

Utilities - HK/China (H/A)

Watt's Up #4: NEA 2024 work plan, market power sales, green power PPA

Industry Overview

NEA: to work on RE grid connection and market trading

On Jan 22nd, NEA published 2024 key work plan for energy supervision, including a) promote inter-province market power sales, RE market power sales, and green power trading. To leverage on optimization of inter-provincial resources allocation, demand side response, user-end storage, virtual power plant, etc. b) supervise grid operators to provide indiscriminate grid connection service to RE, especially for distributed PV. Promote grid connection for desert area RE base, distributed RE, charging station, power storage, etc. c) lift the utilization of power stabilizer, establish reasonable tariff and return. d) promote market trading of RE power and green power to reduce curtailment.

Power: market power sales ratio at 61.4%, +6.1ppt YoY

CEC said 2023 China market power sales volume +7.9% YoY, accounting for 61.4% of total power consumption, +0.61ppt YoY. Mid-to-long term contracted power volume +7% YoY, accounting for 78% of market power sales. By region, intra-province trading accounted for 80% of market power sales, of which green power trading at only 1% share. About 20% of market power sales was for inter-province trading, where 88% basing on inter-governmental contract.

Solar: BlackRock injects US\$500mn to CSI's subsidiary

On Jan 23rd, CSI announced that, its subsidiary, Recurrent Energy, signed an investment agreement with BlackRock, who will invest US\$500mn in convertible preferred shares, equivalent to 20% of Recurrent Energy's diluted stake. CSI will remain controlling shareholder. The investment will help Recurrent Energy to continue to develop global power stations and transform from pure developer to developer plus power project owner in certain regions such as the US and Europe. By 2026, Recurrent Energy expects to own 4GW PV and 2GWh energy storage in the US and Europe.

Power: Green power trading long term contract

On Jan 25th, Merck China and CR Power signed a 10-year green power PPA at 30GWh p.a. With the contract, Merck China will derive 60% of power consumption from green power and is on track for 2040 carbon neutrality goal. On Jan 22nd, Linde China and Three Gorges Renewable Energy signed a 25-year green power PPA. Linde Jiangsu factory targets to derive 100% of power consumption from green power.

Gas: China Dec/full year 2023 gas demand +9.5/+7.6% YoY

According to NBS, China Dec/ full year 2023 gas demand +9.5%/ +7.6% YoY, domestic gas production +2.9%/ +5.8% YoY, gas import +23%/ +9.9% YoY. In 2023, CNPC natural gas research institute saw >10% gas demand growth in Guangdong, Zhejiang, Fujian, Chongqing and Yunnan, weak growth in Jiangsu and Hebei, negative growth in Jilin and Heilongjiang. In Jan 2024, Russian gas import is scheduled to lift, 1MTPA LNG contract between Guangdong Energy and Qatar Energy and 0.5MTPD LNG contract between Shanghai Energy and Centrica will start delivery.

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CEC: China Electricity Council
NEA: National Energy Administration
RE: renewable energy
PV: photovoltaic
CFP: coal-fired power
NDRC: National Development and Reform Committee
CSI: Canadian Solar Inc.
PPA: power purchase agreement
NBS: National Bureau of Statistics
MTPA: million ton per annum
LNG: liquefied natural gas

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Power: Hunan to decouple RE power tariff from CFP tariff

On Jan 22nd, Hunan NDRC published article on energy development, highlighting to a) establish provincial energy group; b) accelerate the integration into national power market, promote the official launch of provincial spot power market; c) work on policies to decouple RE on-grid power tariff from coal-fired power tariff and reduce power bill. d) guide rational investment in RE; 3) improve mechanism on integration of RE + new power storage; 4) promote the integration of local provincial gas pipeline to PipeChina.

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: Capacity exit could drive a recovery in solar module prices in 2H24E](#)

[Gas - CR Gas call takeaways: gas cost is lower YoY and connection volume is well supported](#)

[Power - Huadian Power International call takeaways](#)

[Power - China: Key takeaways from call with Oxford Institute for Energy Studies](#)

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

[Power - China: Key takeaways from power tariffs & reforms expert call with Ms Peng Peng](#)

[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](#)

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

Exhibit 1: Upcoming BofA Utilities events

In-person lunch events on Jan 19th (in Hong Kong) and Jan 31st (In Singapore)

Date	Time (HKT)	Type	Topic	Speaker	Company/Title	Language
1/29/2024	21:00	Expert	Renewables	Heymi Bahar	International Energy Agency (IEA)	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

		Prices (LCY)			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	5.0	5.7	4.3	3.3	0.6	0.5	0.4	38%	32%	33%	10%	12%	14%	4%	5%	6%
Longyuan -A	001289 CH	19.2	23.8	18.0	13.6	2.3	2.1	1.9	38%	32%	33%	10%	12%	14%	1%	1%	1%
Datang Renewables	1798 HK	1.7	4.7	5.0	4.3	0.4	0.3	0.3	-16%	-5%	15%	8%	7%	7%	3%	3%	3%
Three Gorges Renewables	600905 CH	4.5	17.3	15.0	11.9	1.6	1.5	1.3	3%	15%	26%	9%	10%	12%	2%	2%	3%
MingYang Smart Energy	601615 CH	10.8	7.5	6.6	5.7	0.8	0.7	0.7	-10%	13%	17%	11%	11%	12%	3%	3%	4%
Goldwind-H	2208 HK	3.1	4.9	4.7	3.7	0.3	0.3	0.3	10%	4%	28%	8%	8%	10%	6%	6%	8%
Goldwind-A	002202 CH	7.5	12.8	12.3	9.7	0.9	0.8	0.8	10%	4%	28%	8%	8%	10%	2%	2%	3%
Solar																	
Maxwell	300751 CH	123.6	33.0	17.7	10.0	4.8	4.0	3.1	21%	87%	76%	15%	25%	35%	1%	2%	3%
LONGi	601012 CH	22.3	11.9	17.4	11.0	2.3	2.1	1.8	-4%	-32%	58%	21%	13%	18%	2%	1%	2%
IPPs																	
China Resources Power	836 HK	16.0	7.2	5.8	5.3	0.9	0.8	0.7	53%	24%	9%	13%	15%	15%	6%	10%	8%
Huaneng-H	902 HK	4.5	6.1	5.8	5.2	1.0	0.9	0.8	n.a.	4%	11%	18%	16%	15%	8%	9%	10%
Huaneng-A	600011 CH	8.7	12.7	12.2	11.0	2.0	1.8	1.6	n.a.	4%	11%	18%	16%	15%	4%	4%	5%
Huadian-H	1071 HK	3.7	6.8	6.2	5.6	0.8	0.7	0.6	n.a.	9%	11%	12%	12%	11%	7%	8%	9%
Huadian-A	600027 CH	5.7	11.5	10.6	9.5	1.3	1.2	1.0	n.a.	9%	11%	12%	12%	11%	4%	5%	5%
CPID	2380 HK	3.0	10.4	6.6	5.9	0.8	0.8	0.7	20%	58%	12%	8%	12%	13%	5%	8%	9%
Gas																	
ENN Energy	2688 HK	62.1	9.4	10.3	9.9	1.5	1.4	1.3	17%	-9%	4%	18%	14%	13%	5%	4%	4%
China Resources Gas	1193 HK	23.8	8.9	9.1	8.2	1.3	1.2	1.1	27%	-1%	11%	15%	13%	14%	6%	6%	6%
China Gas	384 HK	7.6	10.5	8.0	7.5	0.7	0.7	0.6	-10%	31%	7%	7%	8%	9%	7%	7%	8%
Shenzhen Gas	601139 CH	6.5	11.7	12.0	11.2	1.3	1.2	1.1	31%	-2%	7%	12%	11%	10%	3%	3%	3%
Beijing Enterprises Holding	392 HK	29.0	5.2	4.9	4.4	0.4	0.4	0.3	-7%	6%	12%	8%	8%	8%	5%	7%	8%
Hydro																	
Yangtze Power	600900 CH	23.9	19.4	18.9	18.3	2.6	2.5	2.4	32%	3%	3%	15%	13%	13%	4%	4%	4%
Guiguan Power	600236 CH	5.8	17.1	15.1	14.8	2.5	2.3	2.1	-15%	13%	2%	15%	16%	15%	3%	3%	3%
SDIC	600886 CH	13.3	15.4	12.7	12.2	1.9	1.7	1.6	66%	21%	4%	13%	14%	14%	3%	4%	4%
Environmental protection																	
Everbright Environment	257 HK	2.8	3.9	3.9	4.0	0.3	0.3	0.3	-5%	-2%	0%	9%	8%	8%	8%	8%	8%
Beijing Enterprises Water	371 HK	2.0	8.8	8.8	8.2	0.6	0.6	0.6	70%	0%	7%	7%	7%	7%	8%	8%	8%
HK Utilities																	
CK Infrastructure	1038 HK	46.0	15.9	14.5	14.1	1.0	1.0	0.9	-6%	9%	3%	6%	7%	7%	6%	6%	6%
CLP Holdings	2 HK	62.0	14.1	12.3	11.9	1.4	1.4	1.3	1103%	14%	4%	10%	11%	11%	5%	5%	5%
Guangdong Investment	270 HK	5.9	9.5	8.8	7.3	0.9	0.9	0.9	-15%	9%	21%	9%	10%	12%	10%	10%	10%

Source: BofA Global Research estimates

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