

# China Hua Neng Group Hong Kong LTD.

## Introduction

Strictly Private & Confidential  
July 2024



# CHNG HK: A Leading Chinese Global Renewables Investor

China Hua Neng Group Hong Kong Ltd. (CHNG HK) is the primary platform to execute the China Huaneng Group's international strategy

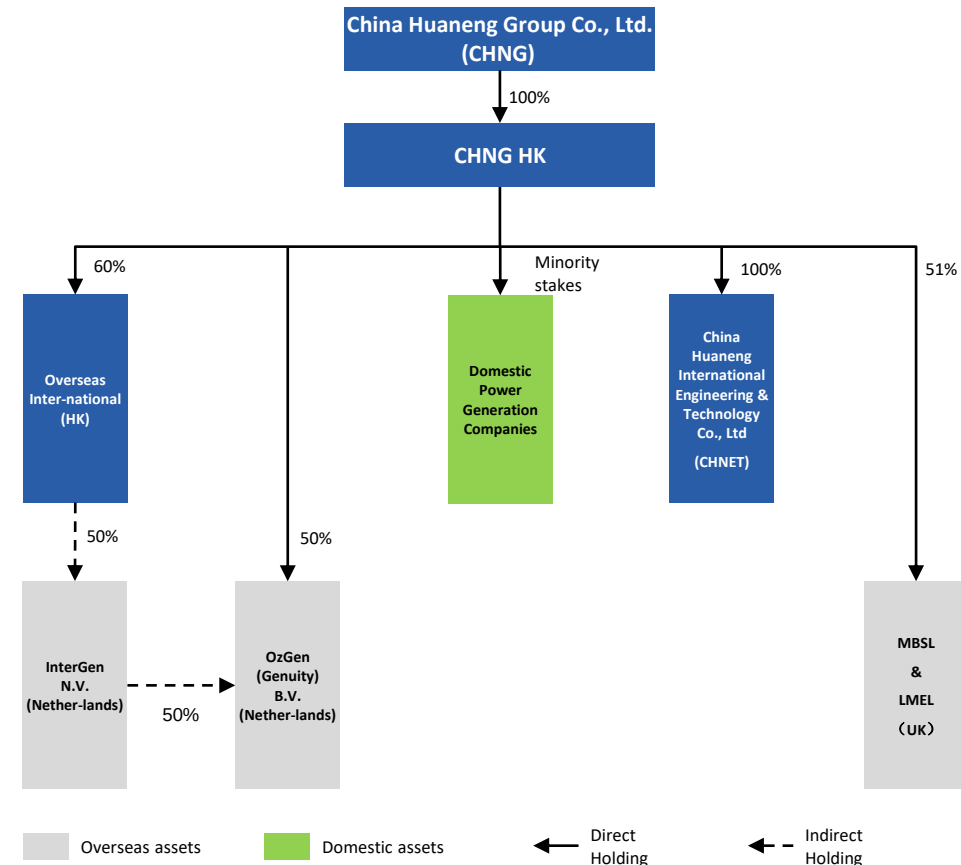
## Company overview

- CHNG HK is the primary platform for overseas strategy execution to operate and manage CHNG's offshore investment and assets
  - In 2003, acquired a 50% stake in Genuity in Australia, China's first overseas investment into power assets in developed country
  - In 2011, jointly acquired a 50% stake in InterGen with Guangdong Energy Group, sold UK assets in 2023
  - In 2019, jointly invested in Minety Battery Storage Project in the UK with CNIC, largest BESS in Europe at that time
  - In 2021, founded China Huaneng International Engineering & Technology Co., Ltd., the carrier of CHNG's technology industrialization towards globalization and the EPC platform of international market
- Principally engages in investment holding in power assets with a focus on the overseas market along with minority interests in Chinese domestic power companies
- Operating in the UK and Australia and establishing representative offices in Kazakhstan and Vietnam
  - Attributable installed generation capacity of overseas assets reached 1,870MW as of 2023

## Financial overview

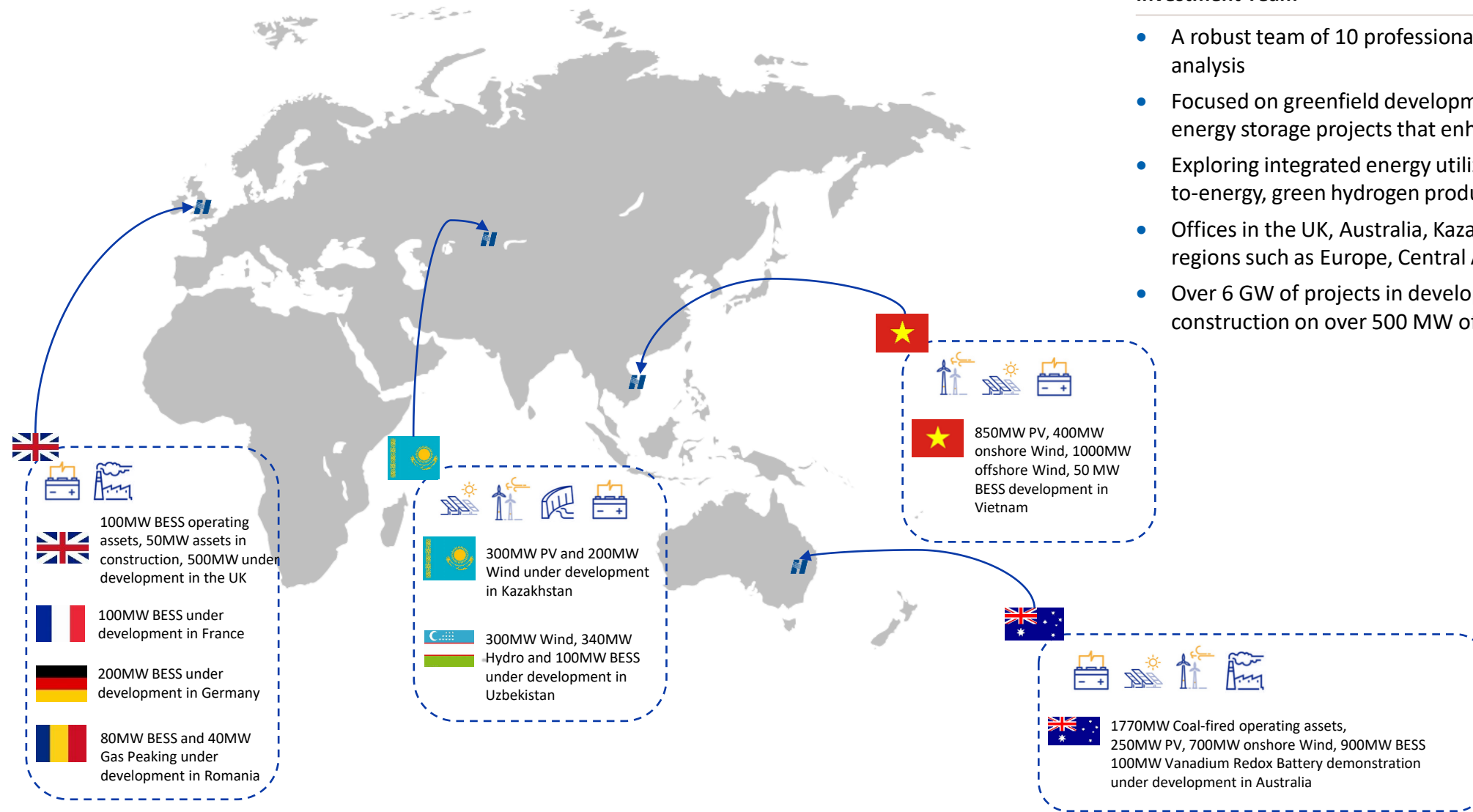
- As of Dec 31, 2023, CHNG HK had a total asset of USD 2.8bn
- The Company derives revenues mostly from returns from its invested companies

## Corporate structure





# CHNG HK: Investment, Construction and Operation Experiences



## Investment Team

- A robust team of 10 professionals dedicated to early-stage investment analysis
- Focused on greenfield development in renewable energy sectors and energy storage projects that enhance grid flexibility
- Exploring integrated energy utilization technologies, including waste-to-energy, green hydrogen production, and CCUS
- Offices in the UK, Australia, Kazakhstan, and Vietnam, covering key regions such as Europe, Central Asia, Southeast Asia, and Oceania
- Over 6 GW of projects in development, with plans to commence construction on over 500 MW of renewables projects by 2025



# CHNG HK: Investment, Construction and Operation Experiences



## Construction Capability

- CHNG HK has developed strong capabilities in constructing renewable energy projects through the establishment of CHNET
- CHNET founded in 2021, has rapidly grown in just three years, with annual engineering contracts revenue exceeding \$1 billion and delivery of over 2GW renewable projects
- Providing end-to-end EPC services, including Technical DD, Design, Procurement, Construction, Operation and Maintenance
- Mainly focus on wind power, PV, BESS and integrated energy solution

**> 2 GW**

renewables projects  
delivered

**150+**

the number of  
employees in  
engineering sector

**10+ Years**

of experiences in  
international renewables  
projects construction

**> USD 1 Billion**

the engineering  
contract revenue of  
2024

**RMB 1 Billion**

of registered capital

**Full**

of qualification certificate  
of engineering design and  
construction in China

## Case Studies



300MW Onshore Wind Farm in Qinghai



600MW Onshore Wind Farm in Neimenggu



60MW/120MWh BESS Project in Neimenggu



200MW Distributed PV Project in Hebei



# CHNG HK: Investment, Construction and Operation Experiences



## Operation Assets

### UK

- Minety Battery Storage Project, 200MW/300MWh
- Phase 1 100MW/100MWh COD 2021
- Phase 2 50MW/100MWh under construction
- Phase 3 50MW/100MWh under development
- Superior quality control of battery system (sustained high system availability and RTE)
- Robust budget control of CAPEX (20% savings due to strong bargaining power)
- Efficient time control of construction period (within 15 months even during pandemic)



### Australia

- CHNG HK holds over 50% shares of Genuity and daily operation and trading is handled by local team
- Genuity holds 2 coal-fired power plants in Queensland, Australia and is an authorised electricity retailer in the National Electricity Market
- Millmerran Power Plant (2\*425MW), participation in Carbon Transport and Storage (CTSCo) project
- Callide C Power Plant (2\*460MW), working together with CS Energy
- Developing large-scale BESS and wind projects near existing Millmerran Power Plant





# CHNG: A Pioneer and Leader of China's Power Industry



209

The Fortune Global  
500  
ranking of 2023

China Huaneng Group Co., Ltd. (CHNG) was established in 1985, engaged in the businesses of power & heat generation and trading, coal production, transportation, environmental protection, finance management and high tech development.

As of 31 December 2023:

Registered Capital

**34.9**

billion RMB

the Aggregate Domestic Power  
Generation accounted for

**9.17%**

market share in China

Total Assets

**1.56**

trillion RMB

Total Heat-supply  
Area

**1.03**

billion m<sup>2</sup>

Total Installed Capacity

**243.1**

GW

Total Installed Capacity  
Ranked

**No.2**

in the world

the Aggregate Power  
Generated

**845.9**

billion kWh

Livelihood Heating  
Capacity Ranked

**No.1**

in China



## Wind Power

Installed Wind Power Capacity

**39.3 GW**

- In 2023, Huaneng Shangdu 2GW onshore Wind Power Base Project achieved COD.
- In 2023, Huaneng Shantou Lemen 2 600MW, the Largest single offshore wind farm, achieved COD.



## Photovoltaic

Installed Photovoltaic Capacity

**33.58 GW**

- China Huaneng accelerated develop photovoltaic.
- China Huaneng's large wind power and photovoltaic bases, which were brought into the first batch key projects that focus on the desert, gobi and wildland area had achieved grid-connected with installed capacity leading the industry.



## Nuclear Power

Installed Nuclear Power Capacity

**200 MW**

- China Huaneng is the fourth power generation group in China to be qualified to construct and control large scale pressurised water reactor projects.
- The world's first fourth-generation nuclear power plant, Huaneng Shidaowan high temperature gas-cooled reactor nuclear power plant, has officially gone into commercial operation on 6 Dec 2023.



## Hydropower

Installed Hydropower Capacity

**27.6 GW**

- Huaneng Lancang River Hydropower Inc. (600025.SH), China Huaneng's sole listed hydropower subsidiary, ranks 2nd in terms of installed hydropower capacity. It owns the right to develop over the entire Lancang River basin. Its net profit for the year of 2023 was RMB824 million, with a year-over-year growth of 13%.





# CHNG: Excellent Performance from Overseas Business



## The Minety Battery Energy Storage Project

with installed capacity of 100 MW in the United Kingdom, started commercial operation in June 2021, was the largest battery energy storage project in Europe when completed.



UK



## Sahiwal Coal Fired Power Plant in China-Pakistan Economic Corridor

It consists of two 660 MW plants for a combined capacity of 1320 MW and is Pakistan's first supercritical coal power plant.



Pakistan



## Shweli River Hydropower Station Stage I is China's first overseas hydropower BOT project.

It is also the largest hydropower station in Myanmar when completed. It had a total installed capacity of 600 MW.



Myanmar



## Lower Sesan II hydropower plant, Cambodia's largest hydropower project.

Lower Sesan II hydropower plant had a total installed capacity of 400 MW and the power generated accounted for about 20% market share in Cambodia for the year of 2023.



Cambodia



## Tuas Power Group is one of the largest power companies in Singapore.

Total controlled installed capacity in Singapore amounted 2010 MW. Tuas Power Generation Pte. Ltd. generated 11.3 billion kWh for the year, accounted for 20.4% market share in Singapore.



Singapore



## OzGen is an energy company in Australia engaged in investment, construction and operation of power plants.

include 2 base-load coal-fired pithead power plants, namely Millmerran (2×425MW), and Callide (2×460MW), which were put into operation in 2003 and 2001 respectively



Australia

# Thanks

