supply and integrated smart energy projects.

In January 2022, the NEA, the Department of Agriculture and Rural Affairs and the National Rural Revitalization Administration jointly released the “Implementation Opinions on Accelerating Transformation and Development of Rural Energy to Boost Rural Vitalization” (《加快農村能源轉型發展助力鄉村振興的實施意見》). In the central and western regions which have been lifted out of poverty and where resources required are available, centralized wind power and photovoltaic bases will be planned and constructed in priority, so as to establish pillar businesses for provinces which have been lifted out of poverty. For places where resources required are available, those areas are encouraged to construct distributed wind power and photovoltaic power projects based on counties and by adopting the model of “company + villages and towns + agricultural households”. Energy enterprises are encouraged to construct “new energy +” compound projects.

In February 2022, the State Council issued the “Plan for Promoting Agricultural and Rural Modernization during the 14th Five-Year Plan Period” (《「十四五」推進農業農村現代化規劃》). The Plan required the increase in the proportion of electricity in the energy consumption of rural areas and the acceleration in the construction of clean energy utilization systems in rural areas that are based on renewable energy. Rural power grid consolidation and improvement engineering shall be carried out and electricity heat supply and heating by clean biomass energy in rural areas shall be developed in a manner tailored to local conditions. Also, clean utilization of coal shall be enhanced and bulk coal replacement shall be promoted. Moreover, circular development of modern agricultural industry parks and industrial clusters shall be pushed forward and replacement demonstration of renewable energy of agriculture and rural areas shall be initiated.

In May 2022, the General Office of the CPC Central Committee and the General Office of the State Council issued the “Implementation Plan of Rural Construction Actions” (《鄉村建設行動實施方案》). Clean energy construction projects shall be implemented. The level of power supply stability shall be consolidated and improved, while promoting the construction of urban and rural distribution network, so as to enhance the capabilities to secure power supply in remote areas. Clean energy including solar energy, wind energy, hydro energy, geothermal energy and biomass energy shall be developed and the construction of multi-energy complementary and distributed low-carbon integrated energy networks shall be explored in areas with suitable conditions. Clean heat supply in northern rural areas shall be promoted in a stable and orderly manner, and clean utilization of coal shall be enhanced and bulk coal replacement shall be promoted, so as to increase the proportion of clean energy of heating energy consumption in rural areas.

During the first half of 2022, China successively introduced policies in relation to the establishment of a power market system which improved the coordination of various types of transactions.

In January 2022, the NDRC and the NEA issued the “Guiding Opinions on Accelerating the Construction of a National Unified Electricity Market System” (《關於加快建設全國統一電力市場體系的指導意見》), which once again recognized the role of the market in the optimal allocation of power resources, focused on problems existing in the construction of an electricity market, proposed the overall objectives and requirements for the construction of the national unified power market and raised structural opinions on the construction of the power market.

In February 2022, the General Office of the NDRC and the Comprehensive Department of the NEA jointly issued the “Notice on Further Promoting the Construction of the Electricity Spot Market” (《關於加快推進電力現貨市場建設工作的通知》), which required the first batch of pilot regions to commence long-cycle continuous trial operation of the spot market in 2022 in principle and the second batch of pilot regions to commence trial operation of the spot market by the end of June 2022 in principle, so as to accelerate the promotion of thorough involvement of the customer end in the spot market. China clearly put forward the overall requirements of accelerating the construction of the electricity spot market, indicating that the construction of the electricity spot market is being widely carried out. With the gradual construction of a more comprehensive power market system, a marketized pricing mechanism is further rationalized.

In respect of Korean power market, it is undergoing an energy structure transformation and it is expected that the number of renewable energy and gas-fired power plants will increase in the future. As competition is intensified in the power market upon the commissioning of new power plants, the profitability of Korean gas-fired power generation companies was affected.



### III. Business Review

The Group's portfolio of assets comprises wind, solar, gas-fired, coal-fired, oil-fired, hydro, cogen, fuel cell and biomass projects, which are in the PRC and Korea power markets. Our business in the PRC covers 19 provinces, two autonomous regions and a municipality with wide geographical coverage and diversified business scope. As of 30 June 2022, the operations in the PRC and Korea accounted for approximately 74.6% and 25.4% of the Group's attributable installed capacity of 8,515.6 MW respectively. Clean and renewable energy projects (namely wind, solar, gas-fired, hydro, fuel cell and biomass projects) accounted for 81.7% of our attributable installed capacity; and conventional energy projects (namely coal-fired, oil-fired and cogen projects) accounted for 18.3% of our attributable installed capacity.

The following table sets out the results of the Group (by fuel type):

US\$' million	Korea Projects	PRC	PRC Hydro Projects	PRC Wind Projects	PRC Solar Projects	Corporate	Total
		Coal-fired, Cogen and Gas-fired Projects					
For the six months ended 30 June 2022							
Revenue	591.4	77.8	13.2	365.0	71.8	14.5	1,133.7
Operating expenses	(540.5)	(71.4)	(5.0)	(130.0)	(30.3)	(26.9)	(804.1)
Operating profit	50.9	6.4	8.2	235.0	41.5	(12.4)	329.6
Profit for the period	28.9	11.6	5.9	177.2	28.5	(58.7)	193.4
Profit attributable to equity shareholders of the Company	28.9	4.9	5.8	169.9	27.1	(58.7)	177.9
For the six months ended 30 June 2021 (Restated)							
Revenue	396.6	71.4	15.2	270.9	68.0	14.9	837.0
Operating expenses	(364.1)	(61.6)	(8.2)	(81.0)	(25.1)	(20.3)	(560.3)
Operating profit	32.5	9.8	7.0	189.9	42.9	(5.4)	276.7
Profit for the period	19.2	21.7	4.7	152.6	29.9	(30.5)	197.6
Profit attributable to equity shareholders of the Company	19.2	19.9	4.6	147.3	24.9	(30.5)	185.4

### ***Korea Projects***

The increase in profit for the period from US\$19.2 million to US\$28.9 million was mainly attributable to the substantial increase in electricity tariff and the contribution from the 109.5MW Daesan biomass project which commenced commercial operation in April 2021.

### ***PRC Coal-fired, Cogen and Gas-fired Projects***

The decrease in profit for the period from US\$21.7 million to US\$11.6 million was mainly attributable to the surge in market coal and gas prices and the implementation of overhauls of units of a gas-fired project in Hubei Province.

### ***PRC Wind Projects***

Starting from the second half of 2021, the Group's newly commissioned attributable installed capacity of wind projects amounted to 825.4 MW. The increase in revenue was mainly attributable to contribution from the increase in power generation from wind projects. Overall, the operating profit increased to US\$235.0 million.

### ***PRC Solar Projects***

Starting from the second half of 2021, the Group's newly commissioned attributable installed capacity amounted to 10.4 MW. The increase in revenue was mainly attributable to contribution from the newly commissioned solar projects. Due to the unstable solar resources in the first half of 2022, the average utilization hours of the solar projects decreased compared with the first half of 2021. Overall, the operating profit slightly decreased to US\$41.5 million.

### ***Installed Capacity***

The attributable installed capacity of the Group's power assets as at 30 June 2022 and 30 June 2021 by fuel type are set out as follows (MW):

	As at	
	30 June 2022	30 June 2021
<b>Clean and renewable energy portfolio</b>		
Wind	3,960.4	3,135.0
Solar	1,136.8	1,126.4
Gas-fired	1,655.0	1,655.0
Hydro	94.1	137.3
Biomass	109.5	109.5
Subtotal	6,955.8	6,163.2
<b>Conventional energy portfolio</b>		
Coal-fired	989.8	989.8
Oil-fired	507.0	507.0
Cogen	63.0	63.0
Subtotal	1,559.8	1,559.8
<b>Total attributable installed capacity</b>	<b>8,515.6</b>	<b>7,723.0</b>

As of 30 June 2022, the Group's attributable installed capacity reached 8,515.6 MW, representing an increase of 792.6 MW or 10.3% from the same period of last year, of which the wind power and solar power accounted for 59.9% of the Group's attributable installed capacity. The attributable installed capacity of wind power amounted to 3,960.4 MW, representing an increase of 825.4 MW or 26.3% from the same period of last year; whereas the attributable installed capacity of solar power amounted to 1,136.8 MW, representing an increase of 10.4 MW or 0.9% from the same period of last year. As of 30 June 2022, the Consolidated Installed Capacity of the Group's power plants reached 7,856.3 MW. It is expected that the growth of new operating capacity in 2022 will remain steady.

In terms of wind power business development, in the second half of 2021 and the first half of 2022, the Group's newly commissioned attributable installed capacity of wind power amounted to 714.4 MW and 111.0 MW respectively. In the first half of 2022, the Group's newly commissioned attributable installed capacity of wind power, by regional distribution, included (1) 61.8 MW in Qinghai Province; (2) 32.4 MW in Gansu Province; and (3) 16.8 MW in Henan Province.

In terms of solar power business development, in the second half of 2021, the newly commissioned attributable installed capacity of solar power of the Group amounted to 10.4 MW.

In the second half of 2021, the attributable installed capacity of the hydro projects of the Group decreased by 43.2 MW, as the cooperation of the Group's Zuojiang hydro project in the Guangxi Zhuang Autonomous Region with a local partner ended and the hydro power station was officially handed over to the local partner for operation and management.

### ***Development of Preliminary Projects***

During the first half of 2022, China officially promulgated the renewable energy development plan for the "14th Five-Year Plan" period, new business formats and models in relation to new energy continued to emerge. Facing the external market situation with intense market competitions, the Company will continue to remain steadfast in its strategic focus, so as to secure high-quality development with high-quality exploitations. The Company will focus on cooperative development to reinforce three alliances of "strategies, industries and technologies"; focus on enhanced development to perform lean management of projects; focus on key development to fight the battle of "major projects"; and focus on coordinated development to deploy resources in new business formats of new energy storage actively.

### ***Safety Management***

In the first half of 2022, the Company experienced steady safe production and pandemic prevention and control with a harmonious atmosphere for safety production.

During the development process, the Company has always insisted on taking President Xi Jinping's important statement on safety production and the thought of ecological civilization as the fundamental guidelines and fully implemented the laws and regulations in relation to safety production on national level. The Company insists that "the people and life be paramount", adheres to the basic principles of "Safety First, Quality Foremost and Pursuing Excellence" and practices the work style focusing on "Stringency, Prudence, Meticulosity and Pragmatism". The Company's overall safety, quality and environmental control was stable but progressive, the safe production trend was generally under control.

## ***Power Generation***

The power generation (GWh) by the projects of the Group are set out as follows:

	<b>For the six months ended 30 June</b>	
	<b>2022</b>	<b>2021</b>
PRC Wind Projects	<b>4,800.1</b>	3,798.1
PRC Solar Projects	<b>841.8</b>	803.1
PRC Cogen and Gas-fired Projects	<b>148.6</b>	234.3
PRC Hydro Projects	<b>284.9</b>	352.9
Korea Projects	<u><b>3,441.6</b></u>	<u>4,045.1</u>
<b>Total</b>	<u><b>9,517.0</b></u>	<u><b>9,233.5</b></u>

In the first half of 2022, the Company pursued progress while maintaining stability, strengthened lean management and accentuated quality and efficiency enhancement. For the six months ended 30 June 2022, the electricity generated by the Group's consolidated power generation projects amounted to 9,517.0 GWh, representing an increase of 3.1% from 9,233.5 GWh for the six months ended 30 June 2021. The increase in power generation was mainly due to the contribution from newly commissioned wind and solar projects. The electricity generated by PRC wind projects and PRC solar projects reached 4,800.1 GWh and 841.8 GWh, representing growth rates of 26.4% and 4.8%, respectively.

The power generation from PRC cogen and gas-fired projects reached 148.6 GWh, representing a decrease of 36.6% as compared with the same period in 2021, mainly because of the implementation of overhauls of a gas-fired project in Hubei Province in 2022; and a cogen project in Jiangsu Province reduced the power generation as a result of the decrease in local demand.

The power generation from PRC hydro projects reached 284.9 GWh, representing a year-on-year decrease of 19.3%, mainly due to the end of the cooperation between the Group's Zuojiang hydro project in Guangxi Zhuang Autonomous Region and the local partner. In October 2021, the hydro power station was officially handed over to the local partner for operation and management, resulting in a decrease in power generation from PRC hydro projects in 2022.

The power generation from Korea projects reached 3,441.6 GWh, mainly from gas-fired and biomass projects, representing a decrease of 14.9% as compared with the same period in 2021. The decrease was mainly due to the lower power generation of Yulchon I Power Project and Yulchon II Power Project as a result of a decrease in the load of power grid dispatch and an overhaul undergone in the first half of 2022.

The total volume of steam sold by the Group amounted to 1,629,000 tonnes, representing a decrease of 9.8% as compared with the six months ended 30 June 2021.

The following table sets out the average utilization hour applicable to the Group's power projects:

**Average utilization hour by fuel type <sup>(1)</sup>**

	<b>For the six months ended 30 June</b>	
	<b>2022</b>	2021
PRC Wind Projects <sup>(2)</sup>	<b>1,148</b>	1,196
PRC Solar Projects <sup>(3)</sup>	<b>684</b>	702
PRC Coal-fired Projects <sup>(4)</sup>	<b>2,347</b>	2,415
PRC Cogen Projects <sup>(5)</sup>	<b>2,037</b>	2,925
PRC Hydro Projects <sup>(6)</sup>	<b>2,303</b>	1,838
Korea Gas-fired Projects <sup>(7)</sup>	<b>1,969</b>	2,487

*Notes:*

- (1) Average utilization hour is the gross electricity generated in a specified period divided by the average installed capacity in the same period.
- (2) Average utilization hours of the PRC wind projects in major regions such as Jiangsu Province, Shandong Province and Gansu Province for the period ended 30 June 2022 were 1,270 hours, 1,205 hours and 876 hours, respectively. Average utilization hours for the PRC wind power projects slightly decreased mainly because of the unstable wind resources in the first half of 2022.

- (3) Average utilization hours of the PRC solar projects operating in major regions such as Inner Mongolia Autonomous Region, Anhui Province, Guizhou Province and Qinghai Province were 950 hours, 647 hours, 446 hours and 837 hours, respectively, in the first half of 2022. Average utilization hours for the PRC solar power projects decreased mainly because of the unstable solar resources in the first half of 2022.
- (4) Average utilization hours for the PRC coal-fired projects decreased in the first half of 2022 due to the decrease in power generation arising from the decrease in local demand.
- (5) Average utilization hours for the PRC cogen projects decreased in the first half of 2022 mainly due to decrease in power generation arising from the decrease in local demand.
- (6) Average utilization hours of the PRC hydro projects increased substantially in the first half of 2022 mainly due to better water resources in Guangxi Zhuang Autonomous Region.
- (7) Average utilization hours of the Korea gas-fired projects decreased mainly due to the lower electricity generation of Yulchon I Power Project and Yulchon II Power Project as a result of a decrease in the load of power grid dispatch and an overhaul undergone in the first half of 2022.

The table below sets out the weighted average tariffs (inclusive of value-added tax (“VAT”)) applicable to our projects in the PRC and Korea for the periods indicated:

**Weighted average tariff – Electricity (inclusive of VAT) <sup>(1)</sup>**

	Unit	For the six months ended 30 June	
		2022	2021
PRC Wind Projects <sup>(2)</sup>	RMB per kWh	<b>0.59</b>	0.53
PRC Solar Projects <sup>(3)</sup>	RMB per kWh	<b>0.66</b>	0.65
PRC Coal-fired Projects	RMB per kWh	<b>0.51</b>	0.44
PRC Cogen Projects <sup>(4)</sup>	RMB per kWh	<b>0.48</b>	0.46
PRC Hydro Projects	RMB per kWh	<b>0.35</b>	0.32
Korea Gas-fired Projects <sup>(5)</sup>	KRW per kWh	<b>209.43</b>	97.35

**Weighted average tariff – Steam (inclusive of VAT)<sup>(1)</sup>**

PRC Cogen Projects <sup>(6)</sup>	RMB per ton	<b>281.46</b>	205.52
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*Notes:*

- (1) The weighted average tariffs are affected not only by the change in the tariff for each project but also the change in net power generation for each project.
- (2) The weighted average tariff of our PRC wind projects increased in the first half of 2022 mainly due to the higher tariff of the newly commissioned wind projects.
- (3) The weighted average tariff of our PRC solar projects increased in the first half of 2022 due to the increase in market-based transaction electricity price.
- (4) The weighted average tariff of our PRC cogen projects excludes steam tariff.
- (5) The weighted average tariff for Korea gas-fired projects includes the tariff for the 25.4 MW fuel cell projects owned by Yulchon I Power Project. The increase in weighted average tariff of Korea gas-fired projects in the first half of 2022 was in line with the increase in Korea gas price during the same period.



- (6) The increase in weighted average tariff of steam in the first half of 2022 was in line with the increase in PRC coal price.

The following table sets out the weighted average gas and standard coal prices (exclusive of VAT) applicable to our projects in the PRC and Korea for the periods indicated:

		<b>For the six months ended 30 June</b>	
	<b>Unit</b>	<b>2022</b>	<b>2021</b>
PRC weighted average standard coal price <sup>(1) (2)</sup>	RMB per ton	<b>1,433.38</b>	984.63
Korea weighted average gas price <sup>(1) (3)</sup>	KRW per Nm <sup>3</sup>	<b>1,039.45</b>	471.34

*Notes:*

- (1) The weighted average standard coal price and the weighted average gas price are weighted based on the consumption of gas or coal in each applicable period.
- (2) The PRC weighted average standard coal price in the first half of 2022 increased substantially compared to the first half of 2021 due to a surge in market coal price.
- (3) The Korea weighted average gas price in the first half of 2022 increased compared to the first half of 2021 due to the increase in the prices known as the Japanese Crude Cocktail, which are calculated with reference to the average prices of crude oil imported into Japan and are an important determinant of natural gas prices in Korean markets. Yulchon I Power Project's power purchase agreement allows us to pass on the fuel cost fluctuations of the tariff to our customers in accordance with the laws.

### ***Scientific and Technological Innovation***

The Company attaches great importance to scientific and technological innovation. In 2022, the Company focuses on the transformation to informatization and digitization management, scientific top-level planning, advance by unity and cooperation as well as optimization of resource allocation. The Company adheres to the working principle of “drawing a blueprint to the end” and promotes transformation of achievements and application promotions, so as to gradually establish sustainable core competitiveness and push forward to achieve the goal of maintaining our dominant position in the industry.

Implement lean management in depth: The Company will carry out multi-dimensional benchmarking management and analyze the reasons for deviations from multiple perspectives. The Company will broaden sources of incomes and reduce expenditures, implement measures to increase the volume of power generation, guarantee the stability of income, strengthen cost control and insist on being cost-oriented, in order to maintain the leading position in respect of annual operation and maintenance costs.

Strengthen offshore wind power strategy: The Company will continuously optimize the intelligent strategies in relation to offshore wind power, which greatly improve the accuracy of marine meteorological forecast, effectively improve the success rate of offshore operation and maintenance, and explore the effective use of windy areas around typhoons to increase power generation.

Continue to commence equipment health management: The Company will continue to promote the whole-lifecycle lean health management, focus on exploring to maintain the leading position of the intelligent transformation of operation and maintenance in the industry. The Company will use the centralized control platform to further implement functions such as centralized control, early warning, safety and digitalization.

In June 2022, the Company's "lean management of wind turbines based on health status monitoring" project received the first-class prize of "Achievements of Innovation of National Electric Power Industry Equipment Management (Management Field) of 2021" (「2021年全國電力行業設備管理創新成果(管理類)」) awarded by China Electric Power Equipment Management Association (中國電力設備管理協會).

The Company will continue to promote the innovation-driven strategic projects in depth and focus on scientific and technological innovation and informatization support, so as to achieve high-quality sustainable development.

### ***Social Responsibility***

As a central state-owned enterprise, the Company has conscientiously strived to meet its corporate social responsibilities while planning the development of the Company. Since 2022, the Company has been further enhancing its political awareness, promoting various tasks in relation to rural revitalization in a high-quality manner, continuing to carry out its vision of green development and promoting water protection work continuously during the construction and operation of projects to facilitate the construction of "Beautiful China". At the same time, the Company has been actively holding public events and caring campaigns, so as to greet the 20th National Congress of the CPC.

In June 2022, the Company's solar power project in the Zhuzhou Rail Transit Industrial Park located in Hunan Province held the volunteer propaganda activity named "Safety Information Day" (安全宣傳諮詢日). The activity carried out thematic promotional campaigns on the new "Safety Production Law" (《安全生產法》) and knowledge related to emergency rescue knowledge and energy saving and pollutant control. Through publicization and mobilization, surrounding people consulted and acquainted themselves with knowledge related to safe production at the promotion booths one after another and joined the skill trainings actively.

### ***Brand Promotion: Recognitions and Awards***

Adhering to the work style of "Stringency, Prudence, Meticulosity and Pragmatism", the Company strongly advocates the initiation of quality management activity groups and enhances the quality management level of the enterprise. The Company encourages employees to exert the spirit of innovation and enhances their motivation to participate in innovation practices, so as to inject technological vitality into the high-quality development of the Company.

In April 2022, the "Achievements of Quality Management Team of Power Construction of 2021" (「2021年度電力建設質量管理小組活動成果」) organized by the China Electric Power Construction Association (中國電力建設企業協會) published the results, where the Taipingshan Wind Power project of the Company located in Shandong Province were awarded four second prizes in total. In May 2022, the Dingyuan Phase I Fishing-Photovoltaic Power Complementary Project located in Anhui Province won the third prize of "Achievements of Quality Control of Electric Power Industry in Anhui Province of 2022" (「2022年安徽省電力行業質量管理成果」) awarded by the Anhui Electric Power Association (安徽省電力協會).

The Company strictly implements the code of conduct of integrity and transparency, professionalism, efficient execution and teamwork and strives to create a working atmosphere of pursuit of excellence, so as to enhance organizational vibrancy of the enterprise, actively create a learning-oriented organization and improve core capability building, which contributes technical strength for the high-quality development of the Company. In April 2022, the Shengsi 5# and 6# offshore wind power project in Zhejiang Province of the Company was awarded as a "Pioneer among Zhejiang Workers" (浙江省工人先鋒號) by "Zhejiang Federation of Trade Union" (浙江省總工會).

## **IV. Risk Factors and Risk Management**

### ***Risks Relating to the Industry***

Our power projects are located in the PRC and Korea, both of which have undergone, and may continue to undergo, regulatory changes. Governmental regulations affect all aspects of our power project operations, including the amount and timing of electricity generation, the setting of tariffs, compliance with power grid controls, dispatch directives and environmental protection. Regulatory changes in the PRC and Korea can affect, among other things, dispatch policies, clean and renewable energy and environmental compliance policies and tariffs, and may result in a change of tariff setting procedures or mandatory installation of costly equipment and technologies to reduce environmental pollutants.

Further, the solar power projects are highly dependent on solar illumination conditions, and the wind power projects are dependent particularly on wind conditions. Extreme wind or weather conditions could lead to downtime of the wind power projects. Solar illumination conditions and wind conditions vary across seasons and locations, and could be unpredictable and are out of our control.

### ***Risk Relating to Fuel Cost***

The non-renewable energy power projects of the Group require supplies of coal, oil and gas as fuel. Fuel costs represent a significant portion of our operating expenses and the operating expenses of our associates. The extent to which our profit is ultimately affected by the cost of fuel depends on our ability to pass through fuel costs to our customers as set out under the relevant regulatory guidelines and the terms of our power purchase agreement for a particular project, as we currently do not take any measures to hedge our exposure to fuel price fluctuations. Our fuel costs are also affected by the volume of electricity generated because the coal consumption rate of coal-fired and cogen power projects decreases when we generate more electricity as a result of economies of scale. In the PRC, government tariff regulations limit our ability to pass through changes in fuel costs. In Korea, while our Yulchon I Power Project is able to pass through our exposure to fuel price fluctuations through fuel cost pass through provisions in the tariff formula, our Yulchon II Power Project and Daesan I Power Project receive payments based on the system marginal price, which is influenced by market demand and supply, and may not fully reflect the power plants' respective fuel price fluctuations. Our diversified generation portfolio enables us to diversify the risks that we would face to utilize a single resource for electricity generation. In particular, our exposure to several fuel types mitigates risks such as price increases in or the availability of any particular fuel source.

### ***Interest Rate Risk***

We are exposed to interest rate risk resulting from fluctuations in interest rates on our debt with floating interest rates based on market prevailing rates. We undertake debt obligations to support asset acquisition and general corporate purposes including capital expenditures and working capital needs. Certain amount of our indebtedness is calculated in accordance with floating interest rate or interest rate that are subject to adjustment by our lenders. We periodically review the ratio of debt with floating interest rates to debt with fixed rates, taking into account the potential impact on our profit, interest coverage and cash flows.

### ***Foreign Exchange Risk***

The functional currency of the Company is US dollars, and our reportable profit is affected by fluctuations in foreign currency exchange rates. We collect most of our revenue from our projects in Renminbi and KRW, some of which are converted into foreign currencies to (1) purchase foreign-made equipment and parts for repair and maintenance; (2) make investments in certain joint ventures or acquire interests from other companies; (3) pay out dividends to the shareholders of our project companies; and (4) repay our outstanding debt. By managing and monitoring the risks of foreign currency, we ensure that appropriate measures are adopted effectively in a timely manner.

## **V. Prospects**

During the first half of 2022, as affected by unfavorable factors including the pandemic, a strained supply chain and the rise in price of bulk commodities, the internal and external situation remained severe. In the second half of the year, the Company will continue to prioritize high-quality development and focus on exploring and fostering business growth, so as to intensively cultivate existing assets by various measures. Furthermore, the Company will endeavour to eliminate the risks encountered during its development through enhanced management, establishment of core capabilities as well as reforms and innovation, so as to improve and enhance traditional wind power and solar energy businesses and ensure that the Company will maintain its leading position in the industry.

**1. Strengthen its leading role in market development to enhance its market competitiveness**

Firstly, the Company will strengthen its main regional and territorial responsibilities and deepen the establishment of three alliances of “strategies, industries and technologies”, so as to establish win-win cooperative relationship and enhance market competitiveness. At the same time, the Company will focus on major bases and major projects to establish its presence in ultra-high voltage ancillary base projects actively. Secondly, the Company will actively expand roof distributed photovoltaic and decentralized wind power businesses throughout the county. Thirdly, the Company will speed up in promoting the development of extended businesses such as energy storage, so as to create new momentum for corporate growth.

**2. Overcome difficulties to accelerate project construction**

As affected by the pandemic and policies, the situation of the industry is not optimistic. In the second half of the year, the Company will strive to overcome difficulties and accelerate the promotion of key areas with larger project capacities and difficulties in progressing with investment review, so as to actively coordinate the key factors affecting investment reviews, such as the reply in relation to the connection system proposal, environmental and water conservation, and reply in relation to forestry lands as well as the optimization of investment returns. The Company will sort out the production and transportation of equipment by manufacturers comprehensively, identify potential supply risks in advance and formulate response plans, in order to ensure that the supply of equipment for each project is compatible with the construction progress.

**3. Focus on the transaction response mechanism of the spot market of parity projects to further strengthen the coordination of production and sales**

Firstly, the Company will enhance the awareness of market-oriented competition in electricity and strengthen the coordinated development of the entire business chain of projects. Secondly, the Company will deploy the user-side market in advance, accelerate the nationwide coverage of the traditional purchase and sale of electricity business and new businesses including virtual power plants and demand side response, and actively explore the paths and models (such as new energy storage) for new market players to participate in the electricity market, in order to promote the transformation of the results of digital marketing capability and technological products into new productivity. Thirdly, the Company will strengthen the synergy of sales to reduce power abandonment through multi-type market transactions and strive for excess in consumption capacity, in order to aim for maximization of comprehensive income.

**4. Deepen reforms to stimulate new vitality of high-quality development**

The Company will stimulate vitality through implementing reforms to solve practical problems during its development. Firstly, the Company will strengthen the penetrating power of reforms of its cadre and teams of talents. Secondly, the Company will promote reforms of pilot branches comprehensively and improve the management efficiency and core capabilities of the pilot branches.

**5. Strictly prevent and control risks to safeguard the red line and bottom line for safety**

Firstly, the Company will carry out in-depth production safety inspections and sort out the weaknesses of safety, quality and environmental management systematically to investigate hidden dangers and risks comprehensively, so as to eliminate major risks and improve the level of safety, quality and environmental management. Secondly, the Company will strictly control the safety of project construction, stringently manage safety protection measures and prevent projects from being blindly undertaken. Thirdly, the Company will strictly control the management risks of new businesses and formulate different security prevention and control measures for different businesses to ensure the safe production of new businesses.



## **PURCHASE, SALE OR REDEMPTION OF THE COMPANY'S LISTED SECURITIES**

Neither the Company, nor any of its subsidiaries has purchased, sold or redeemed any of the Company's listed securities during the six months ended 30 June 2022.

## **CORPORATE GOVERNANCE CODE**

During the six months ended 30 June 2022, the Company has complied with all the code provisions of the Corporate Governance Code, except for code provision C.2.1 of the Corporate Governance Code which states that the roles of chairman and chief executive should be separate and should not be performed by the same individual.

Mr. Zhang Zhiwu has been appointed as both the Chairman and the President of the Company since 8 April 2022. Taking into account the fact that Mr. Zhang has demonstrated suitable leadership and management capabilities and developed a thorough understanding of the Group's business and strategy since his appointment as an executive Director of the Company in 2020, the Board believes that vesting the roles of the Chairman and the President in Mr. Zhang can facilitate the execution of the Group's business strategies and enable more effective and efficient overall strategic planning for the Group. Therefore, the Board considers that the deviation from code provision C.2.1 of the Corporate Governance Code will not be inappropriate in such circumstances. In addition, the Board comprises, among others, three non-executive Directors and three independent non-executive Directors. Therefore, the Board believes that the balance of power and authority for the present arrangement would not be impaired and this structure will enable the Company to make and implement decisions promptly and effectively. The Board will continue to review and consider its options in relation to the present arrangement at a time when it is appropriate by taking into account the circumstances of the Group as a whole.



## COMPLIANCE WITH MODEL CODE

The Company has adopted its own Code for Securities Transactions by Directors (the “**Company’s Code**”), the stipulations of which are no less exacting than those set out in the Model Code, as a code of conduct for dealing in securities of the Company by the Directors.

Specific enquiries have been made with the Directors, and all Directors confirmed in writing that they have complied with the required standards in respect of securities transactions by the Directors set out in the Model Code and the Company’s Code during the six months ended 30 June 2022.

## REVIEW OF INTERIM RESULTS

The Group’s unaudited consolidated interim results for the six months ended 30 June 2022 have been reviewed by the audit committee of the Company and the auditor of the Company, KPMG.

## INTERIM DIVIDEND

The Board resolved not to declare an interim dividend for the six months ended 30 June 2022.

## DEFINITIONS

“Board”	the board of Directors
“CGN”	China General Nuclear Power Corporation (中國廣核集團有限公司), a state-owned enterprise established in the PRC and the controlling shareholder of the Company
“CGN Energy International”	CGN Energy International Holdings Co., Limited (中國廣核能源國際控股有限公司), an indirectly wholly-owned subsidiary of CGN incorporated in Hong Kong with limited liability and the immediate shareholder of the Company
“CGN Finance”	CGN Finance Co., Ltd. (中廣核財務有限責任公司), a company established in the PRC and a fellow subsidiary of the Company
“CGNPC Huasheng”	CGNPC Huasheng Investment Limited (中廣核華盛投資有限公司), a company established in Hong Kong and a fellow subsidiary of the Company
“CGN Hubei”	CGN (Hubei) Integrated Energy Services Company Limited (中廣核(湖北)綜合能源服務有限公司), a company established in the PRC which was an indirect wholly-owned subsidiary of the Company

“CGN Solar Energy”	CGN Solar Energy Development Co., Ltd. (中廣核太陽能開發有限公司), a company established in the PRC and a non-wholly owned subsidiary of CGN
“CGN Wind Energy”	CGN Wind Power Co., Ltd. (中廣核風電有限公司), a company established in the PRC and a non-wholly owned subsidiary of CGN
“Companies Ordinance”	the Companies Ordinance (Chapter 622 of the Laws of Hong Kong), as amended, supplemented or otherwise modified from time to time
“Company” or “We”	CGN New Energy Holdings Co., Ltd., a company incorporated in Bermuda with limited liability, the Shares of which are listed on the Main Board of the Stock Exchange
“Consolidated Installed Capacity”	the aggregate installed capacity of our project companies that we fully consolidated in our consolidated financial statements. It is calculated by including 100% of the installed capacity of our project companies that we fully consolidate in our consolidated financial statements and are deemed as our subsidiaries. Consolidated Installed Capacity does not include the capacity of our associated companies
“Corporate Governance Code”	Corporate Governance Code contained in Appendix 14 to the Listing Rules
“Daesan I Power Project”	a 507.0 MW oil-fired project in Korea
“Directors”	the directors of the Company
“Group”	the Company and its subsidiaries from time to time
“GW”	gigawatt, equal to one million kilowatts
“GWh”	gigawatt-hour, or one million kilowatt-hours. GWh is typically used as a measure for the annual energy production of large power projects
“HK\$”	Hong Kong dollars, the lawful currency of Hong Kong

“Hong Kong”	The Hong Kong Special Administrative Region of the PRC
“IAS”	International Accounting Standards
“Korea”	the Republic of Korea
“KRW”	Korean Won, the lawful currency of the Republic of Korea
“kWh”	kilowatt-hour, the standard unit of energy used in the power industry. One kilowatt-hour is the amount of energy that would be produced by a generator producing one thousand watts for one hour
“Listing Rules”	the Rules Governing the Listing of Securities on the Stock Exchange (as amended from time to time)
“Model Code”	Model Code for Securities Transactions by Directors of Listed Issuers contained in Appendix 10 to the Listing Rules
“MW”	megawatt, or one million watts. The installed capacity of power projects is generally expressed in terms of MW
“NDRC”	National Development and Reform Commission of the PRC
“NEA”	National Energy Administration of the PRC
“PRC” or “China”	the People’s Republic of China, and for the purpose of this announcement, excludes Hong Kong, The Macau Special Administrative Region of the PRC and Taiwan
“RMB”	Renminbi, the lawful currency of the PRC
“Share(s)”	ordinary share(s) of HK\$0.0001 each in the share capital of the Company
“Stock Exchange”	The Stock Exchange of Hong Kong Limited
“TWh”	terawatt-hour, or one million megawatt-hours. TWh is typically used as a measure for the annual energy production of a region or a country

“US\$”	United States dollars, the lawful currency of the United States of America
“Yulchon I Power Project”	a 592.8 MW gas-fired project in Korea
“Yulchon II Power Project”	a 946.3 MW gas-fired project in Korea
“%”	per cent.

By Order of the Board  
**CGN New Energy Holdings Co., Ltd.**  
**Zhang Zhiwu**  
*Chairman, President and Executive Director*

Hong Kong, 23 August 2022

*As at the date of this announcement, the Board comprises seven Directors, namely:*

<i>Chairman, President and Executive Director</i>	<i>:</i>	<i>Mr. Zhang Zhiwu</i>
<i>Non-executive Directors</i>	<i>:</i>	<i>Mr. Wang Hongxin, Mr. Chen Xinguo and Mr. Ren Liyong</i>
<i>Independent Non-executive Directors</i>	<i>:</i>	<i>Mr. Wang Minhao, Mr. Yang Xiaosheng and Mr. Leung Chi Ching Frederick</i>