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)

Annual Results for the Year Ended 31 December 2022

HIGHLIGHTS OF THE ANNUAL RESULTS FOR THE YEAR ENDED 31 DECEMBER 2022

- Revenue for the year ended 31 December 2022 amounted to US$2,430.1 million, representing an increase of 36.9% from US$1,775.3 million for the year ended 31 December 2021.
- Profit for the year ended 31 December 2022 amounted to US$214.4 million, representing a decrease of 17.9% from US$261.1 million for the year ended 31 December 2021.
- Profit attributable to equity shareholders of the Company for the year ended 31 December 2022 amounted to US$195.1 million, representing a decrease of 20.1% from US$244.3 million for the year ended 31 December 2021.
- As a result of retrospective restatements due to amendments to IAS 16, the profit of the Group for the year ended 31 December 2021 increased by US$59.4 million from the comparative figures previously reported for the year ended 31 December 2021.
- If one-off adjustments are taken out, which mainly include (1) 2021 profit impact of such retrospective restatements of US$59.4 million, and (2) post-tax impairment losses recognized in respect of property, plant and equipment of US$61.8 million in 2022, the profit of the Group for the year ended 31 December 2022 would have increased by 34.0% from the comparative figures previously reported for the year ended 31 December 2021.

  The increase in profit was mainly attributable to (1) increase in fuel margin of Korea projects; and (2) contribution from increase in power generation from wind projects; partially offset by (3) increase in coal price that led to losses in associates.
- Earnings per share for the year ended 31 December 2022 amounted to 4.55 US cents, representing a decrease of 20.1% from 5.69 US cents for the year ended 31 December 2021.
- The Board recommended the payment of a final dividend for the year ended 31 December 2022 of 0.91 US cents per Share (equivalent to 7.09 HK cents per Share), totalling approximately US$39.0 million (equivalent to approximately HK$304.4 million), which is calculated based on 4,290,824,000 Shares in issue on 21 March 2023 (equivalent to 20% of profit for the year attributable to equity shareholders of the Company for the financial year of 2022 as dividends).

The Board is pleased to announce the annual results of the Group for the year ended 31 December 2022, together with the comparative figures for the corresponding period in 2021.

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

For the year ended 31 December 2022

	2022	2021
	US$'000	*US$'000*
		(Restated)
		(Note)
Revenue	**2,430,056**	1,775,305
Operating expenses:		
Coal, oil, gas and wood pellet	**1,247,302**	778,486
Depreciation of property, plant and equipment	**335,969**	266,346
Repair and maintenance	**29,971**	37,684
Staff costs	**109,395**	102,854
Recognition of loss allowance of trade and other receivables and contract assets	**2,791**	20,292
Other operating expenses	**114,976**	90,047
Total operating expenses	**1,840,404**	1,295,709
Operating profit	**589,652**	479,596
Other income	**42,699**	41,307
Other gains and losses	**(69,000)**	44
Finance costs	**(227,105)**	(188,216)
Share of results of associates	**(63,252)**	(37,551)
Profit before taxation	**272,994**	295,180
Income tax	**(58,573)**	(34,066)
Profit for the year	**214,421**	261,114

	2022 US$'000	2021 US$'000 (Restated) (Note)
Other comprehensive income for the year		
Items that will not be reclassified to profit or loss:		
Remeasurement of net defined benefit retirement scheme assets/obligations	**980**	599
Items that are/may be reclassified subsequently to profit or loss:		
Exchange difference arising on translation of foreign operations	**(182,042)**	(23,927)
Effective portion of changes in fair value of hedging instruments recognized during the year	**(8,793)**	12,580
Deferred tax credited/(charged) arising from fair value change in hedging instruments	**2,222**	(3,044)
Reclassification adjustments for amounts transferred to profit or loss		
– release of hedging reserve	**(110)**	(124)
– deferred tax credit arising on release of hedging reserve	**25**	30
Other comprehensive income for the year	**(187,718)**	(13,886)
Total comprehensive income for the year	**26,703**	247,228
Profit for the year attributable to:		
Equity shareholders of the Company	**195,143**	244,274
Non-controlling interests	**19,278**	16,840
	214,421	261,114
Total comprehensive income for the year attributable to:		
Equity shareholders of the Company	**18,335**	228,939
Non-controlling interests	**8,368**	18,289
	26,703	247,228
Earnings per Share		
– Basic *(US cents)*	**4.55**	5.69
– Diluted *(US cents)*	**4.55**	5.69

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 3.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

At 31 December 2022

	At 31 December	
	2022	2021
	US$'000	*US$'000*
		(Restated)
		(Note)
NON-CURRENT ASSETS		
Property, plant and equipment	**5,812,394**	6,255,323
Right-of-use assets	**105,248**	100,315
Goodwill	**154,596**	168,798
Interests in associates	**74,268**	149,238
Derivative financial instruments	**–**	8,645
Deferred tax assets	**24,757**	23,322
Financial assets designated at fair value through other comprehensive income	**3,411**	5,238
Net defined benefit retirement scheme assets	**170**	–
Other non-current assets	**276,177**	363,664
	6,451,021	7,074,543
CURRENT ASSETS		
Inventories	**66,328**	54,209
Trade receivables	**739,314**	744,471
Contract assets	**354,219**	186,735
Other receivables and prepayments	**111,458**	123,141
Amounts due from fellow subsidiaries	**5,494**	6,321
Tax recoverable	**524**	214
Derivative financial instruments	**8,300**	8,454
Pledged bank deposits	**152,270**	157,730
Short-term bank deposits	**14,359**	3,137
Cash and cash equivalents	**440,646**	374,999
	1,892,912	1,659,411

	At 31 December	
	2022	2021
	US$'000	*US$'000*
		(Restated)
		(Note)
CURRENT LIABILITIES		
Trade payables	**223,028**	129,505
Contract liabilities	**4,569**	4,719
Other payables and accruals	**483,420**	614,581
Amounts due to fellow subsidiaries	**110,743**	108,806
Amounts due to non-controlling shareholders		
– due within one year	**899**	2,153
Loans from fellow subsidiaries		
– due within one year	**651,952**	1,162,467
Bank borrowings – due within one year	**957,392**	763,503
Lease liabilities – due within one year	**4,864**	6,899
Government grants	**194**	212
Tax payable	**30,390**	12,299
	2,467,451	2,805,144
NET CURRENT LIABILITIES	**(574,539)**	(1,145,733)
TOTAL ASSETS LESS CURRENT LIABILITIES	**5,876,482**	5,928,810
NON-CURRENT LIABILITIES		
Other payables and accruals		
– due after one year	**3,409**	3,835
Amount due to a non-controlling shareholder		
– due after one year	**1,154**	1,183
Loans from fellow subsidiaries		
– due after one year	**876,591**	856,821
Bank borrowings – due after one year	**3,407,088**	3,482,388
Lease liabilities – due after one year	**32,378**	28,648
Government grants	**7,519**	9,345
Net defined benefit retirement scheme obligations	**–**	1,683
Deferred tax liabilities	**48,484**	49,696
	4,376,623	4,433,599
NET ASSETS	**1,499,859**	1,495,211

	At 31 December	
	2022	2021
	US$'000	*US$'000*
		(Restated)
		(Note)
CAPITAL AND RESERVES		
Share capital	**55**	55
Reserves	**1,362,469**	1,373,635
Total equity attributable to equity shareholders of the Company	**1,362,524**	1,373,690
Non-controlling interests	**137,335**	121,521
TOTAL EQUITY	**1,499,859**	1,495,211

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 3.

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 segments:

For the year ended 31 December 2022

	Power plants in the PRC *US$'000*	**Power plants in Korea** *US$'000*	**Management companies** *US$'000*	**Total** *US$'000*
Segment revenue – external	**1,024,780**	**1,377,435**	**27,841**	**2,430,056**
Segment results	**287,229**	**85,096**	**1,326**	**373,651**
Unallocated other income				**32**
Unallocated operating expenses				**(5,796)**
Unallocated finance costs				**(31,641)**
Share of results of associates				**(63,252)**
Profit before taxation				**272,994**

For the year ended 31 December 2021 (Restated)

	Power plants in the PRC *US$'000*	Power plants in Korea *US$'000*	Management companies *US$'000*	Total *US$'000*
Segment revenue – external	883,572	849,322	42,411	1,775,305
Segment results	325,237	31,682	2,020	358,939
Unallocated other income				48
Unallocated operating expenses				(556)
Unallocated finance costs				(25,700)
Share of results of associates				(37,551)
Profit before taxation				295,180

The following is an analysis of the Group's assets and liabilities by reportable segments:

	At 31 December	
	2022	2021
	US$'000	*US$'000*
		(Restated)
Segment assets		
Power plants in the PRC	**6,743,376**	7,065,248
Power plants in Korea	**1,481,181**	1,478,564
Management companies	**3,050**	4,754
Total segment assets	**8,227,607**	8,548,566
Interests in associates	**74,268**	149,238
Unallocated		
– Right-of-use assets	**2,258**	3,381
– Others	**39,800**	32,769
Consolidated assets	**8,343,933**	8,733,954
Segment liabilities		
Power plants in the PRC	**5,149,935**	5,526,998
Power plants in Korea	**876,975**	895,278
Management companies	**772**	958
Total segment liabilities	**6,027,682**	6,423,234
Unallocated		
– Bank borrowings	**100,000**	100,000
– Loans from fellow subsidiaries	**700,000**	700,000
– Lease liabilities	**2,274**	3,381
– Others	**14,118**	12,128
Consolidated liabilities	**6,844,074**	7,238,743

NOTES

1. GENERAL

The Company is incorporated in Bermuda as an exempted company with limited liability under the Companies Act 1981 of Bermuda and the 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 Group's consolidated financial statements for the year ended 31 December 2022, but is derived from those financial statements.

The consolidated financial statements have been prepared in accordance with accounting policies which conform with IFRSs (as defined below). In addition, the consolidated financial statements include applicable disclosures required by the Listing Rules and the Hong Kong Companies Ordinance for the year ended 31 December 2022.

2. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS

The consolidated financial statements have been prepared in accordance with all applicable International Financial Reporting Standards ("**IFRSs**"), which collective term includes all applicable individual International Financial Reporting Standards, International Accounting Standards ("**IASs**") and Interpretations issued by the International Accounting Standards Board ("**IASB**"). In addition, the consolidated financial statements include applicable disclosures required by the Listing Rules and by the Hong Kong Companies Ordinance.

The consolidated financial statements for the year ended 31 December 2022 comprise the Group and the Group's interests in its associates.

The measurement basis used in the preparation of the consolidated financial statements is the historical cost basis except that investments in equity securities and derivative financial instruments are stated at their fair value. The Group had net current liabilities of approximately US$574.5 million as at 31 December 2022. CGN Finance Co., Ltd. ("**CGN Finance**") and CGN Wind Energy, the fellow subsidiaries of the Company, have confirmed in writing that despite the loans from CGN Finance of RMB700.0 million (equivalent to US$100.5 million) and CGN Wind Energy of RMB3,800.0 million (equivalent to US$545.6 million) which are due for repayment within twelve months from 31 December 2022, they will not cancel the existing loan facilities within twelve months from 31 December 2022 and that the loans will be extended upon expiry. Furthermore, taking into account the financial resources of the Group, the Group has unutilized general facilities of US$1,398.7 million as at 31 December 2022 for the next twelve months from the end of the reporting period. In addition, the directors of the Company have reviewed the Group's cash flow projections prepared by the management of the Group. The cash flow projections cover a period not less than twelve months from the end of the reporting period.

Taking into account the above-mentioned considerations, the directors of the Company are of the opinion that the Group has sufficient working capital to meet in full its financial obligations as they fall due for at least the next twelve months from the end of the reporting period and accordingly, these consolidated financial statements have been prepared on a going concern basis.

3. CHANGES IN ACCOUNTING POLICIES

The Group has applied the following amendments to IFRSs issued by the IASB to these 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:

	As previously reported	**Impact on application of amendments to IAS 16**	**As restated**
	US$'000	*US$'000*	*US$'000*
Consolidated statement of financial position at 31 December 2021			
Property, plant and equipment	6,195,027	60,296	6,255,323
Total non-current assets	7,014,247	60,296	7,074,543
Total assets less current liabilities	5,868,514	60,296	5,928,810
Deferred tax liabilities	49,415	281	49,696
Total non-current liabilities	4,433,318	281	4,433,599
Net assets	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
Total equity	1,435,196	60,015	1,495,211

	As previously reported	Impact on application of amendments to IAS 16	As restated
	US$'000	*US$'000*	*US$'000*
Consolidated statement of profit or loss and other comprehensive income for the year ended 31 December 2021			
Revenue	1,694,658	80,647	1,775,305
Coal, oil, gas and wood pellet	771,190	7,296	778,486
Depreciation of property, plant and equipment	265,029	1,317	266,346
Staff costs	96,680	6,174	102,854
Other operating expenses	83,869	6,178	90,047
Total operating expenses	1,274,744	20,965	1,295,709
Operating profit	419,914	59,682	479,596
Profit before taxation	235,498	59,682	295,180
Income tax	(33,774)	(292)	(34,066)
Profit for the year	201,724	59,390	261,114
Exchange difference arising on translation of foreign operations	(24,552)	625	(23,927)
Other comprehensive income for the year	(14,511)	625	(13,886)
Total comprehensive income for the year	187,213	60,015	247,228
Profit for the year attributable to:			
Equity shareholders of the Company	184,762	59,512	244,274
Non-controlling interests	16,962	(122)	16,840
Total comprehensive income for the year attributable to:			
Equity shareholders of the Company	168,801	60,138	228,939
Non-controlling interests	18,412	(123)	18,289

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 profit of the Group for the year ended 31 December 2021 increased by US$59.4 million from the comparative figures previously reported for the year ended 31 December 2021.

If one-off adjustments are taken out, which mainly include (1) 2021 profit impact of such retrospective restatements of US$59.4 million, and (2) post-tax impairment losses recognized in respect of property, plant and equipment of US$61.8 million in 2022, the profit and earnings per share of the Group for the year ended 31 December 2022 would have increased by 34.0% and 35.9% respectively from the comparative figures previously reported for the year ended 31 December 2021.

In 2022, the revenue of the Group amounted to US$2,430.1 million, representing an increase of 36.9% compared with last year. In 2022, the operating profit of the Group amounted to US$589.7 million, representing an increase of 22.9% compared with last year.

The profit attributable to equity shareholders of the Company amounted to US$195.1 million, representing a decrease of US$49.2 million or 20.1% compared with last year. In 2022, the profit of the Group amounted to US$214.4 million, representing a decrease of US$46.7 million or 17.9% compared with last year.

Revenue

In 2022, the revenue of the Group amounted to US$2,430.1 million, representing an increase of 36.9% compared with US$1,775.3 million of last year. The revenue derived from wind projects in the PRC amounted to US$692.8 million, representing an increase of 21.7% compared with US$569.2 million of last year. Such increase was mainly attributable to the increase in power generation and the newly commissioned installed capacity from the wind projects.

The revenue derived from Korea amounted to US$1,377.4 million, representing an increase of 62.2% compared with US$849.3 million of last year. Such increase in revenue 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 2022, the operating expenses of the Group amounted to US$1,840.4 million, representing an increase of 42.0% compared with US$1,295.7 million of last year. The increase in operating expenses was mainly due to substantial increase in gas costs of Yulchon I & II Power Projects. In addition, the commencement of operation of the new wind projects has resulted in the increase of depreciation and staff costs.

Operating Profit

In 2022, the operating profit, which is equal to revenue minus operating expenses, of the Group amounted to US$589.7 million, representing an increase of US$110.1 million or 22.9% compared with US$479.6 million of last year. The increase in operating profit was mainly caused by the increase in power generation from wind projects and the increase in fuel margin of Korea projects.

Other Income

Other income mainly represented income on sales of generating rights and capacity, interest income and government grants. In 2022, other income of the Group amounted to US$42.7 million, representing an increase of US$1.4 million or 3.4% compared with US$41.3 million of last year.

Other gains and losses

In 2022, the other losses amounted to US$69.0 million. The other losses mainly represented impairment losses of US$45.0 million and US$21.8 million recognized in respect of property, plant and equipment for the PRC wind projects and Korea projects respectively.

Finance Costs

In 2022, the finance costs of the Group amounted to US$227.1 million, representing an increase of US$38.9 million or 20.7% compared with US$188.2 million of last year. The increase in finance costs was mainly attributable to the increase in interest expenses when more wind projects gradually commenced operations during 2021 and 2022 and increase in interest rates .

Share of Results of Associates

In 2022, the share of losses of associates amounted to US$63.3 million, representing an increase of US$25.7 million compared with US$37.6 million of last year. The increase in losses of the associates was mainly affected by the increase in market coal price during the year.

Loss on Disposal of a Subsidiary

In 2022, the Group entered into an equity transfer agreement to dispose of the entire equity interest in CGN (Hubei) Integrated Energy Services Company Limited ("**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, when 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.

Income Tax

In 2022, the income tax of the Group amounted to US$58.6 million, representing an increase of US$24.5 million or 71.9% compared with US$34.1 million of last year, which was mainly due to the expiration of the preferential tax rate period of certain subsidiaries in the PRC.

Liquidity and Capital Resources

The Group's cash and cash equivalents increased from US$375.0 million as at 31 December 2021 to US$440.6 million as at 31 December 2022, which was mainly due to the increase in net cash generated from operating activities.

Net Debt/Equity Ratio

The Group's net debt/equity ratio decreased from 3.94 as at 31 December 2021 to 3.64 as at 31 December 2022, which was mainly due to the decrease in loans from fellow subsidiaries.

Dividend

At the Board meeting held on 21 March 2023, the Board recommended the payment of a final dividend for the year ended 31 December 2022 of 0.91 US cents per Share (equivalent to 7.09 HK cents per Share), totalling approximately US$39.0 million (equivalent to approximately HK$304.4 million), which is calculated based on 4,290,824,000 Shares in issue on 21 March 2023. The payout ratio of the proposed dividend is 20%.

Earnings per Share

	Year ended 31 December	
	2022	2021
	US cents	*US cents*
		(Restated)
Earnings per share, basic and diluted – calculated based on the number of ordinary shares outstanding at year end	**4.55**	5.69

	Year ended 31 December	
	2022	2021
	US$'000	*US$'000*
		(Restated)
Earnings for the purposes of calculating basic and diluted earnings per share (profit for the year attributable to ordinary equity shareholders of the Company)	**195,143**	244,274
	'000	*'000*
Number of ordinary shares outstanding at year end	**4,290,824**	4,290,824

Trade Receivables

	As at 31 December	
	2022	2021
	US$'000	*US$'000*
Trade receivables – contracts with customers	**751,352**	760,992
Less: allowance for credit losses	**(12,038)**	(16,521)
	739,314	744,471

The following is an aging 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.

	As at 31 December	
	2022	2021
	US$'000	*US$'000*
0 – 60 days	**340,956**	221,325
61 – 90 days	**16,301**	30,168
91 – 180 days	**47,574**	88,368
Over 180 days	**334,483**	404,610
	739,314	744,471

As at 31 December 2022, the Group's trade receivables balance included debtors with aggregate carrying amount of US$317.8 million (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 31 December 2022, the Group's trade receivables balance included debtors with aggregate carrying amount of US$421.5 million (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 (《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 Group measures loss allowance for trade receivables and contract assets at an amount equal to lifetime ECLs, which is calculated using a provision matrix based on the historical settlement records, latest aging profile of those receivables and forward looking information that is available without undue cost and effort. As a result, during the year ended 31 December 2022, expected credit losses of US$3.2 million in respect of trade receivables were reversed (2021: recognition of expected credit losses of US$15.7 million) and expected credit losses of US$6.0 million in respect of contract assets were recognized (2021: US$4.7 million).

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

Contract Assets

	As at 31 December	
	2022	2021
	US$'000	*US$'000*
Tariff income from sales of renewable energy	**364,333**	191,453
Less: allowance for credit losses	**(10,114)**	(4,718)
	354,219	186,735

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 aging analysis of trade payables presented based on the invoice date at the end of the reporting period.

	As at 31 December	
	2022	2021
	US$'000	*US$'000*
0 – 60 days	**216,279**	127,066
61 – 90 days	**1,084**	318
Over 90 days	**5,665**	2,121
	223,028	129,505

The average credit period on purchases of goods is 27 days (2021: 22 days) for the year ended 31 December 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$6,451.0 million as at 31 December 2022, which was mainly due to the decrease in property, plant and equipment during the year.

Current assets increased from US$1,659.4 million as at 31 December 2021 to US$1,892.9 million as at 31 December 2022, which was mainly attributable to the increase in contract assets.

Current liabilities decreased from US$2,805.1 million as at 31 December 2021 to US$2,467.5 million as at 31 December 2022, which was mainly due to the decrease in loans from fellow subsidiaries due within one year 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$4,376.6 million as at 31 December 2022, which 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$4,364.5 million as at 31 December 2022. Details of bank borrowings are as follows:

	As at 31 December	
	2022	2021
	US$'000	*US$'000*
Secured	**2,864,220**	3,188,682
Unsecured	**1,500,260**	1,057,209
	4,364,480	4,245,891

	As at 31 December	
	2022	2021
	US$'000	*US$'000*
The maturity profile of bank borrowings is as follows:		
Within 1 year	**957,392**	763,503
After 1 year but within 2 years	**397,449**	399,027
After 2 years but within 5 years	**1,369,181**	1,191,136
Over 5 years	**1,640,458**	1,892,225
	3,407,088	3,482,388
	4,364,480	4,245,891

As at 31 December 2022, the Group had committed unutilized banking facilities of US$2,022.5 million (2021: US$2,445.9 million).

Loans from Fellow Subsidiaries

As at 31 December 2022 and 2021, the amounts represent:

	Notes	**2022** ***US$'000***	2021 *US$'000*
Loans from fellow subsidiaries – due within 1 year:			
CGN Finance	*i(a)*	**106,335**	174,340
CGN Wind Energy	*ii*	**545,617**	988,127
		651,952	1,162,467
Loans from fellow subsidiaries – due after 1 year:			
CGN Finance	*i(b)*	**176,591**	156,821
CGNPC Huasheng Investment Limited ("**CGNPC Huasheng**")	*iii*	**250,000**	250,000
China Clean Energy Development Limited ("**China Clean Energy**")	*iv*	**450,000**	450,000
		876,591	856,821

Notes:

(i)(a) Loans from CGN Finance of RMB706.1 million (equivalent to US$101.4 million) (31 December 2021: RMB1,111.5 million (equivalent to US$174.3 million)) are unsecured, interest bearing ranged from 3.45% to 4.21% (31 December 2021: 3.45% to 4.21%) per annum and repayable within one year; and

Loan from CGN Finance of RMB34.4 million (equivalent to US$4.9 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 0.60% to 1% per annum and repayable within one year.

(i)(b) Loans from CGN Finance of RMB61.7 million (equivalent to US$8.9 million) (31 December 2021: RMB50.1 million (equivalent to US$7.9 million)) are unsecured, interest bearing ranged from 3.60% to 4.21% (31 December 2021: 4.21%) per annum and repayable in 2030 to 2035 (31 December 2021: 2035); and

Loans from CGN Finance of RMB1,168.2 million (equivalent to US$167.7 million) (31 December 2021: RMB949.8 million (equivalent to US$149.0 million)) are unsecured, interest bearing at the RMB Loan Prime Rate minus 0.6% to 1.35% (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), RMB1,100.0 million (equivalent to US$172.5 million) and RMB4,200.0 million (equivalent to US$658.8 million) as at 31 December 2021 were repaid during the year.

Loan from CGN Wind Energy of RMB3,800.0 million (equivalent to US$545.6 million) is unsecured, interest bearing at 3.50% per annum and repayable in 2023.

(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 expenditure decreased by US$897.0 million to US$362.8 million in 2022 from US$1,259.8 million in 2021.

Contingent Liabilities

As at 31 December 2022 and 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 31 December 2022, the total book value of the pledged assets amounted to US$1,785.0 million (2021: US$2,202.6 million).

Employees and Remuneration Policy

As at 31 December 2022, the Group had about 1,936 full-time employees, with the majority 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. The PRC government is directly responsible for the payment of the benefits to these employees.

In Korea, the Group is required by law to contribute 4.5% of the employees' monthly average salaries for the national pension, 3.545% for national health insurance (12.81% of the national health insurance contribution for long term care insurance), 1.15% for unemployment insurance, 1.06%(Seoul Office)/0.804%(Yulchon)/0.804%(Daesan) for the industrial accident compensation insurance and 0.06% for a wage claim guarantee fund.

In Hong Kong, the Group participates in a mandatory provident fund scheme established under the Mandatory Provident Fund Schemes Ordinance (Cap. 485). 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.

II. Industry Overview

China's power market:

According to the data published by the NEA, the installed capacity of the PRC amounted to 2,564.1 GW in 2022, representing a year-on-year increase of 7.8%, while electricity consumption amounted to 8,637.2 TWh, representing a year-on-year increase of 3.6%.

The accumulated grid-connected wind power capacity for 2022 reached 365.4 GW, with a year-on-year increase of 11.2%, while the accumulated grid-connected solar power capacity recorded 392.6 GW, with a year-on-year increase of 28.1%.

The 36th group study session of the 19th Political Bureau of the Central Committee of the Communist Party of China (the "**CPC**") in 2022 pointed out that "for achieving dual carbon goal, we ourselves must do it, instead of doing it as required by others". To reach "Carbon Peak, Carbon Neutrality" is the crying need to achieve national sustainable development, economic transformation and upgrades and promotion of the harmonious coexistence of humans and nature. Also, green and low carbon development is the long term task to achieve comprehensive developments of the economy and society, and the prospects of the new energy development is wide, firm and long-term.

The report of the 20th National Congress of the CPC clearly stated that "the primary task of building China into a modern socialist country in all respects is to promote high-quality development", which further highlighted the overall and long-term implications of development quality. The report of the 20th National Congress focused on green development and proposed "actively and steadily promote carbon peak and carbon neutrality", "thoroughly pushing forward energy reform" and "make faster progress in planning and developing new energy system". In order to achieve the "dual carbon" goal, a number of green policies have been releasing bonus since 2022, such as the "Raft of Measures and Policies to Firmly Stabilize the Economy" (《紮實穩住經濟的一籃子政策措施》), 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》) and the "14th Five-Year Plan for Renewable Energy Development" (《「十四五」可再生能源發展規劃》), which marked that the intensification and acceleration of new energy investment has become a new normal. Under the "dual carbon" goal, the room for development of thermal power is limited and various types of investment entities jostle to enter the new energy industry, thus the industry development has entered a period of rapid growth.

Large Scale and Intensified Development Trends:

With the exploration of the "dual carbon" goal, the new energy industry is on track, wind power and photovoltaic power have advanced to an era of grid parity which has presented more large-scale and intensive development trends, and large-scale wind power and photovoltaic power bases have become the highlight of the plans.

In February 2022, the NDRC and the NEA issued the notice on "Issuing the Layout Plan of Large-scale Wind Power Photovoltaic Bases Focusing on Deserts, Gobi and Barren Lands" (《以沙漠、戈壁、荒漠地區為重點的大型風電光伏基地規劃佈局方案》). The Plan proposed to plan and develop large-scale wind power and photovoltaic bases focusing on four deserts, namely Kubuqi, Ulan Buh, Tengger and Badanjilin, being supplemented by other deserts and Gobi area and taking into account coal mining subsidence areas. The Plan stated explicitly that, by 2030, the total installed capacity of wind and photovoltaic power bases to be planned and constructed will be 455 GW, of which, the planned installed capacity of the bases located at Kubuqi, Ulan Buh, Tengger and Badanjilin deserts will be 284 GW, the planned installed capacity of coal mining subsidence areas will be 37 GW and the planned installed capacity of other deserts and Gobi area will be 134 GW. The total installed capacity of wind and photovoltaic power bases to be planned and constructed during the period of "14th Five-Year Plan" will be approximately 200 GW, while the total installed capacity of wind and photovoltaic power bases to be planned and constructed during the "15th Five-Year Plan" period will be approximately 255 GW.

In March 2022, the NDRC and the NEA issued the "Plan for Modern Energy System during the 14th Five-Year Plan" (《「十四五」現代能源體系規劃》). The Plan proposed the target on installed capacity, from 2022 to 2025, the new installed capacity of hydropower will increase by approximately 25 GW and the new installed capacity of nuclear power will increase by approximately 17 GW. 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. A new power system will be constructed in order to establish a modern energy market. The Plan highlighted the planning and construction of a new energy supply and consumption system based on large-scale wind and photovoltaic power bases, supported by coal power and carried by ultra-high voltage transmission and distribution circuits.

In March 2022, the NEA issued the "Guiding Opinion on Energy Work in 2022" (《2022年能源工作指導意見》). The Opinion proposed to actively promote the construction of complementary hydropower, wind and photovoltaic power bases; deploy grid side energy storage at key nodes to encourage the construction of smart micro-grid focusing on new energy consumption; optimize the offshore wind power layout and set up a demonstration on the construction of wind power in deep seas; and continue with the development and construction of roof distributed photovoltaic power within a county.

In June 2022, nine governmental authorities including the NDRC, the NEA and the Ministry of Finance issued the "14th Five-Year Plan for Renewable Energy Development" (《「十四五」可再生能源發展規劃》). The Plan stated explicitly that, by 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 Plan stated that base-driven and large-scale development will be optimized and promoted in the "three northern" regions, integrated development of hydro power, wind power and photovoltaic power will be coordinated and advanced in the southwestern region, local development in the vicinity will be promoted in the central and southeastern region, and the development of offshore wind power clusters will be actively promoted in the eastern coastal region. The development will be supported by key bases and explicitly focused on deserts, Gobi and barren lands. Also, the construction of seven onshore new energy bases located at the upstream of the Yellow River, Hexi Corridor, Jiziwan (几字彎) of the Yellow River, northern Hebei, Songliao, Xinjiang and the downstream of the Yellow River, two complementary hydropower, wind and photovoltaic power bases located at Southeast Tibet and Sichuan-Yunnan-Guizhou-Guangxi as well as five offshore wind power base clusters will be accelerated.

High-Quality Development of the New Energy:

In order to complete the "dual carbon" goal in a better way, China has released a series of policies to guide new energy towards high-quality development in 2022.

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" (《「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. The Plan stated explicitly that increased efforts shall be made to develop new types of energy storage technologies on the power generation side and focus on the layout of system-friendly new energy power stations equipped with reasonable new energy storage in Inner Mongolia, Xinjiang, Gansu, Qinghai and other regions with high penetration rate of new energy. Leveraging on existing assets and the newly-added inter-provincial and inter-regional electricity transmission channels during the "14th Five-Year Plan", large-scale inter-provincial delivery and consumption of new energy can be promoted through the multi-energy complementary model of "integration of wind, solar, water and coal storage". Coupled with the development of large-scale wind power and photovoltaic power bases in deserts, Gobi and barren lands and the exploration of hydrogen production by renewable energy, large-scale delivery of new energy will be supported. Combining with large-scale development of offshore wind power bases in areas like Guangdong, Fujian, Jiangsu, Zhejiang and Shandong, the study of offshore wind power equipped with new energy storage will be carried out. The construction of new energy storage or wind and solar power storage facilities using the existing factory address of retired thermal power units and power transmission and transformation facilities will be explored. The Plan also suggested to explore the promotion of shared energy storage model. New energy power stations are encouraged to allocate energy storage by way of self-construction, leasing or purchase, so as to give full play to the function of sharing of energy storage in terms of "multi-purpose in one station". Various types of entities will be supported actively to commence the application demonstration of innovative commercial models like shared energy storage or cloud energy storage and the construction of a pilot shared energy storage transaction platform and operation monitoring system.

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 the construction of a clean, low-carbon, safe and efficient energy system will be accelerated. The Plan proposed to innovate the mode of new energy development and utilization, accelerate the building of new type of power systems to accommodate the gradual increase in the proportion of new energy and deepen the reform of "delegating, regulating and serving" in the new energy sector, so as to guarantee reasonable room for development of new energy and give full play to the benefits of new energy in terms of ecological and environmental protection. At the same time, the Plan stated the direction of new energy development to comprehensively improve the regulation capacity and flexibility of the power system, focus on improving the ability of power distribution networks to accept distributed new energy, improve the system of weighting responsibility for the consumption of electricity generated from renewable energy and improve the land use regulations of new energy projects.

In May 2022, the Ministry of Water Resources issued the "Guiding Opinion of the Ministry of Water Resources on Strengthening the Management and Control of Shoreline Space of Rivers and Lakes" (《水利部關於加強河湖水域岸線空間管控的指導意見》). The Guiding Opinion required managing and controlling various types of usage of shorelines of waters strictly. Projects like photovoltaic power stations and wind power plants cannot be constructed in rivers, lakes and reservoirs. The construction of photovoltaic and wind power projects adjacent to lakes and on the branch of reservoirs are subject to scientific researches and strict management and control. The Guiding Opinion stated explicitly that each province (autonomous region and municipality) may impose specific requirement on various types of usage of shorelines of waters according to laws and regulations in light of its actual situation. Further requirements will be imposed on the lands for the new energy projects and those projects which cannot meet the requirements may be terminated.

In December 2022, the Central Committee of the CPC and the State Council issued the "Summary of the Strategic Plan for Expanding Domestic Demand (2022-2035)" (《擴大內需戰略規劃綱要(2022-2035年)》), and then the NDRC issued the "Implementation Plan of Expanding Domestic Demand Strategies in the 14th Five-Year Plan" (《「十四五」擴大內需戰略實施方案》). The Implementation Plan clearly stated: strengthening the construction of the energy infrastructure. Improving the layout and structure of the main grid; actively promoting the actions of power distribution network reconstruction and the consolidation and improvement works for rural grid; promoting the construction of a series of coal sites for green transformation and high-quality development; promoting the construction of multiple-energy complement clean-energy site; and promoting the construction of the innovation power system.

Achieve Price Parity of Offshore Wind Power:

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 price 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 first half of 2022, Shandong Province implemented provincial subsidy policy targeting at offshore wind power. On 1 April 2022, 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 kW 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.

In November 2022, Shanghai Development and Reform Commission issued a notice in relation to the "Measures for Special Funds for Development of Renewable Energy and New Energy in Shanghai"(《上海市可再生能源和新能源發展專項資金扶持辦法》). The incentive standard of offshore wind power projects in deep sea and offshore wind power projects with offshore distance greater than or equal to 50 kilometres was RMB500 per kW. The annual incentive amounts of a project shall not exceed RMB50 million.

Improve a Power Market System Coordinated Various Types of Transactions:

During 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 Opinion 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. It explicitly stated 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 July 2022, the pilot operation of the Southern Regional Power Market was launched, marking the first implementation of a national unified electricity market system in the southern region. In September 2022, the "Implementation Opinion of Liaoning Province on Accelerating the Construction of a National Unified Electricity Market System" (《遼寧省落實加快建設全國統一電力市場體系的實施意見》) was issued and implemented, marking that Liaoning became the first province in the country for the implementation of the national decision and plan to accelerate the construction of a national unified electricity market system. It also means that the construction of a national unified electricity market system has been initially implemented at different levels at the regional and provincial levels and has been continuously and steadily advanced.

In November 2022, the NEA issued a notice on the public consultation on the "Basic Rules for the Electricity Spot Market (Draft for Comments)"(《電力現貨市場基本規則(徵求意見稿)》), which is the first time that a regulatory document of the electricity spot market rules is published at the national level. The Basic Rules clarified the objectives, paths, tasks and operational requirements for the construction of the electricity spot market, and also made detailed requirements for the participants in the market, market connection, credit management, etc., which is conducive to standardizing the operation and management of the electricity spot market, promoting the construction of a unified, open, competitive and orderly electricity market system, and will further promote the electricity spot market from pilot to nationwide promotion. The Basic Rules also mentioned that taking into account the development of the electricity market and the actual needs, China shall explore the establishment of a market-oriented capacity compensation mechanism to stimulate the investment and construction of various types of power sources, and ensure the adequacy of the system's power generation capacity, flexibility and operation safety.

Korean power market:

As the Korean power market is undergoing a transformation of energy structure, it is expected that there would be an increase in the use of renewable energy and more natural gas power plants in the future. As the operation of new power plants would intensify the competition in the power market, the profitability of Korean gas-fired power generation companies was hindered.

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 operation in the PRC and Korea power markets. The Group's business in the PRC covers 19 provinces, two autonomous regions and a municipality with a wide geographical coverage and diversified business scope. As of 31 December 2022, the operations in the PRC and Korea accounted for approximately 75.9% and 24.1% of the Group's attributable installed capacity of 8,986.5 MW, respectively. Clean and renewable energy projects (namely, wind, solar, gas-fired, hydro, fuel cell and biomass projects) accounted for 82.6% of the Group's attributable installed capacity; and conventional energy projects (namely, coal-fired, oil-fired and cogen projects) accounted for 17.4% of the Group's attributable installed capacity.

The following table sets out items selected by us from the results of the Group (by fuel type):

US$ million	Korea Projects	PRC Coal-fired, Cogen and Gas-fired Projects	PRC Hydro Projects	PRC Wind Projects	PRC Solar Projects	Corporate	Total
For the year ended 31 December 2022							
Revenue	**1,377.4**	**151.1**	**18.8**	**692.8**	**137.1**	**52.9**	**2,430.1**
Operating expenses	**(1,261.6)**	**(143.4)**	**(10.9)**	**(297.9)**	**(67.1)**	**(59.5)**	**(1,840.4)**
Operating profit/(loss)	**115.8**	**7.7**	**7.9**	**394.9**	**70.0**	**(6.6)**	**589.7**
Profit/(loss) for the year	**62.7**	**(43.2)**	**8.0**	**241.2**	**45.7**	**(100.0)**	**214.4**
Profit/(loss) attributable to equity shareholders of the Company	**62.7**	**(49.9)**	**7.3**	**230.9**	**44.1**	**(100.0)**	**195.1**
For the year ended 31 December 2021 (Restated)							
Revenue	849.3	141.7	31.2	569.2	141.9	42.0	1,775.3
Operating expenses	(795.9)	(137.3)	(18.6)	(217.0)	(70.4)	(56.5)	(1,295.7)
Operating profit/(loss)	53.4	4.4	12.6	352.2	71.5	(14.5)	479.6
Profit/(loss) for the year	25.0	(16.7)	14.8	273.0	41.9	(76.9)	261.1
Profit/(loss) attributable to equity shareholders of the Company	25.0	(22.0)	14.0	267.5	36.7	(76.9)	244.3

Korea Projects

The increase in profit for the year from US$25.0 million to US$62.7 million was mainly attributable to the increase in fuel margin and the contribution from the 109.5 MW Daesan biomass project which commenced commercial operation in April 2021, which was partially offset by the post-tax impact of impairment losses recognized in respect of property, plant and equipment of US$16.8 million.

PRC Coal-fired, Cogen and Gas-fired Projects

The increase in loss for the year from US$16.7 million to US$43.2 million was mainly attributable to the increase in market coal price that led to the increase in loss of the associates.

PRC Wind Projects

In 2022, the Group's newly commissioned attributable installed capacity of wind projects amounted to 569.7 MW. The increase in revenue was mainly attributable to the increase in power generation from wind projects. Overall, the operating profit increased by US$42.7 million to US$394.9 million. Mainly affected by the post-tax impact of the impairment losses recognized in respect of property, plant and equipment of US$45.0 million, the profit of wind projects decreased to US$241.2 compared with last year.

PRC Solar Projects

In 2022, the Group's newly commissioned attributable installed capacity of solar projects amounted to 50.0 MW. With the progressive increase in power generation from solar projects, the profit slightly increased by US$3.8 million to US$45.7 million.

Installed Capacity

The attributable installed capacity of the Group's power assets as of 31 December 2022 and 2021 by fuel type are set out as follows:

	As at 31 December	
	2022	2021
	(MW)	*(MW)*
Clean and renewable energy portfolio		
Wind	**4,419.1**	3,849.4
Solar	**1,186.8**	1,136.8
Gas-fired	**1,655.0**	1,655.0
Hydro	**56.3**	94.1
Biomass	**109.5**	109.5
Subtotal	**7,426.7**	6,844.8
Conventional energy portfolio		
Coal-fired	**989.8**	989.8
Oil-fired	**507.0**	507.0
Cogen	**63.0**	63.0
Subtotal	**1,559.8**	1,559.8
Total attributable installed capacity	**8,986.5**	8,404.6

As at 31 December 2022, the attributable installed capacity of the Group reached 8,986.5 MW, representing a year-on-year increase of 6.9%, in particular, the newly added attributable installed capacity of wind power and solar power amounted to 619.7 MW in total. The attributable installed capacity of wind power amounted to 4,419.1 MW, representing a year-on-year increase of 569.7 MW or 14.8%; whereas the attributable installed capacity of solar power amounted to 1,186.8 MW, representing a year-on-year increase of 50.0 MW or 4.4%. The wind power and solar power accounted for 62.4% of the Group's attributable installed capacity. As at 31 December 2022, the consolidated installed capacity of the power plants reached 8,234.5 MW.

In 2022, the Group steadily promoted the development of its wind power business. The newly added attributable installed capacity was mainly distributed by region as follows: (1) 153.2 MW in Gansu Province, (2) 130.0 MW in Shandong Province, (3) 81.9 MW in Qinghai Province, (4) 76.5 MW in Jiangsu Province, (5) 56.3 MW in Guangxi Zhuang Autonomous Region, (6) 35.2 MW in Hunan Province (7) 26.6 MW in Henan Province and (8) 10.0 MW in Inner Mongolia Autonomous Region.

In 2022, the Group further strengthened the development of its solar business, and the newly added attributable installed capacity was mainly distributed by region as follows : (1) 50.0 MW in Anhui Province.

In the second half of 2022, the attributable installed capacity of the hydro projects of the Group decreased by 37.8 MW, as the cooperation of Group's Fushi I 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.

The Company has been adhering to the principle of high-quality development and expedited project construction. It is expected that the growth of new operating capacity in 2023 will remain steady.

Safety Management

During the development process, the Company has always insisted on taking General Secretary Xi Jinping's important statement on safety production and the thought of ecological civilization as the fundamental guidelines, and insisted on the people-centred development ideology, the mission of guarding employees' lives and safety, the people first and life first, the basic principles of "Safety First, Quality Foremost and Pursuing Excellence", and insisted on the goal of "zero fatalities, zero serious injuries and zero large equipment damage liability accidents". In 2022, we focused on the theme of safety and rule of law, continued to enhance the two key capabilities of autonomous management and standardized construction, implemented the responsibility of safety management in all aspects of production and operation, and embodied the connotation of "everyone is responsible for safe production" and "everyone is a protection wall" corporate safety culture. On the basis of legal compliance, we continued to improve our safety, quality and environmental management capabilities and performance, and achieved a highly stable safety situation by keeping the overall production safety situation under control.

The Company established and improved the safety production responsibility system for all staff, established a list of safety, quality and environmental responsibilities with clear boundaries of responsibility, matching responsibility and rights, horizontal to vertical, and all levels and positions, grasped one level and implemented it at all levels, ensured that the main responsibility for safety, quality and environment was performed in place, and carried out inspection of the performance of all staff, continuously strengthened the main responsibility for safety, quality and environment at all levels, focused on the main responsible unit or individual, strengthened technical and management means, improved long-term mechanisms, ensured that measures were implemented, and ensured that the responsibility for safety production for all staff was implemented.

The Company attached great importance to the construction of safety, quality and environmental standardization, implemented a special supervision mechanism for standardization, optimised the construction, evaluation and incentive mechanism for safety, quality and environmental standardization, promoted the deep integration of safety, quality and environmental standardization with daily work, and designated a special staff to supervise and help the key upgrading field stations of the Company. Taking international benchmarking as a grip, the Company continued to build up the core capacity of offshore wind power projects and established a management system for offshore wind power projects to help the high-quality development of the business of the offshore wind power business.

The Company continued to promote the construction of a dual-prevention mechanism, improved the risk identification process in conventional areas, carried out whole life cycle risk identification and evaluation for new business areas, and formulated management and control measures in accordance with the requirements of one policy per case, introduced targeted safety, quality and environmental management and control programmes, and effectively improved the level of safety management. The Company carried out safety inspections and hidden danger investigations in a hierarchical and graded manner, and set up special incentives to improve the quality of hidden danger investigations. The Company organised special inspections such as safety production inspection, "four-no and two-direct" (no issuance of notice, no prior notice, no report listening, no reception or escort; direct rush to grassroots, direct rush to job site), inspections and quality supervision to dig deeper into on-site problems and hidden dangers and help improve on-site safety level. We carried out on-site stationing for the 20th National Congress of the CPC, to keep an eye on the key risks at the site to ensure a stable safety production situation during the conference and create a good atmosphere for the 20th National Congress.

The Company set up the goal of eliminating potential accidents from the root, and completed the three-year action plan for special rectification of production safety with high quality through regular summary assessment, on-site inspection and verification, and leading management implementation. We improved the list of responsibilities of all positions, clarified the relationship between all parties, established a working mechanism for all staff to perform their duties as inspectors, completed the rectification of the issues with high quality, and improved the management system and operating procedures of the Company.

The Company always kept in mind its role as a central enterprise and its highest political standing, continued to summarise its experience and good practices in dealing with the pandemic, actively optimised its prevention and control measures to cope with the new situation of the pandemic, and in the meantime, organised the procurement of sufficient quantities of pandemic prevention materials to ensure normal use by employees, reduced staff infection and avoided the occurrence of aggregated pandemic, so as to solidify the epidemic prevention line and promote the high-quality development of the Company's business.

Project Construction

In 2022, in the face of multiple challenges such as short construction period, multi-point spread of the pandemic and tight supply of main equipment such as components, the Company has always been vigorous and diligent, constantly improving its ability to refine process management and control and planning ahead to ensure steady and effective progress of construction. First, the Company enhanced its ability to identify and prevent risks, and made good plans for the opening phase of the project construction. Second, the Company strengthened the on-site management and control and the division's functional supervision responsibilities for contracting EPC projects. Third, the Company focused on improving on-site construction organization and construction efficiency. Fourth, the Company paid close attention to the acceptance work of the project before electrification and strengthened the level of production preparation.

Development of Preliminary Projects

In 2022, the Company resolutely implemented the principle of "grow bigger, stronger and better". Being market-oriented, the Company was committed to focusing and targeting on the high-end market and adhered to pioneering and innovating, which resulted in a stable increase in the capacity of resource reserves and achieved remarkable results in existing asset conversion.

In 2023, facing the competitive market conditions in respect of new energy and based on the development requirements of high quality and high objectives, the development efforts of the Company will regard the market as the orientation and value creation as the objective, so as to bring the role of markets in resource allocation into full play and promote the optimization and adjustment of the development layouts of the new energy market actively. The Company will persist to focus on the development of main responsibilities and main businesses (wind power and photovoltaic power), strive to be the pilot of innovation and endeavor to construct adjustable capacity building, so as to make greater contributions for "Carbon Peak, Carbon Neutrality".

Power Generation

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

	For the year ended 31 December	
	2022	2021
PRC Wind Projects	**9,370.8**	7,624.3
PRC Solar Projects	**1,692.4**	1,590.1
PRC Cogen and Gas-Fired Projects	**362.8**	418.2
PRC Hydro Projects	**488.4**	759.5
Korea Projects	**7,275.3**	7,769.9
Total	**19,189.7**	18,162.0

In 2022, the Company's production, operation and maintenance line overcame the adverse factors such as the decline in climatic resources, the frequent occurrence of extreme weather and the pandemic, always adhered to the main line of reliable power supply, focused on safeguarding production safety, strengthened safety production management and ensured power safety in all aspects; strengthened equipment quality improvement and safeguarded reliable power supply; firmly built a network information security prevention system and comprehensively protected information security, laying a solid foundation for the completion of the Company's annual power generation target and providing strong protection for stable power supply. As of 31 December 2022, the electricity generated by the Group's consolidated power generation projects amounted to 19,189.7 GWh, representing an increase of 5.7% from 18,162.0 GWh as compared with that of last year. The increase in power generation was mainly due to the contribution from newly commissioned wind and solar projects and from the increase in power generation of the existing wind and solar projects. The electricity generated by PRC wind projects and PRC solar projects reached 9,370.8 GWh and 1,692.4 GWh respectively, representing growth rates of 22.9% and 6.4%, respectively.

The electricity generated by PRC cogen and gas-fired projects amounted to 362.8 GWh, representing a year-on-year decrease of 13.2%. It was mainly due to the power generation of a cogen project in Jiangsu Province decreased as a result of the decrease of the local demands.

The power generation from PRC hydro projects reached 488.4 GWh, representing a year-on-year decrease of 35.7%, mainly due to the end of the cooperation between the Group's Zuojiang and Fushi I hydro projects in Guangxi Zhuang Autonomous Region and the local partner. Such hydro power stations were officially handed over to the local partner for operation and management in October 2021 and September 2022, respectively, resulting in a decrease in power generation from PRC hydro projects in 2022.

The power generation from Korea projects reached 7,275.3 GWh, mainly from gas-fired and biomass projects, representing a year-on-year decrease of 6.4%, mainly due to the gas-fired projects experienced a decrease in the load of power grid dispatch in 2022, resulting in a decrease of power generation of the Korea projects in 2022.

The total steam sold by the Group amounted to 3,087,000 tonnes, representing a decrease of 6.4% as compared with 2021.

The following table sets out the average utilization hour applicable to our projects for the Group:

Average utilization hour by fuel type[(1)]

	For the year ended 31 December	
	2022	2021
PRC Wind Projects[(2)]	**2,284**	2,383
PRC Solar Projects[(3)]	**1,414**	1,440
PRC Coal-fired Projects[(4)]	**5,018**	4,729
PRC Cogen Projects[(5)]	**4,163**	5,037
PRC Hydro Projects[(6)]	**3,996**	3,923
Korea Gas-fired Projects[(7)]	**4,065**	4,621

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 for the year ended 31 December 2022 for the PRC wind projects in major regions such as Gansu Province, Henan Province and Shandong Province were 1,800 hours, 2,569 hours and 2,190 hours, respectively. Average utilization hours for the PRC wind projects slightly decreased mainly because of the relatively unstable wind resources in 2022.

(3) Average utilization hours for the year ended 31 December 2022 for the PRC solar projects in major regions such as Inner Mongolia Autonomous Region, Anhui Province and Qinghai Province were 1,810 hours, 1,322 hours and 1,612 hours, respectively. Average utilization hours for the PRC solar projects remained stable compared to last year.

(4) Average utilization hour for the PRC coal-fired projects increased in 2022 due to increase in power generation arising from the increase in local demand.

(5) Average utilization hour for the PRC cogen projects decreased in 2022 due to decrease in local demand, which led to decrease in total volume of power generation.

(6) Average utilization hour for the PRC hydro projects remained stable compared to last year.

(7) Our Korea gas-fired power projects had lower average utilization hour in 2022 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 in 2022.

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

Weighted average tariff – Electricity (inclusive of VAT)[(1)]

	Unit	For the year ended 31 December **2022**	2021
PRC Wind Projects[(2)]	RMB per kWh	**0.57**	0.54
PRC Solar Projects[(3)]	RMB per kWh	**0.64**	0.66
PRC Coal-fired Projects	RMB per kWh	**0.50**	0.44
PRC Cogen Projects[(4)]	RMB per kWh	**0.47**	0.45
PRC Hydro Projects[(5)]	RMB per kWh	**0.30**	0.30
Korea Gas-fired Projects[(6)]	KRW per kWh	**251.67**	116.50
Weighted average tariff – steam (inclusive of VAT)			
PRC Cogen Projects[(7)]	RMB per ton	**286.26**	227.55

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 2022 mainly due to the higher tariff of the offshore wind power projects gradually commenced operations during 2021 and 2022.

(3) The weighted average tariff of our PRC solar projects decreased in 2022 mainly due to lower tariff of newly commissioned solar projects.

(4) The weighted average tariff for our PRC cogen projects excludes steam tariff.

(5) The weighted average tariff of our PRC hydro projects remained stable in 2022.

(6) The increase in weighted average tariff for our Korea gas-fired projects was in line with the increase in gas price in Korea.

(7) The increase in weighted average tariff of steam in 2022 was in line with the increase in PRC coal price.

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

		For the year ended 31 December	
	Unit	**2022**	2021
PRC weighted average standard coal price[(1)(2)]	RMB per ton	**1,436.5**	1,226.9
Korea weighted average gas price[(1)(3)]	KRW per Nm^3	**1,228.6**	566.1

Notes:

(1) The weighted average standard coal and the weighted average gas prices are determined based on the consumption of gas or coal in each applicable period.

(2) The PRC weighted average standard coal price in 2022 increased compared to 2021 due to an increase in market coal price.

(3) Our Korea weighted average gas price in 2022 increased substantially compared to 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

To contribute to the achievement of the "dual carbon" strategic goal, the Company continued to maintain its scale development while promoting technological innovation, ensuring high-end and stable operation of equipment, achieving cost reduction and efficiency enhancement, and perfecting and improving the efficiency of its existing assets.

Leading project of digital operation and maintenance. In the context of the low-carbon market in the energy industry, the Company focused on technologies related to grid-friendly new power systems, with the aim of improving the operational efficiency and the level of safe operation of the Company's power generation assets and achieving the goal of digital transformation of new energy projects through the integrated application of digital and intelligent technologies such as the internet, big data, cloud computing and artificial intelligence. The Company has been focusing on promoting demonstration projects such as onshore wind farms, digital twins for offshore wind turbine equipment and unattended photovoltaic power stations.

Integration project of advanced technology of offshore wind power. With the aim of enhancing, optimizing and expanding the offshore wind power work, the Company focused on the innovation goal of domestic first-class integration capability of advanced technology of offshore wind power, aiming at the development trend of key technologies of offshore wind power projects, accelerating the transformation and integrated application of innovation results, and grasping the market initiative of offshore wind power innovation and development. The Company focused on research on key technologies such as offshore price parity offshore wind power and deep-sea floating wind power.

In 2022, the Company was awarded the first batch of AAA-level Integration of Informatization and Industrialization Management System Certificate issued by the Ministry of Industry and Information Technology, and the building of digital operation and control capacity of the Company successfully passed the Requirements for Informatization and Industrialization Integration Management System (《信息化和工業化融合管理體系要求》) GB/T 23001-2017 and the Requirements for New Type of Capabilities Classification of Informatization and Industrialization Integration Management System (《信息化和工業化融合管理體系新型能力分級要求》) (T/AIITRE 10003-2021) system certification. Informatization and industrialization integration management system is a set of digital transformation method system that enterprises can refer to and implement, a system framework that ensures the overall planning and advancement of corporate strategy, business, technology, management, etc., and the first management system in China that covers the overall situation, all elements and the whole process of informatization and industrialization. In particular, AAA level (domain level) is the highest certification level that can be applied for informatization and industrialization integration management system, which marks the authoritative recognition of the Company's in-depth integration of informatization with industrialization and digitalization, laying a solid foundation for the digital development of the Company.

Scientific and technological innovation is the key engine to achieve the "dual carbon" goal. By strengthening forward thinking and planning, the Company intensified scientific and technological innovation, took the "needs of new energy owners" as the guide, gathered quality resources in the industry, and insisted on being technology-driven and innovation-driven to improve and upgrade products and services, and achieved low-carbon, green, sustainable and high-quality development.

Social Responsibility

2022 is a key year to consolidate and expand the results of poverty alleviation and deeply implement all-around rural revitalization work. The Company actively implemented the decision of the Central Committee of the CPC and the State Council on all round rural revitalization and rural construction strategy, advanced the established assistance project steadily with high standard, undertook new assistance task with high profile, and improved the quality of the assistance through multiple initiatives. Meanwhile, the Company practiced its corporate mission of "Developing Clean Energy and Building a Beautiful China", conducting prevention and control of the epidemics, environmental protection, soil and water conservation and biodiversity protection actively while developing its main responsibilities and main businesses, and made contributions to save energy and reduce emissions as well as to construct a "Beautiful China".

In March 2022, the Company made a donation to Shengsi Charity Federation to purchase pandemic prevention materials, so as to help the prevention and control of the epidemics in Shengsi county. In November 2022, the Company made a donation to Huaniao town in Shengsi county through the government authority of county level, Eco-environmental Protection Bureau in Shengsi county, to help the rural revitalization and low carbon and energy saving reform in the island.

In May 2022, the Company launched the first marine organisms propagation and release activity in Liupu Wharf, Rudong county in Jiangsu Province. This activity facilitated a faster renovation of portunus trituberculatus resources in the sea areas around the wind farm, protected the ecological balance, and generated significant ecological benefits, social benefits and economic benefits.

In December 2022, the Cenxi Dalong Wind Farm（岑溪大隆風電場）of the Company in Guangxi Zhuang Autonomous Region won the prize of "2022 Environment-friendly Practical Technologies and Demonstration Projects" issued by the China Association of Environmental Protection Industry, as the wind farm has been implementing the "Three Simultaneous" for environmental protection, soil and water conservation strictly in compliance with environment-protection requirements since its early construction by conducting vegetation restoration on upper and lower slope timely, preventing and governing the surface soil, and reusing the muck.

Exchange of Ideas with Industrial Peers

In September 2022, Central Enterprise Think Tank Alliance（中央企業智庫聯盟）organized the 28th Think Tank Salon of State-owned Enterprises（央企智庫沙龍）and the 3rd "Liupukang Energy Forum"（六鋪炕能源論壇）in Beijing, the PRC, and the theme of which was "speeding up the construction of new power system and striving to push the dual carbon goal". The Company was invited to attend such forum and participated in the discussion during the dialogue sessions with enterprises. The conference closely surrounded the essential roles of major energy enterprises in achieving the ambitious goal of "Carbon Peak, Carbon Neutrality" and contributing towards the establishment of new power system and in-depth discussions were conducted on such matter.

In November 2022, as commissioned by the NEA, Electric Power Planning & Engineering Institute（電力規劃設計總院）and Renewable Energy Engineering Institute（水電水利規劃設計總院）organized a press conference on the cost of electric power projects put into operation during the "13th Five-Year Plan" period. The Company was invited to participate in such conference and spoke as a representative. During such conference, the costs of power engineering projects (including thermal power, nuclear power, hydropower, wind power, photovoltaic power and power transmission and transformation) during the "13th Five-Year Plan" period were announced. Through the trend analysis of costs and regional benchmark in the electric power industry, it was beneficial to the scientific development of power policies and cost control policies for the "14th Five-Year Plan" and promoted power enterprises to further enhance their cost management, which provided useful references and assistances for power enterprises to implement cost constraints effectively. Such measures helped to promote the construction of new power system and contributed towards the achievement of "Carbon Peak, Carbon Neutrality" goal ultimately.

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 in Shandong Province was awarded four second-class prizes in total.

In May 2022, the Dangtu Fishing-Photovoltaic Power Complementary project, the Dongzhi Zhaotan Wind Power project and the Dingyuan Phase I Fishing-Photovoltaic Power Complementary project of the Company in Anhui Province won the first-class prize, the third-class prize and the third-class 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), respectively.

In June 2022, the "Fifth National Equipment Management and Technological Innovation Achievements"(「第五屆全國設備管理與技術創新成果」) organized by China Equipment Management Association(中國設備管理協會) published the results, where each of the Taipingshan Wind Power project in Shandong Province, the Minqin Wind Power project in Gansu Province and Hongshagang Wind Power project in Gansu Province of the Company was awarded one second-class prize.

In June and July 2022, the "Achievements of Exchange Activities of Quality Management Team of 2022"(「2022年質量管理小組交流活動成果」)organized by China Association for Water and Electricity Quality Management (中國水利電力質量管理協會)published the results, where the Taipingshan Wind Power project of the Company in Shandong Province was awarded four third-class prizes in total.

In July 2022, the Minqin Wind Power project, the Hongshagang Wind Power project, the Guazhou Tianrun Wind Power project and the Jinta Solar project in Gansu Province of the Company were awarded one third-class prize, two third-class prizes, one third-class prize and one third-class prize in the "Gansu Province Quality Management Team Activities of 2022"(「2022年度甘肅省質量管理小組活動」) by Gansu Quality Association(甘肅省質量協會), respectively.

The Company has maintained strict control over production and operation indicators, keeps creating and seeks truth from facts in our work, in order to improve the quality management level of enterprises; encourages employees to be prudent and innovative in their work, and constantly improves the motivation of employees to participate in the work, striving for the realization of the goal of power stations. In August 2022, the China Electricity Council announced the results: the Qingyun Shantang Wind Farm in Shandong Province, the Leling Zhuji Wind Farm in Shandong Province, the Lianshui Tangji Wind Farm in Jiangsu Province and the Longnan Yangcun Wind Farm in Jiangxi Province of the Company won the honorary title of "AAAA-level Unit in the Benchmarking of Production and Operation Statistical Indicators for National Wind Farms in China", respectively; the Anqiu Huangminshan Wind Farm in Shandong Province and the Baoying Xianfeng Wind Farm in Jiangsu Province of the Company won the honorary title of "AAA-level Unit in the Benchmarking of Production and Operation Statistical Indicators for National Wind Farms in China", respectively; the Xitieshan Photovoltaic Power Station in Qinghai Province of the Company won the honorary title of "AAAA-level Unit in the Benchmarking of Production and Operation Statistical Indicators for National Solar Photovoltaic Power Stations in China"; the Wulan Photovoltaic Power Station in Qinghai Province of the Company won the honorary title of "AAA-level Unit in the Benchmarking of Production and Operation Statistical Indicators for National Solar Photovoltaic Power Stations in China".

The Company strictly implements the code of conduct of "integrity and transparency, professionalism, efficient execution and teamwork" and strives to create a working atmosphere in pursuit of excellence, so as to enhance organizational vibrancy of the enterprise, actively create learning-oriented teams and improve core capability building, which contributes technical strength for the high-quality development of the Company. In April 2022, the Shengsi 5#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).

The Company continues to implement General Secretary Xi Jinping's important statement on "technological innovation, management innovation, organizational innovation, model innovation and brand innovation" and constantly advances the innovation work on materials management of the electric power industry in a down-to-earth and effective manner. In June 2022, China Electric Power Equipment Management Association(中國電力設備管理協會)issued the "Notice on Publishing the 2021 National Electric Power Industry Material Management Innovation Achievement Project"(《關於發佈2021年全國電力行業物資管理創新成果項目的通知》). The project named "three management methods empower the central procurement of equipment, achieving lower cost and higher efficiency"(《三項管理手段賦能設備集中採購,實現降本增效》)reported by the Company won the first-class prize (Management Field), while the project named "focus on the dual carbon target to seek management innovation and practices on the coordinated development of the industrial chain of new energy"(《聚焦雙碳目標,共謀新能源產業鏈協同發展的管理創新與實踐》)won the second-class prize (Management Field), which were the first time of the Company winning innovation achievement awards on materials management of national electric power industry. The Company will continue to adhere to take the innovation-driven mode as a strong foothold, construct innovative platforms and promote innovation achievements, so as to enable the Company to achieve high-quality development.

The Company continues to focus on the field of investor relations, so as to improve the transparency of the Company steadily. In September 2022, the Company won two awards at the 8th Investor Relations Awards (the "**IR Awards**") of the Hong Kong Investor Relations Association (HKIRA), namely "Best IR Company" and "Best ESG (E)". In terms of individuals and teams, Mr. Zhang Zhiwu, the Chairman, President and Executive Director of the Company, won the "Best IR by Chairman/CEO" award. Mr. Liu Chao, the Chief Accountant of the Company, won the "Best IR by CFO" award. Mr. Lee Kin, the Assistant President and Company Secretary of the Company, won the "Best IRO" award. The investor relations team of the Company won the "Best IR Team" award.

IV. Risk Factors and 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 RMB 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. During the reporting period, the Group used forward exchange contracts to manage its exchange rate risk until the settlement date of foreign currency receivables or payables. By managing and monitoring the risks of foreign currency, we ensure that appropriate measures are adopted effectively in a timely manner.

V. Prospects

2023 is the beginning year to implement the spirit of the 20th National Congress of the CPC and a crucial year under the "14th Five-Year Plan" to inherit the past and usher in the future, but the external environment remains severe and complicated. The Company will implement the work style of "Stringency, Prudence, Meticulosity and Pragmatism" thoroughly while insisting on integrity and innovation in forging ahead with determination. Also, we will consolidate the development foundation for traditional businesses intensively and accelerate the establishment of a new development pattern, spare all efforts in fostering new advantages in development and strive to achieve various tasks and goals of production and operation as well as reform and development, so as to facilitate the construction of first-class renewable energy enterprise through high-quality development.

1. Focus on the development of traditional businesses and determine to win three key battles, thereby pushing the operating results of the Company to reach new heights:

   The Company will make every effort to win the battle of high-quality resources and spare all efforts for large bases and large-scale projects. We will promote conventional parity and distributed projects actively and expand and innovate the way of resource acquisition vigorously. Moreover, the Company will use every effort to win the battle of putting projects into operation and accelerate the efficient conversion and implementation of project resources, so as to improve the conversion rate of new projects comprehensively. Also, the Company will make every effort to win the initiative battle of efficiency ramp-up, so as to improve the core capability of production, operation and maintenance continuously.

2. Focus on the improvement of core capabilities and implement five lean management projects thoroughly, so as to give an impetus to strengthening the traditional advantages of the Company:

   Firstly, the Company will strengthen the lean management project of project development. Secondly, the Company will strengthen the lean management project of project design. Thirdly, the Company will strengthen the lean management project of procurements. Fourthly, the Company will strengthen the lean management project of project costs. Fifthly, the Company will strengthen the lean management project of operating costs.

3. Focus on fostering new advantages and strive to promote four key actions, so as to accelerate the construction of a new pattern of high-quality development of the Company:

   We will adhere to diversified coordination to promote integrated development of businesses. Besides, we will persist in technology empowerment and continue to strengthen scientific research investment. Additionally, we will adhere to the aid of capital and strengthen the synergistic development of industry-finance while focusing on promoting the advancement of cooperation and development through capital, so as to bring the bridging role of capital into full play. We will deepen the strategic cooperation with local governments and relevant enterprises and actively invest in extended businesses in the upstream and downstream, so as to achieve industrial expansion and technological edge as well as strengthening and supplementing the chain. Moreover, we will insist on deepening reforms, endeavor to provide a mechanism and talent guarantee and continue to deepen the three systems of governance, employment and incentives and the market-oriented mechanism that allows the management to get promotion or demotion; employees to be employed or dismissed; and revenues to be increased or decreased.

4. Focus on intrinsic safety and make every effort to reinforce four lines of defense, thereby promoting the development of the Company to reach a new level:

   We will build a strong line of defense for production safety comprehensively and follow the mission of "implementing production safety responsibility and protecting the safety of employees", so as to eliminate the occurrence of major hidden hazards and serious accidents resolutely, and to achieve zero accident for safety production. Also, we will build a strong line of defense for major risks comprehensively and carry out whole process management of various operational risks properly. In addition, we will build a strong line of defense for legal compliance comprehensively to strengthen overall compliance management. We will promote legal compliance and cleanliness of projects rigorously and conduct thorough inspection for defects and fill in gaps, so as to further improve the quality and efficiency of compliance management operation. Furthermore, we will build a strong line of defense against corruption comprehensively and deeply promote the establishment of institutional mechanism under which no one dares to or can be corrupted or thinks of committing corruption while enhancing the pertinence and effectiveness of grassroots discipline inspection works, so as to improve the overall quality and efficiency of supervision of the Company and strengthen the red line and defense line of business integrity effectively.

5. Focus on fostering cooperative spirit through solid foundation and strengthening Party discipline comprehensively, thereby creating a new pattern where Party building leads the development:

   The Company will thoroughly study, publicize and implement the spirit of the 20th National Congress of the CPC and adhere to implement the "dual carbon" goal. Also, we will implement General Secretary Xi Jinping's thought on socialism with Chinese characteristics for a new era comprehensively and maintain a high degree of consistency with the Central Committee of the CPC with General Secretary Xi Jinping as the core in terms of thoughts, political ideology and actions unwaveringly. We will continue to enhance the quality of Party building works to lead and ensure the high-quality development of the Company with high-quality Party building.

EVENTS OCCURRING AFTER THE REPORTING PERIOD

Meiya Electric Asia, Ltd., a wholly-owned subsidiary of the Company, intends to dispose of all the equity interests it holds in Nantong Meiya Co-generation Co., Ltd. For further information, please refer to the Company's announcement dated 21 March 2023. Save as disclosed above, no important event or transaction affecting the Group and which is required to be disclosed by the Company to its Shareholders has taken place after 31 December 2022.

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 year ended 31 December 2022.

CORPORATE GOVERNANCE CODE

During the year ended 31 December 2022, the Company has complied with all applicable 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 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 is not 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 is not impaired and this structure enables 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 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 year ended 31 December 2022.

REVIEW OF ANNUAL RESULTS

The Group's annual results for the year ended 31 December 2022 have been reviewed by the audit committee of the Company.

SCOPE OF WORK OF KPMG

The figures in respect of the Group's consolidated statement of financial position, consolidated statement of profit or loss and other comprehensive income and the related notes thereto for the year ended 31 December 2022 as set out in the preliminary announcement have been agreed by the Group's auditor, KPMG, to the amounts set out in the Group's draft consolidated financial statements for the year. The work performed by KPMG in this respect did not constitute an assurance engagement in accordance with Hong Kong Standards on Auditing, Hong Kong Standards on Review Engagements or Hong Kong Standards on Assurance Engagements issued by the Hong Kong Institute of Certified Public Accountants and consequently no assurance has been expressed by KPMG on the preliminary announcement.

FINAL DIVIDEND

The Board recommended a final dividend of 0.91 US cents per Share (equivalent to 7.09 HK cents per Share). As at 21 March 2023, 4,290,824,000 Shares were in issue. If the recommendation is approved by the Shareholders, the final dividend of 0.91 US cents per Share (equivalent to 7.09 HK cents) will be payable on Wednesday, 21 June 2023 to registered Shareholders as at Monday, 12 June 2023.

For the purpose of determining the entitlement to the proposed final dividend, the register of members will be closed from Thursday, 8 June 2023 to Monday, 12 June 2023 (both days inclusive), during which period no transfer of Shares will be registered. In order to be qualified for the proposed final dividend, all transfer documents accompanied by the relevant share certificates must be lodged with the Company's Hong Kong branch share registrar, Tricor Investor Services Limited at 17/F, Far East Finance Centre, 16 Harcourt Road, Hong Kong for registration by not later than 4:30 p.m. on Wednesday, 7 June 2023.

ANNUAL GENERAL MEETING

The Annual General Meeting will be held on Tuesday, 23 May 2023 at 10:00 a.m. A circular containing, inter alia, the information required by the Listing Rules concerning (1) re-election of retiring Directors; (2) grant of general mandates to repurchase Shares and to issue new Shares; and (3) adoption of new bye-laws of the Company, together with the notice of the Annual General Meeting, will be published and despatched to the Shareholders in the manner as required by the Listing Rules on or before Thursday, 20 April 2023.

For the purpose of determining the entitlement to attend and vote at the Annual General Meeting, the register of members of the Company will be closed from Thursday, 18 May 2023 to Tuesday, 23 May 2023 (both days inclusive), during which period no transfer of Shares will be registered. In order to be qualified for attending and voting at the Annual General Meeting, all transfer documents accompanied by the relevant share certificates must be lodged with the Company's Hong Kong branch share registrar, Tricor Investor Services Limited at 17/F, Far East Finance Centre, 16 Harcourt Road, Hong Kong for registration by not later than 4:30 p.m. on Wednesday, 17 May 2023.

PUBLICATION OF RESULTS ON THE WEBSITES OF THE STOCK EXCHANGE AND THE COMPANY

This announcement is published on the Stock Exchange's website (www.hkexnews.hk) and the Company's website (www.cgnne.com). The 2022 annual report of the Company containing all the information required by the applicable Listing Rules will be despatched to the Shareholders and available on the above websites on or before Thursday, 20 April 2023.

DEFINITIONS

"Annual General Meeting"	an annual general meeting of the Company for the year 2023 to be held on Tuesday, 23 May 2023 or any adjournment thereof
"Board"	the board of Directors of the Company
"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 Group"	CGN and its subsidiaries
"CGN Wind Energy"	CGN Wind Power Company, Limited（中廣核風電有限公司）, a company established in the PRC and a non-wholly owned subsidiary of CGN
"Company"	CGN New Energy Holdings Co., Ltd., an exempted company incorporated in Bermuda with limited liability, the Shares of which are listed on the Main Board of the Stock Exchange
"Company's Code"	Code for Securities Transactions by Directors of the Company
"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
"Director(s)"	the director(s) 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
"Korea"	the Republic of Korea
"KRW"	Korean Won, the lawful currency 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

"Shareholder(s)"	the shareholders of the Company
"State Council"	State Council of the PRC
"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$" or "US dollar(s)"	United States dollars, the lawful currency of the United States of America
"Yulchon I Power Project"	a 577.4 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, 21 March 2023

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

Chairman, President and Executive Director	:	*Mr. Zhang Zhiwu*
Non-executive Directors	:	*Mr. Wang Hongxin, Mr. Chen Xinguo and Mr. Bian Shuming*
Independent Non-executive Directors	:	*Mr. Wang Minhao, Mr. Yang Xiaosheng and Mr. Leung Chi Ching Frederick*