

Utilities - HK/China (H)

Watt's Up #3: Dec power output +8% YoY, German module plant closure, grid capex

Industry Overview

"Watt's Up" is our new series highlighting key developments in the China power utilities and renewable energy sector. We also include our latest event calendar at the end.

Power: large generator Dec power output +8.0% YoY

National Bureau of Statistics (NBS) data, power output from generators above designated size increased by 8.0%/ 5.2% in Dec/ full year 2023, vs. 8.4% in Nov. In Dec, thermal power output +9.3% YoY, vs. 6.3% in Nov; hydro output +2.5% YoY, vs. 5.4% in Nov; nuclear output -4.2% YoY, vs. -2.4% in Nov; wind output +7.4% YoY in Dec vs. 26.6% in Nov; solar output +17.2% in Dec vs. 35.4% in Dec.

Solar: Meyer Burger to cease model capacity in Germany

Meyer Burger is considering to shut down its solar module capacity (1.4GW) in Germany citing lack of protection from China's anti-competitive practices. It plans to focus on the new construction of 2GW US cell and module facilities. It produced 650MW solar modules in FY23 but slumped sales meant module inventory increased to around 360MW. Its CHF126mn FY23 EBITDA loss reflects initial write-down of inventory in Europe, low utilization, and costs incurred from continued commissioning of production facilities in Germany and ongoing expansion in the U.S.

Solar: Oman to build 100k tons polysilicon project

On Jan 16th, Shuangliang announced it won bidding for a high-purity silicon-based materials project of 100k tons annual output from United Solar Polysilicon SPC. The Middle East is only able to consume half of the output, and the rest may go to the European and American markets. Oman is building a local polysilicon industry. In July 2023, Oman signed a land lease agreement to invest USD68mn to build its first silicon metal factory in Sohar port and freezone, where the United Solar Project is located.

Power: State Grid CAPEX to exceed RMB500mn in 2024

State Grid's annual investment is expected to exceed Rmb500mn in 2024. 6 UHV AC projects from Wuhan to Nanchang, Sichuan, and Chongqing are expected to commence operation in 2024. 8 UHV projects from Northern Shaanxi to Anhui and from Sichuan Aba to Chengdu East are expected to start construction in 2024.

Solar: CNNC module tender quote as low as Rmb0.81/W

31 module players participated in China National Nuclear Corporation's (CNNC) recent tender of 8GW solar module. Most of the bidders priced P-210 module RMB0.8-3.6cents/W higher than P-182. 7 bidders priced them the same. 1 bidder priced P-210 cheaper. Bidders priced N-type module RMB2cents/W to above RMB10cents/W higher than P-182. For P-182 module, quotations ranged between RMB0.817-0.92/W, averaging RMB0.862/W. For P-210, quotations ranged between RMB0.813-0.941, averaging RMB0.877/W. For N-type, quotations ranged RMB0.858-0.976, averaging RMB0.917/W. (More on the next page...)

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[Utilities - HK/China \(H\): Year Ahead 2024: Opportunities from power reforms and yield 18 January 2024](#)

MW: megawatt

RE: renewable energy

UHV: Ultra High Voltage

MoM: month over month

SOE: state-owned enterprises

WTG: wind turbine generator

LCOE: Levelized Cost of Electricity

CNNC: China National Nuclear Corporation

UHV: ultra-high voltage

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Wind: offshore wind investment to reach record high

In a recent report published by Clarksons, 19.5GW global offshore wind projects have committed investment decision, with total investment of USD59bn, despite global inflation and tight supply chain. EU, with 9.2GW capacity and USD33bn total investment, ranks the highest. The report also stated that, with the rise in US market and China leading the Asia market boom, global offshore wind investment will reach another new record in 2024.

IEA: China has 392GW coal fired capacity in pipeline

International Energy Agency (IEA) published “Renewables 2023” report in Jan 2023, stating that for the next 5 years (2023-2028), China is expected to account for 56%/72% of global renewable energy/ coal-fired power installation additions. China is expected to add 2,060GW renewable energy capacity during 2023-2028, followed by EU 429GW, US 337GW, India 230GW, and ASEAN 63GW. China has 136.24GW coal-fired power under construction and 255.5GW under planning, accounting for 72% of global planned addition.

Mingyang: Acquire 100% of Mingyang Longyuan

On Jan 13th, Mingyang announced to acquire 100% of Guangdong Mingyang Longyuan Power Electronics Co. at Rmb291mn. Mingyang Longyuan engages in Static Var Generator (SVG) products, flexible DC transmission products, solar PV inverters, etc. According to the announcement, Mingyang Longyuan has high synergy with Mingyang and its wholly-owned subsidiary Tianjin Ruiyuan Electric. Mingyang believes the acquisition will help the development of offshore wind and large-scale RE bases in Gobi Desert regions.

SDIC: 2023 net profit to surge by 40-68% YoY

On Jan 13th, SDIC (600886 CH) announced profit alert. 2023 net attributable profit is expected at Rmb5.72-6.86bn, up by 40-68% YoY, thanks to cheaper coal cost, and higher coal (15% YoY), wind (33% YoY), and solar (60% YoY) generation.

Solar: Tongwei approved for energy saving on 16GW cell

On Jan 15th, Sichuan National Development and Reform Commission (NDRC) approved Tongwei's 16GW N-type cell project energy-saving report. The project will have 32 cell manufacturing lines with Rmb5.5bn total investment.

Gas: Europe gas futures price dropped below EUR30/MWh

Europe TTF LNG (Title Transfer Facility Liquefied Natural Gas) price dropped by 8.5% on Monday, and is the 1st time below EUR30/MWh in 8 months. It has come off significantly from peak level since the geopolitical tension, though still doubles the price of previous winters. EU accumulated record level gas storage in 2023, thanks to weak economy thus less consumption, stables supply, and increase in renewable power generation.

HNP: 2023 power volume +5% YoY, tariff -0.23% YoY

On Jan 15th, Huaneng Power International (HNP) released 2023 operational data. 2023 power sales volume was 448 bn KWh, +5% YoY, with average tariff of RMB509/MWh, drop by 0.23% YoY. In 2023, HNP's market power sales percentage remained at 88.40%.

RE: 353GW of RE project allocation

In 2023, 353GW of Renewable Energy (RE) projects were announced nationwide, including 168.1GW of wind, 179.2GW of solar, and 6.1GW of integrated wind and solar. Xinjiang has the largest project scale of 78GW. In total, more than 400 companies participated in obtaining projects, 97 companies have obtained more than 400MW of RE projects, with a total scale of 321.1GW. SPIC, China Huadian Corporation, China Huaneng Corporation, China Energy Investment, and China Datang Corporation each obtained more than 18GW, totaling 129.9GW or 37% market share. Local energy groups and private companies obtained 24.6GW and 23GW, respectively.

RE: Green certificate trading income won't impact subsidy

On Jan 12th, National Energy Association (NEA) answered a question on whether a subsidized wind project is eligible to collect the gap between subsidy amount and green certificate trading gain, with positive. This is in line with NEA's previous statement. Back in Aug 2023, when it published the notice on expanding the scope of green power certificate issuance to all renewable energy projects, NEA confirmed that, for a) RE projects with central gov't subsidy, green certificate trading income offsets central gov't subsidy or is state-owned; b) RE projects with no central gov't subsidy, green certificate trading income goes to the project owner.

RE: Guangxi RE market power tariff RMB0.38/kWh

Guangxi provincial Ministry of Industry and Information Technology (MIIT) announced the market power tariff to be RMB0.38/kWh for wind and solar base projects, about Rmb4c lower than the local benchmark coal tariff Rmb0.4207/kWh.

RE: 2024 1st batch RE subsidy list added 723MW

On Jan 16th, National Grid announced the 2024 1st batch renewable energy subsidy list, that included 235 projects, totaling 723.4MW, where 543.6MW is centralized projects, and 179.8MW is distributed projects.

Upcoming BofA Utilities events

We highlight our upcoming events and takeaways notes below. Please contact BofA China Utilities team or your BofA salesperson for more details or registration.

[Solar – China: Wood Mackenzie solar expert call takeaways](#)

[Power – China: Key takeaways from power tariffs & reforms expert call](#)

[Solar – China: European solar channel checks with Huasun Energy](#)

[Power – China: Takeaways from power expert call with former Director at China Electricity Council](#)

[Wind - China: Longyuan conference call takeaways](#)

[Solar - China: Key takeaways from solar expert call with Rystad Energy](#)

[Wind - China: Key takeaways from expert call with China Wind Energy Association](#)

[Beijing Enterprises Water: Call takeaways: saw better cash collection rate and water supply tariff](#)



Exhibit 1: Upcoming BofA Utilities eventsIn-person lunch events on Jan 19th (in Hong Kong) and Jan 31st (In Singapore)

1/19/2024	Lunch	BofA	Power	BofA China Utilities	China Utilities & Renewables Year Ahead lunch	Mandarin/English
1/22/2024	16:00	Corporate	Power	Hu Shufeng	Huadian Power (1071 HK)	Mandarin
1/23/2024	9:00	Expert	Solar	Shujuan Wang	Chinese solar supply chain with Zhihui Solar PV	Mandarin
1/23/2024	16:00	Corporate	Renewables	Zou Min	Datang Renewable (1798 HK) Director of Securities Department	Mandarin
1/24/2024	9:00	Corporate	Solar	Anais Wu	LONGi Green Energy (601012 CH) IR	English
1/24/2024	10:00	Expert	Gas	Miao Lv	China Gas Association	Mandarin
1/24/2024	11:00	Corporate	Gas	Kelvin Shan	CR Gas (1193 HK)	Mandarin
1/25/2024	9:00	Expert	Carbon/power	Boyang Jin	Refinitiv LSE - Team Lead China Carbon & Energy Transition	English
1/30/2024	9:00	Expert	Solar	Frank Haugwitz	Asia Europe Clean Energy (Solar) Association	English
1/31/2024	Lunch (SG)	BofA	Solar	Dr. Thomas Reindl	CEO at Solar Energy Research Institute of Singapore at NUS	English
2/1/2024	10:00	Expert	Solar (Glass)	Yuping Cui	SCI99 - Senior Analyst of Float Glass Market	Mandarin
2/1/2024	11:00	BofA	Solar	BofA Asia solar research	China solar supply chain team call	English

	Solar calls
	Lunch

Source: BofA Global Research

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Exhibit 2: Valuation comparison table for China Utilities and Renewable companies

Key selected valuation metrics for utility and renewable sector companies in 2023-25E

		PE			PB			EPS Growth			ROE			Dividend yield		
		2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E	2023E	2024E	2025E
Wind																
Longyuan -H	916 HK	5.5	4.2	3.2	0.5	0.5	0.4	37.8%	31.9%	33.0%	10.2%	12.2%	14.5%	3.6%	4.8%	6.3%
Datang Renewables	1798 HK	4.4	4.7	4.0	0.3	0.3	0.3	-15.9%	-5.5%	15.3%	7.8%	6.8%	7.3%	2.8%	2.7%	3.1%
Goldwind-H	2208 HK	4.7	4.5	3.5	0.3	0.3	0.3	9.5%	3.6%	27.6%	8.1%	8.4%	9.9%	6.5%	6.7%	8.5%
IPPs																
China Resources Power	836 HK	7.0	5.6	5.1	0.8	0.8	0.7	53.0%	23.9%	9.3%	12.6%	14.6%	14.8%	5.7%	10.3%	7.8%
Huaneng-H	902 HK	5.7	5.5	4.9	0.9	0.8	0.7	n.a.	4.3%	11.3%	17.8%	15.6%	15.3%	8.8%	9.1%	10.2%
Huadian-H	1071 HK	6.6	6.1	5.4	0.8	0.7	0.6	n.a.	8.8%	11.5%	12.2%	11.6%	11.3%	7.6%	8.3%	9.2%
CPID	2380 HK	10.1	6.4	5.7	0.8	0.8	0.7	20.4%	58.2%	12.4%	8.4%	12.3%	12.8%	5.4%	8.3%	9.3%
Gas																
ENN Energy	2688 HK	8.0	8.8	8.5	1.3	1.2	1.1	17.0%	-8.8%	3.6%	18.1%	14.0%	13.4%	5.5%	4.8%	5.1%
China Resources Gas	1193 HK	8.6	8.7	7.8	1.2	1.1	1.0	27.2%	-1.2%	10.9%	14.6%	13.4%	13.8%	5.9%	5.9%	6.7%
China Gas	384 HK	10.1	7.7	7.2	0.7	0.6	0.6	-9.9%	31.1%	7.4%	6.6%	8.4%	8.8%	6.9%	7.8%	8.5%
Beijing Enterprises Holding	392 HK	4.9	4.7	4.2	0.4	0.3	0.3	-6.9%	6.0%	12.1%	7.6%	7.6%	8.1%	5.5%	7.0%	8.4%
Environmental protection																
Everbright Environment	257 HK	3.6	3.7	3.7	0.3	0.3	0.3	-4.7%	-1.7%	-0.4%	9.0%	8.3%	7.8%	8.9%	8.7%	8.7%
Beijing Enterprises Water	371 HK	8.2	8.2	7.7	0.6	0.5	0.5	69.9%	-0.2%	6.6%	6.8%	6.7%	6.9%	8.5%	8.5%	8.5%
HK Utilities																
CK Infrastructure	1038 HK	15.2	13.9	13.5	0.9	0.9	0.9	-5.7%	9.1%	3.3%	6.1%	6.6%	6.7%	5.8%	5.9%	6.0%
CLP Holdings	2 HK	13.9	12.2	11.8	1.4	1.4	1.3	1103.4%	14.3%	3.7%	10.4%	11.5%	11.4%	5.2%	5.4%	5.5%
Guangdong Investment	270 HK	9.5	8.8	7.2	0.9	0.9	0.9	-15.4%	8.7%	21.0%	9.3%	10.1%	12.0%	10.4%	10.4%	10.4%

Exhibit 2: Valuation comparison table for China Utilities and Renewable companies
Key selected valuation metrics for utility and renewable sector companies in 2023-25E

	PE	PB	EPS Growth	ROE	Dividend yield
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Source: BofA Global Research estimates

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Underperform	N/A	≥ 20%

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