Goldman Sachs 高盛

买入 BUY

国电南瑞 (600406.SS)

从业务规模和范围看最有望受益于中国智能电网领域的结构性需求;首次覆盖评为买入(摘要)

China Grid Tech
Ensuring integration of growing renewable energy and a reliable grid network for expanding electricity demand

Explore >

证券研究报告
Research | Equity

杜茜
+86(21)2401-8948 |
jacqueline.du@goldmansachs.cn
高盛（中国）证券有限责任公司

李舟
+86(21)2401-8648 |
zhou.li@goldmansachs.cn
高盛（中国）证券有限责任公司

陈豪
+86(21)2401-8812 |
hao.z.chen@goldmansachs.cn
高盛（中国）证券有限责任公司

叶枝函
+86(21)2411-8029 |
zhihan.ye@goldmansachs.cn
高盛（中国）证券有限责任公司

我们首次覆盖国电南瑞并给予买入评级，12个月目标价为人民币29.0元，隐含26%的上行空间。我们认为其估值具有吸引力，因为过去三个月里该股股价回调了25%（同期沪深300指数下跌5%），表现也落后于过去两年受益于欧美电力短缺的其他电力设备股。然而，我们预计在持续的财政支持下，中国的电网投资（来自国家电网）将达到人民币6,900亿元的记录高点（同比增长13%），略高于人民币6,500亿元的年度目标。我们也看好国电南瑞作为中国主要的二次设备供应商，业务规模和范围最有望受益于中国智能电网的需求。太阳能和风能在中国电力结构中占比达到15%的关键拐点后，中国智能电网正处于转型变革的风口浪尖，整合间歇性和波动性可再生能源的挑战日益严峻，并且可能受益于人工智能电力需求的增长。我们认为，2024-30年国电南瑞的收入/净利润年均复合增长强劲，增速可达10%/11%，高于中国8%的电网投资年均复合增速，这主要得益于智能电网投资结构性增长。

考虑到国电南瑞与国家电网的关系以及稳定的市场格局，该公司可能在特高压换流阀、电网数字化、调度软件、自动化解决方案以及SVC/STATCOM系统和继电保护等二次设备领域保持其稳固的主导地位（市场份额为34%-70%）。我们预计，国电南瑞强劲的财务状况（2024-30年预期毛利率/营业利润率为28%/16%，净资产回报率领先，为18%）和以软件为主的收入结构（占2024年预期总收入的40%）将支撑其在中国工业科技同业中享有估值溢价。我们的目标价基于25倍的2025年预期市盈率，得益于公司稳定的盈利增长和行业领先的CROCI。

*全文翻译随后提供

目录

Thesis in key charts

图表 1: We believe Nari Tech is likely to outperform power grid peers going forward driven by China domestic UHV and smart grid built-out

Share price history for power equipment stocks and drivers

Jan 2008 rebased to 100
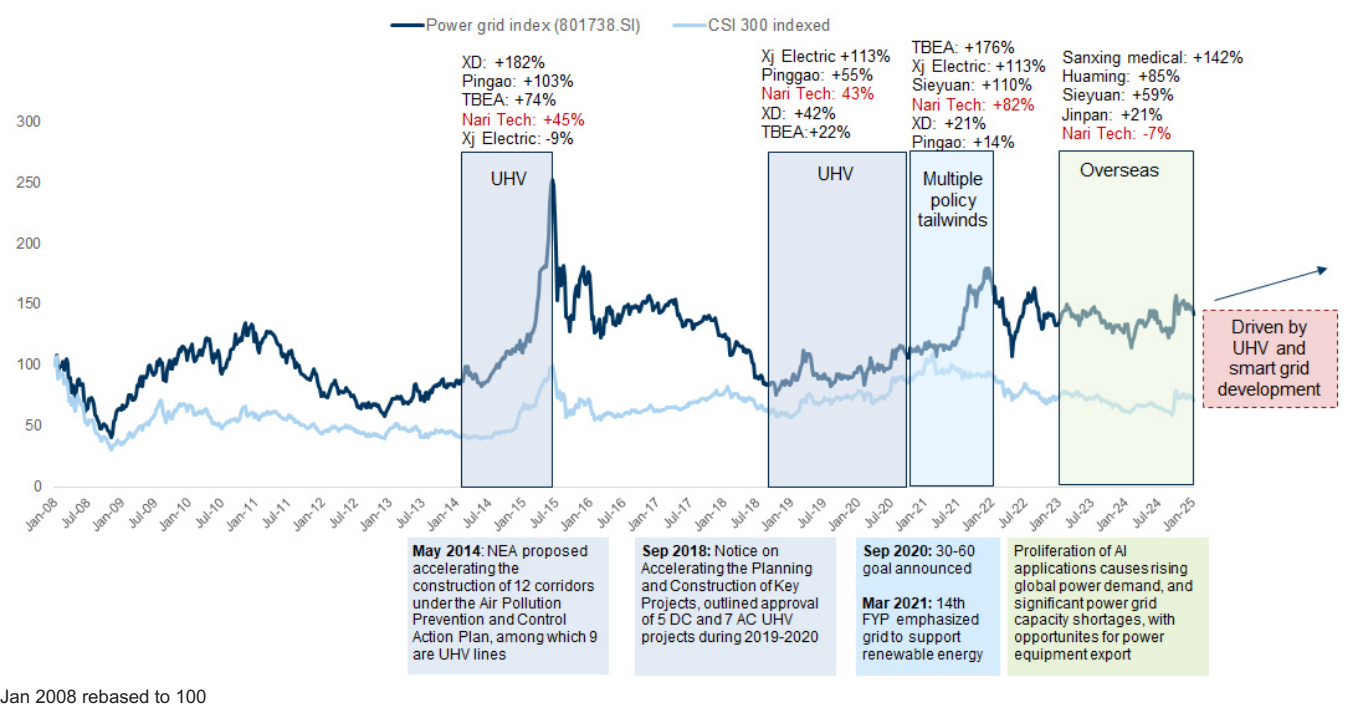
资料来源：万得, IEA, 国家发改委, Data compiled by Goldman Sachs Global Investment Research

图表 2: We expect 2025E China power grid investment by State Grid to record a new high of Rmb690bn, +13% yoy slightly above its target of Rmb650bn

China's power grid investment by State Grid
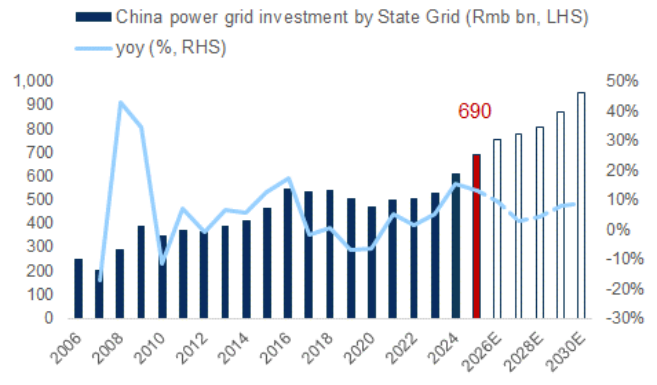
资料来源：State Grid, 万得, 高盛全球投资研究部

图表 3: We believe grid investment will shift from cyclical growth to a multi-year structural trend driven by the intake of renewables, with emphasis on UHV first, then shifting to smart grids

China's power grid investment breakdown by growth drivers
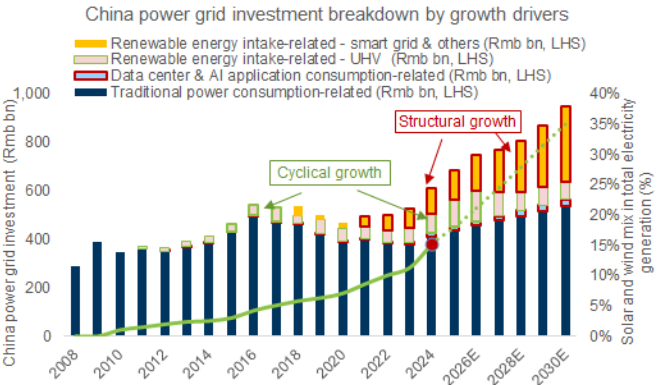
China power grid investment refers to investment made by the State Grid

资料来源：State Grid, 高盛全球投资研究部

图表 4: We expect Nari Tech's dominant market share in key products to remain stable in the coming years
Market share forecast for Nari Tech's key products

Revenue segments	2024E revenue mix	Key products	2018-23 avg market share / 2024-30E avg market share
Grid Digitalization	23%	MES systems	high
Power generation	22%	Integrated control	low
Grid automation - dispatch	9%	Hardware	53%
		Software	70%
Grid automation - substation	14%	SVC/STATCOM	56%
Grid Automation - flexible transmission & relay protection	9%	UHV converter valve	49%
		Relay protection	34%
Grid Automation - Distribution & Consumption	14%	Smart meter	5%->6%
Industrial Internet	6%	PLC, SCADA, energy mgmt	3%

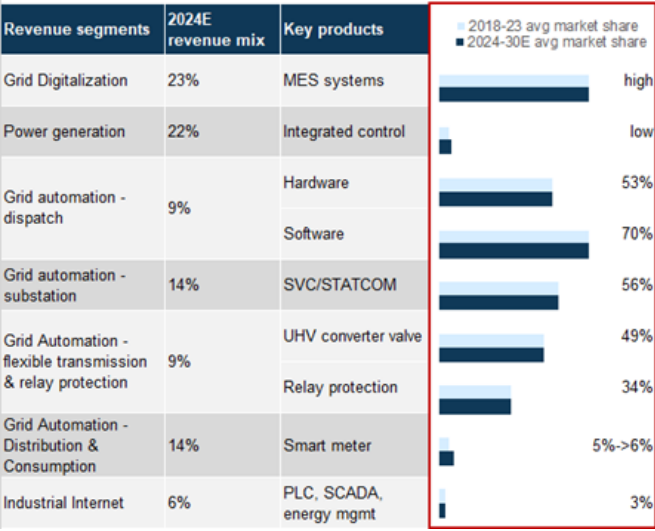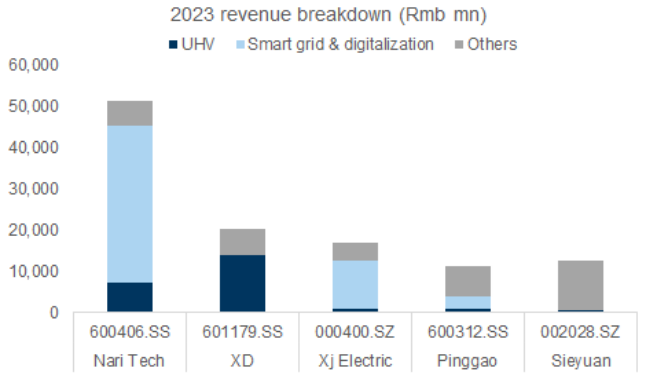资料来源：State Grid, Data compiled by Goldman Sachs Global Investment Research

图表 5: We expect the fastest-growing segments to be grid digitalization, flexible transmission & relay protection benefitting from UHV investments and grid automation products, driven by smart grid investments
Nari Tech's revenue segment growth expectations and margin profile

Revenue segments	2024E revenue mix	2024-30E revenue CAGR	2024-30E avg GPM (%)
Grid Digitalization	23%	13%	26%
Power generation	22%	9%	23%
Grid automation - dispatch	9%	8%	41%
Grid automation - substation	14%	8%	32%
Grid Automation - flexible transmission & relay protection	9%	12%	39%
Grid Automation - Distribution & Consumption	14%	12%	21%
Industrial Internet	6%	5%	30%

资料来源：公司数据, 高盛全球投资研究部

图表 6: Nari Tech excels in scale and scope towards structurally-growing smart grid & digitalization, compared to other A-share peers
Revenue breakdown by drivers in 2023 for Nari Tech and representative A-share peers

资料来源：万得, 公司数据, Data compiled by Goldman Sachs Global Investment Research

图表 7: Nari Tech is trading at 20X 12-m forward P/E, vs. its own historical average of 22.1X and we expect valuation expansion from here to be driven by 1) 2025E strong grid capex; 2) sustainable long-run growth outlook; 3) slight AI benefit potentially
12-m forward P/E for Nari Tech and domestic peers
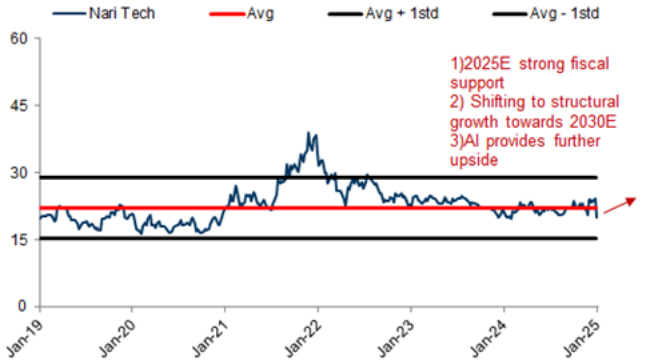
资料来源：彭博, 公司数据, 高盛全球投资研究部

图表 8: We forecast Nari Tech's revenue/net profit to deliver 10%/11% CAGR during 2024-30E
Nari Tech's tear sheet

Nari Tech revenue forecast	Unit	2020	2021	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2024-30E CAGR
Power Grid Automation													
Revenue	Rmb mn	22,065	24,293	24,993	25,635	26,455	28,977	32,343	34,892	38,000	41,828	46,095	10%
yoy	%		10%	3%	3%	3%	10%	12%	8%	9%	10%	10%	
Among: Relay protection and flexible transmission		6,014	6,142	6,377	5,127	5,127	6,409	8,075	8,640	9,072	9,526	10,002	
Among: Dispatch		4,413	4,859	4,999	5,127	5,332	5,572	5,906	6,320	6,889	7,536	8,245	
Among: Transformation/substation		6,619	7,288	7,498	7,691	7,998	8,358	8,860	9,480	10,333	11,304	12,367	
Among: Distribution and consumption		5,018	6,004	6,119	7,691	7,998	8,638	9,502	10,452	11,706	13,462	15,481	
China power grid investment	Rmb bn	470	495	501	528	610	690	755	776	807	871	948	8%
yoy	%	-6%	5%	1%	5%	16%	13%	9%	3%	4%	8%	9%	
Power Grid Digitalization													
Revenue	Rmb mn	6,501	7,611	9,146	11,134	12,804	14,597	16,494	18,474	20,690	23,173	26,649	13%
yoy	%		17%	20%	22%	15%	14%	13%	12%	12%	12%	15%	
Power Generation													
Revenue	Rmb mn	5,373	5,292	7,007	9,638	12,336	14,295	15,689	16,909	18,229	19,658	21,204	9%
yoy	%		-2%	32%	38%	28%	16%	10%	8%	8%	8%	8%	
Among: ESS				701	2,891	4,048	4,857	5,440	5,930	6,464	7,045	7,679	
Among: Wind and solar				3,504	2,891	4,048	4,857	5,440	5,930	6,464	7,045	7,679	
Among: Other power generation				2,803	3,855	4,241	4,580	4,809	5,049	5,302	5,567	5,845	
China power generation investment	Rmb bn	524	553	721	968	1,221	1,439	1,505	1,654	1,894	2,061	2,276	11%
yoy	%		5%	30%	34%	26%	18%	5%	10%	14%	9%	10%	
Industrial Internet													
Revenue	Rmb mn	2,668	2,939	3,245	3,169	3,327	3,494	3,668	3,852	4,044	4,247	4,459	5%
yoy	%	19%	10%	10%	-2%	5%	5%	5%	5%	5%	5%	5%	
Others													
Revenue	Rmb mn	1,896	2,276	2,438	1,998	1,798	1,798	1,798	1,798	1,798	1,798	1,798	0%
yoy	%	28%	20%	7%	-18%	-10%	0%	0%	0%	0%	0%	0%	
Financial summary	Unit	2020	2021	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	
Total revenue	Rmb mn	38,502	42,411	46,829	51,573	56,721	63,160	69,993	75,924	82,762	90,704	100,205	10%
yoy	%	19%	10%	10%	10%	10%	11%	11%	8%	9%	10%	10%	
Gross margin	%	27%	27%	27%	27%	28%	28%	28%	28%	28%	28%	28%	
Operating margin	%	15%	15%	15%	14%	15%	16%	16%	16%	16%	16%	16%	
Net margin	%	13%	13%	14%	14%	14%	15%	15%	15%	15%	15%	15%	
EPS	Rmb	0.61	0.71	0.80	0.89	1.00	1.16	1.29	1.41	1.55	1.71	1.89	11%
yoy	%	12%	16%	14%	11%	12%	15%	12%	9%	10%	10%	11%	
ROE	%	15%	16%	16%	16%	16%	18%	18%	18%	18%	18%	18%	

资料来源：公司数据，高盛全球投资研究部

图表 9: Nari Tech is a structural beneficiary from the incremental grid investment needs (smart grid/grid IT/UHV contribute 32%/32%/10% of incremental top line growth from 2023 to 2030E)
Nari Tech topline growth attribution, 2023-30E
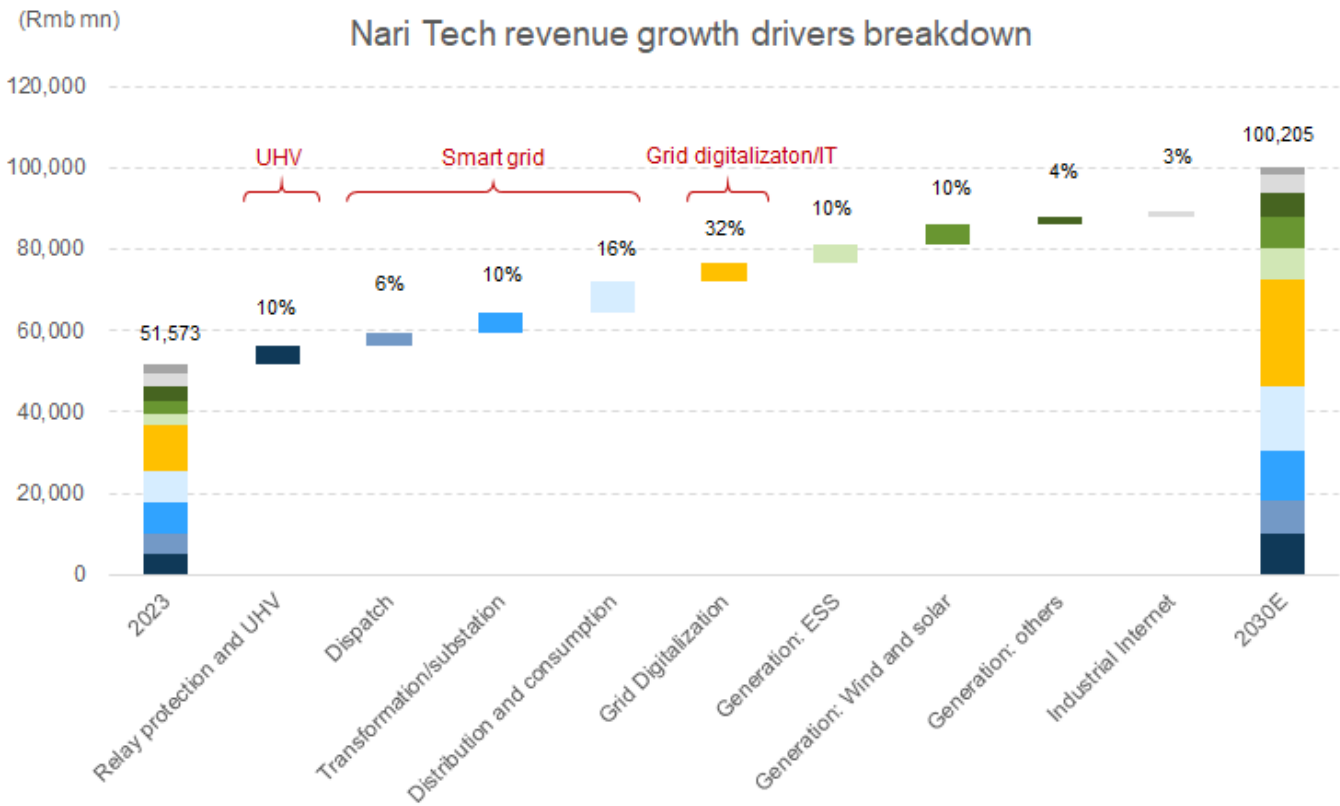

资料来源：万得，高盛全球投资研究部

Where we are different (1): Renewables intake as a structural tailwind to benefit secondary equipment the most

The market may underestimate the longer-term sustainability of grid investment growth in our view, which is often perceived as cyclically driven by policies and project (especially UHV) construction cycle. As we discussed in our report, China Grid Tech: Grid transformation: From cyclical to structural, we believe China's grid network is on the verge of a transformative shift and expect growing renewables in-take in particular and slight contribution from data center & AI power consumption will likely drive nearly 60% of incremental investments over 2024-2030E, with total grid investment increasing at a robust 8% CAGR and smart grid rising from 13.7% of total grid spending to 16% in 2030E, which will focus on advanced systems to regulate, dispatch, and process real-time data for efficient power allocation.

China's power grids are indeed much newer than those of the EU/US, however renewables just reached 15% of total energy generation in China, and we forecast this to grow to 35% in 2030E. Germany's experience is instructive: In 2011-2023, Germany's renewable energy share surged from 11% to 39% of total generation, accompanied by a fourfold increase in grid T&D (transmission & distribution) investment (made by companies like TenneT and E.ON). While interruptions from volatility and intermittency have been minimal in China, potential grid shocks cannot be ignored. Additionally, we believe fast-growing AI training & inference capex investment that follow the trend in US, as well as proliferating smart devices for growing charging needs in China, will potentially provide further upside. We expect data centers' contribution to total power consumption will rise from 1.6% in 2023 to 5% in 2030E with AI taking up around 12% of it.

图表 10: We believe a significantly higher proportion of grid investment going foward will serve to incorporate renewable energy
China power grid investment breakdown by growth drivers
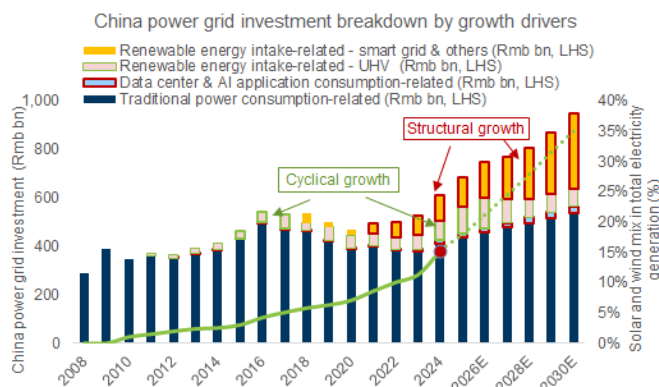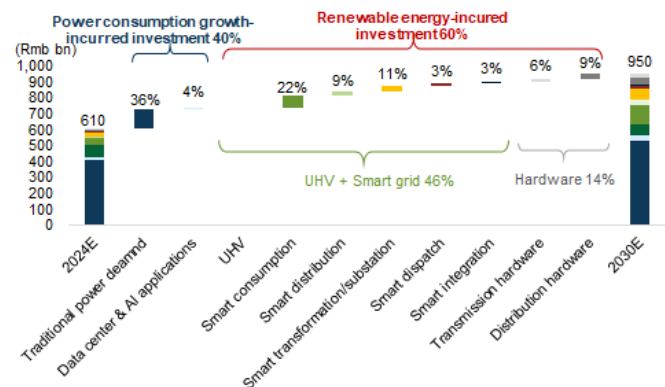

China power grid investment refers to investment made by the State Grid

资料来源：State Grid, Data compiled by Goldman Sachs Global Investment Research

图表 11: We expect 60% of incremental grid investment over 2024-30E will be driven by renewable energy intake
Breakdown of factors contributing to incremental power grid investment over 2024-30E

资料来源：State Grid, 高盛全球投资研究部

图表 12: China's grid reliability (in terms of average outage hours) is quite advanced but still lags behind developed countries such as the US and Germany
China/US/Germany average power outage hours and China power reliability, 2012-2023

China avg power outage (hrs, LHS) US avg power outage (hrs, LHS)
Germany avg power outage (hrs, LHS) China power reliability (%, RHS)
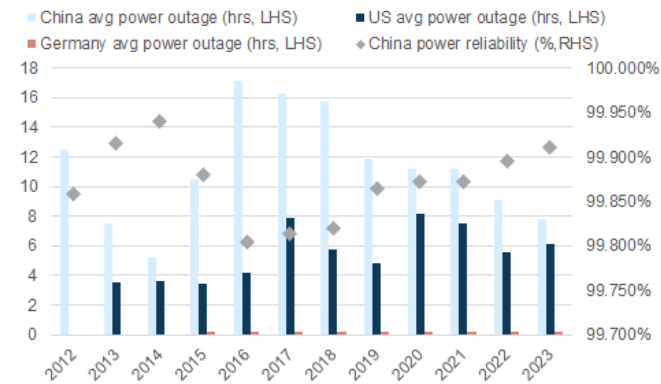
资料来源：EIA, 国资委, VDE, Clean Energy Wire

图表 13: China is going through a drastic change in power generation mix, with solar and wind expected to grow from 11% in 2023 to 35% in 2030E
China power generation mix change, 2008-2030E

China power generation mix (TWh)

Thermal Nuclear Hydroelectric Wind Solar

China's 2023 level => 11% wind + solar

资料来源：万得, 高盛全球投资研究部

图表 14: Germany's solar and wind mix was at 11% in 2011, same as China's 2023 level, and rapidly increased to 39% in 2023, with no power consumption growth
Germany electricity generation mix, 2000-2023

Germany electricity generation mix (TWh)

Coal Oil Natural gas Nuclear Others Hydroelectric Wind Solar

China's 2023 level => 11% wind + solar

资料来源：Clean Energy Wire, Data compiled by Goldman Sachs Global Investment Research

图表 15: Germany's grid capex nearly quadrupled over 2012-2023, driven not by consumption growth, but largely from the mix increase of solar and wind as well as grid upgrade
Germany's grid capex (mainly Tennet and E.ON) from 2012 to 2023

TenneT transmission grid capex in Germany (EUR bn, LHS)
E.ON distribution grid capex in Germany (EUR bn, LHS)
Renewable energy mix of electricity generation in Germany (%, RHS)

Annual grid capex 4x, as solar and wind mix of electricity generation 3x from 2012 to 2023
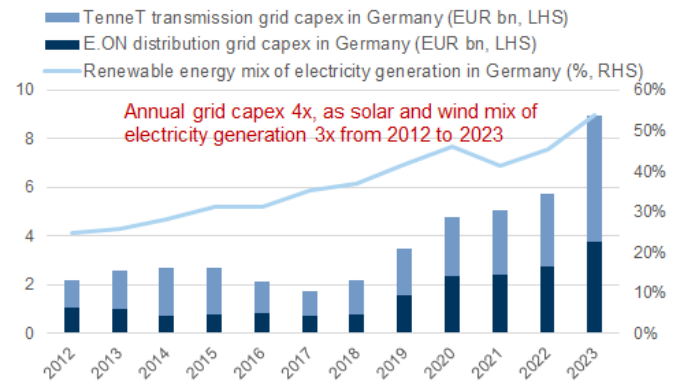
资料来源：公司数据, Data compiled by Goldman Sachs Global Investment Research

The biggest driver for power grid investment growth now is the relevant intelligent infrastructure to ensure the smooth integration of renewable energy and reliability of power system:

Smart Power Generation

Renewable energy like wind and solar is volatile and intermittent, requiring advanced grid adjustment systems. Coal power is the primary tool for flexibility, managing peaks and troughs in renewable output. Nari Tech offers renewable energy generation control solutions that integrate advanced systems like AGC, AVC, and FFR to ensure frequency stability, voltage regulation, and reliable power quality.

Smart Dispatch

Real-time control has replaced traditional scheduling to integrate renewables effectively. Accurate forecasting of renewables output, supported by advanced dispatch systems, enhances grid reliability. Nari Tech's flagship product has been Open-2000 since establishment, and has a dominant position (70-80% market share) in all five levels of dispatch system:national, regional, provincial, local, and county. The new dispatch system rolled out in 2020 has 20% higher content value than the previous iteration.

Smart Substations

Substations address challenges like reverse power flow, overloading, and instability from distributed renewables. Solutions include reactive power devices, voltage regulation tools, and equipment upgrades for grid reliability. Nari Tech offers relay protection and SVC (Static Var Compensator)/STATCOM (Static Synchronous Compensator) in the smart substations.

Smart Distribution

Modern distribution networks are shifting to active, bidirectional systems. Nari Tech offers intelligent devices like DTUs, TTUs, FTUs, and RTUs to enable fault detection, load forecasting, and seamless integration of renewable and EV loads into the grid.

Smart Power Consumption

Users actively participate in energy markets by producing, consuming, and storing energy. Nari Tech offers smart meters and integrated communication systems to facilitate informed decision-making and demand-side management, strengthening grid efficiency.

UHV Transmission

To address the mismatch between resource-rich areas and demand centers, UHV transmission transfers large-scale clean energy efficiently. Nari Tech offers the key component, converter valve, in Direct Current UHV lines.

图表 16: We believe UHV is the fastest-growing segment in 2025-26E, while investments shift towards the digital infrastructure in 2027-30E

Key changes to the grid and the reasons behind the change

China power grid investment refers to investment made by the State Grid

资料来源：State Grid, 公司数据, 高盛全球投资研究部

We also expect distribution network investments to grow faster than transmission over 2024-30E, with distribution investment contribution to increase from 56% of total in 2024E to 59% in 2030E. This shift is driven by: the need to modernize local grids to handle distributed energy resources (DERs), such as rooftop solar and energy storage systems; expansion of microgrids and enhancements to accommodate the increased use of electric vehicles and other decentralized loads; efforts to improve power reliability

and reduce outage rates, aligning with the need for higher-quality electricity supply.

图表 17: We expect distribution investment to increase as a % of total State Grid investment from 56% in 2024E to 59% in 2030E, rising from 48% in 2011
State Grid investment breakdown by T&D

State Grid investment breakdown by T&D (Rmb bn)
■ Transmission ■ Distribution
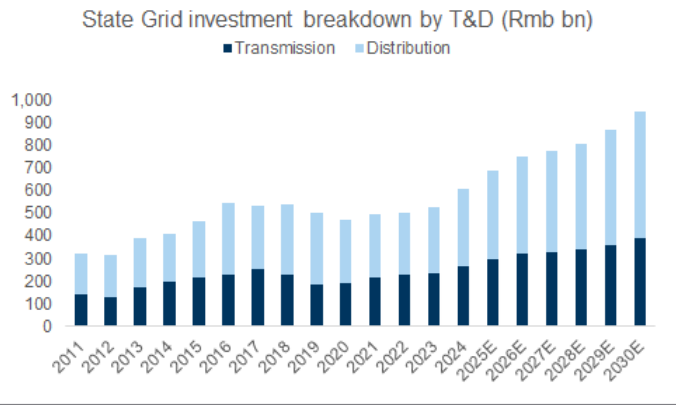
资料来源：State Grid, 高盛全球投资研究部

Where we are different (2): 2025E grid investment to stay strong but we are slightly above State Grid's target

We expect China's power grid investment, specifically those made by the State Grid, to reach a new high of Rmb690bn in 2025E with continued fiscal support and slightly above its announced annual target of Rmb650bn as grid investment is often served as a counter-cyclical economic policy tool, e.g., in 2008-09 and 2015-16. There will be continued tailwind from equipment upgrade, as "Implementation Plan for Large-Scale Equipment Upgrades in Key Energy Areas" aims to increase the scale of energy equipment investment by 25%+ to 2027, compared to 2023 (c.5% growth per annum). Among the total investment of Rmb690bn, we estimate 44% goes towards transmission investment (16% UHV and 27% HV) and 66% to distribution.

图表 18: We expect 2025E China power grid investment by State Grid to record a new high of Rmb690bn, +13% yoy... China's power grid investment forecasts
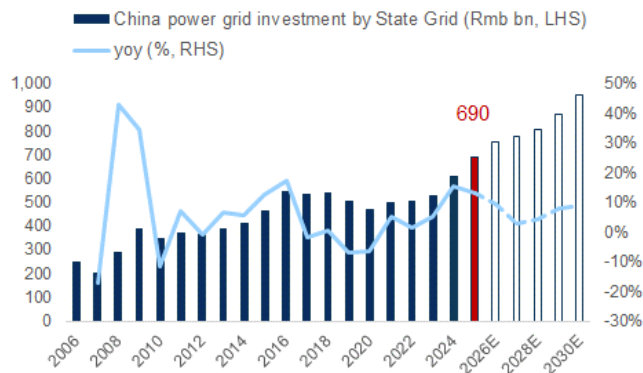
资料来源：State Grid, 万得, 高盛全球投资研究部

图表 19: ...with counter-cyclical policy support China's power grid investment growth vs. GDP growth
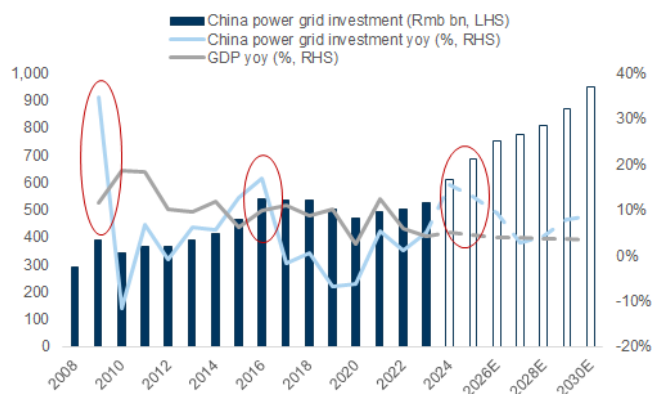
China power grid investment refers to investment made by the State Grid

资料来源：万得, State Grid, 高盛全球投资研究部

图表 20: Where will China power grid investment go towards in 2025E?
Breakdown of China's power grid investment by the State Grid
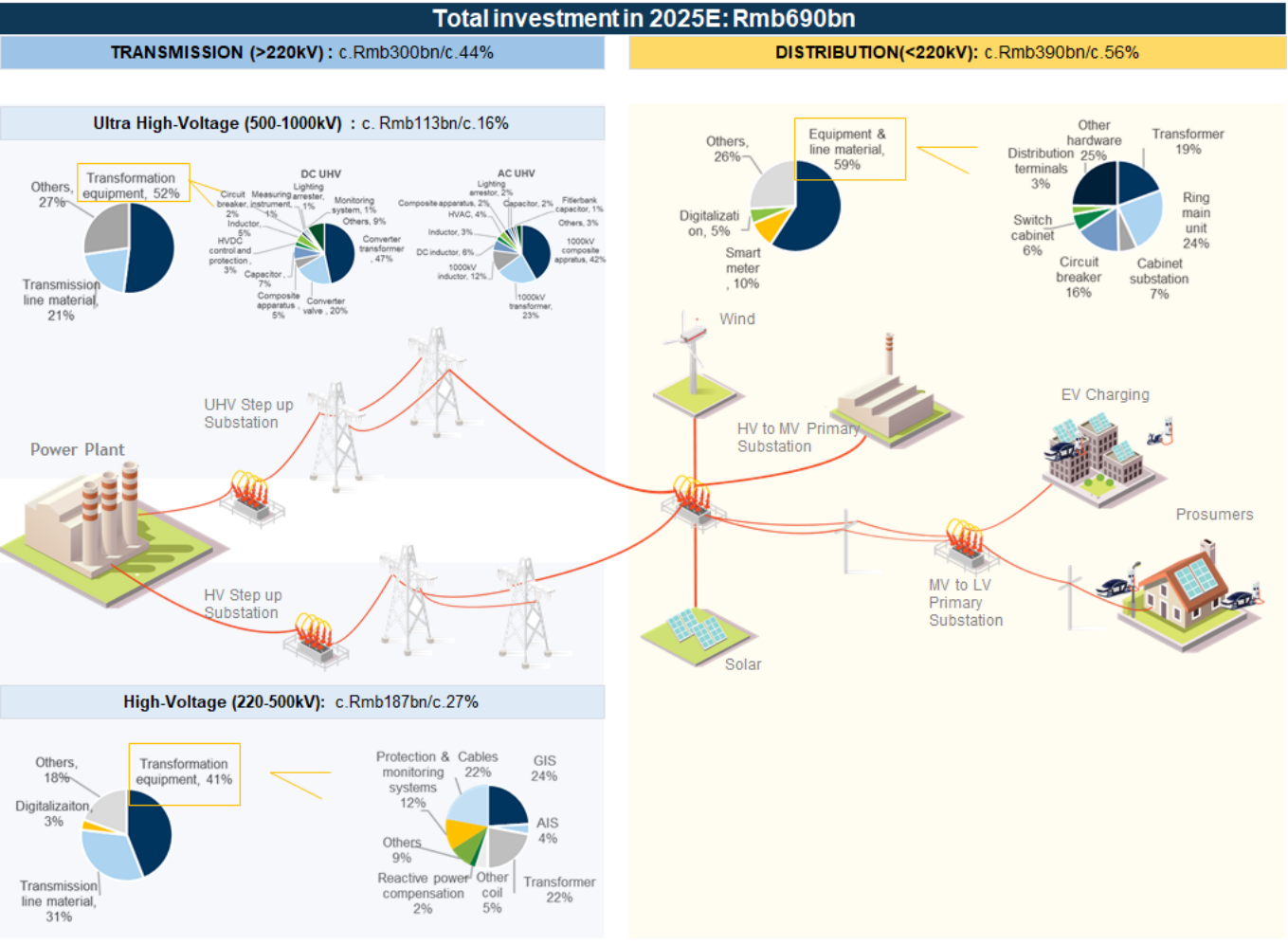
资料来源: State Grid, Data compiled by Goldman Sachs Global Investment Research

In terms of the fastest-growing segment in 2025E, we believe it will be UHV transmission investments. We expect UHV investment to grow 43%/13% yoy in 2025E/26E as project approval pace accelerates. Compared to four UHV lines starting construction in 2024, we expect at least six lines starting construction in 2025E-26E. The fast-growing upstream renewable energy installation requires advanced planning of UHV projects (the process from environmental assessment, approval, budgeting, design, to construction typically takes 3-5 years), to prevent the curtailment issue of wind and solar. At the 2025 National Energy Work Conference (Dec 15, 2024, link), China announced plans to prioritize the approval and construction of several key UHV projects in 2025, including corridors from Western Inner Mongolia to Beijing-Tianjin-Hebei, Southeastern Tibet to the Greater Bay Area, Gansu's Badain Jaran Desert to Sichuan, and Southern Xinjiang to Sichuan-Chongqing. We expect six new projects starting construction in 2025E-26E, driving the investments to a record high.

图表 21: We expect UHV investment growth to peak in 2025E/26E (with six projects starting construction each year)
China UHV investments and No. of projects starting/under construction, 2006-2030E
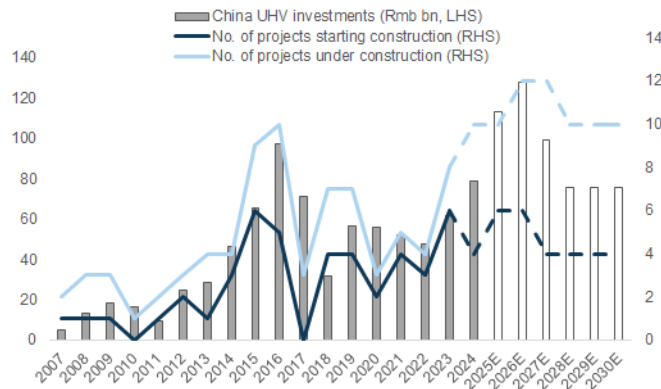
资料来源：State Grid, 高盛全球投资研究部

图表 22: Among the 15-16 UHV lines needed for solar and wind bases under 14th FYP, three lines are under construction, and seven lines are pending approval; 18-19 lines are required for 15th FYP
Three batches of solar and wind bases and corresponding demand for UHV lines
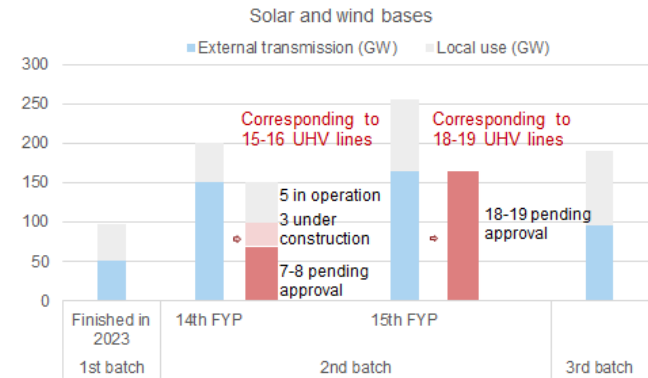
资料来源：State Grid, Data compiled by Goldman Sachs Global Investment Research

We believe UHV investments will stay elevated beyond 2025E, supported by strong demand to transmit the renewable energy from mega bases despite investment yoy growth slowing down. An UHV line with transmission power of 4-8GW on average can transmit 10-11GW of renewable energy and 3-4GW of supporting energy. The second batch of projects planned in 14th FYP (150GW of external transmission) will require 15-16 UHV lines, relying on five lines already in the installed base, and ten additional new lines (seven lines pending approval). The second batch of projects planned in 15th FYP (165GW of external transmission) will accordingly require 18-19 UHV lines. 15th FYP projects, combined with the third batch (40GW of external transmission), provide strong demand support to continued UHV construction. Additionally, the State Grid has also announced reserve projects of five AC line and nine DC lines, which we believe will sustain the UHV construction pace beyond 2025E.

图表 23: There is an ample pipeline of UHV projects awaiting approval
List of announced/planned projects of UHV lines for 14th Five-Year Plan and State Grid reserve projects.

| Project EN	Project CN	Project type	Status	Approval time	Construction start	Operation start	Transmission power (GW)	Investment (Rmb mn)	Length (km)	Power (kV)
14th Five-Year Plan: 3 AC lines and 9 DC lines										
Zhangbei - Shengli	张北-胜利	AC	In operation	Sep-22	Sep-23	Oct-24	8	6,786	366	800
Chengdu - Chongqing	甘孜-天府南-成都东、天府南-铜梁 (川	AC	Under construction	Aug-22	Sep-22	Jul-25	2	28,800	658	1000
Jinshang - Hubei	金上-湖北	DC	Under construction	Dec-22	Mar-23	Apr-25	4	33,484	1,901	800
Longdong - Shandong	陇东-山东	DC	Under construction	Feb-23	Aug-23	Jun-25	8	20,200	934	800
Ningxia - Hunan	宁夏-湖南	DC	Under construction	May-23	Jun-23	Dec-25	8	28,100	1,619	800
Hami - Chongqing	哈密-重庆 (疆电入渝)	VSC-DC	Under construction	Jul-23	Mar-24	Sep-25	8	28,600	2,290	800
North Shaanxi - Anhui	陕北-安徽 (途径河南)	DC	Under construction	Feb-24	Jun-24	Jun-26	8	20,500	1,069	800
Gansu - Zhejiang	**甘肃-浙江**	**VSC-DC**	Under construction	Jul-24	Dec-24	Jun-26	4	35,300	2,370	800
Datong - Huailai - Tianjin North South	大同-怀来-天津北-天津南	AC	Under construction	Oct-24	Jan-25	Sep-26	6	22,480	770	1000
Mongolia West - Beijing/Tianjin/Hebei	蒙西-京津冀	**VSC-DC**	Waiting for approval							
Tibet Southeast - Guangdong/HK/Macao	藏东南-粤港澳	**VSC-DC**	Waiting for approval							
Shaanxi - Henan	陕西-河南 (途径山西)	DC	Waiting for approval							
State Grid Reserve Projects: 5 AC lines and 9 DC lines										
Badan Jilin - Sichuan	巴丹吉林-四川	**VSC-DC**	Waiting for approval							
Xinjiang South - Chuanyu	南疆-川渝	DC	Waiting for approval							
Qinghai outbound	青海海南外送	DC	Waiting for approval							
Huabei Dalate - Mengxi	华北达拉特-蒙西	AC	Waiting for approval							
Ulaanbuh - Jingjinji	乌兰布和-京津冀	DC	Waiting for approval							
Kubuqi - Shanghai	库布奇-上海	DC	Waiting for approval							
Datong-Bayannur	大同-乌兰察布-包头-巴彦淖尔	AC	Waiting for approval							
Datong-Baotou	大同-达拉特-包头	AC	Waiting for approval							
Mongolia - Jiangsu	内蒙古-江苏	**VSC-DC**	Waiting for approval							
Songliao - Northern Area	松辽-华北	DC	Waiting for approval							
Panxi-Tianfu South	攀西-川南-天府南	AC	Waiting for approval							
Tenggeli - Jiangxi	腾格里-江西	DC	Waiting for approval							
Yanwei	烟威	AC	Waiting for approval							
Jiuquan - Eastern Area	内蒙古-华东	DC	Waiting for approval							

资料来源：国家能源局, State Grid, Data compiled by Goldman Sachs Global Investment Research

On top of UHV growth, Nari Tech will also benefit from the penetration of VSC-HVDC, where we forecast relay protection and flexible transmission revenue segment to deliver 25%/26% yoy growth in 2025E/26E. About 4-7 months after the start of project construction, State Grid hosts primary and secondary equipment tendering. If Nari Tech wins the tender, it usually takes them about a year to deliver the product in order to book revenue. We think the momentum of strong revenue recognition may sustain into 2026-27E. Nari Tech offers converter valves for UHV projects, whose significance among UHV equipment increases from 22% in DC lines to 29% in VSC-HVDC lines. With increased penetration of VSC-DC, the content value for converter valves per GW grows 2.2X on average compared to a normal DC line, and Nari Tech holds a dominant market position (c.49%) in both DC and VSC-DC lines.

图表 24: Typically, secondary equipment tendering lags primary equipment tendering by 3-6 months.
Typical timeline for a UHV project, from approval to tendering to operations
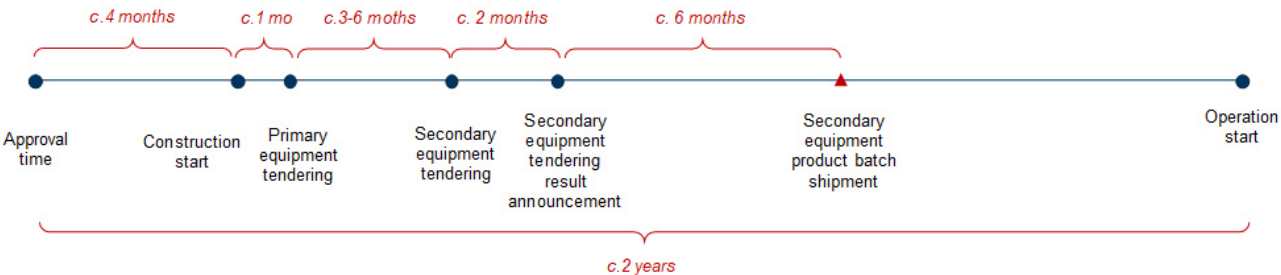
资料来源：State Grid, Data compiled by Goldman Sachs Global Investment Research

图表 25: On average, 25-29% of UHV investments go to equipment, where Nari Tech specializes in converter valve, with 20% of total equipment value in DC, which increases to 39% in VSC-DC lines

DC/VSC-DC/AC line equipment cost breakdown

	DC				VSC-DC				AC		
	Yazhong - Nanchang 雅中-南昌	Baihetan-Zhejiang 白鹤滩-浙江	Average breakdown (%)		Wudongde-Guangdong/ Guangxi乌东 德-广东广西	Baihetan-Jiangsu 白鹤滩-江苏	Average breakdown (%)		Nanchang-Changsha 南昌- 长沙	Zhangbei-Shengli 张北-胜利	Average breakdown (%)
Total investment (Rmb mn)	24,400	27,000		Total investment (Rmb mn)	24,250	30700		Total investment (Rmb mn)	10200	6,780	
Equipment as % of investment	29%	26%	27%	Equipment as % of investment	31%	28%	29%	Equipment as % of investment	28%	22%	25%
Equipment (Rmb mn)	7,146	6,936		Equipment (Rmb mn)	7,500	8,617		Equipment (Rmb mn)	2869	1484	
Converter transformer 换流变压器	3,230	3,332	47%	Converter valve and cooling 换流阀及阀冷却系统	3,528	2,635	39%	1000kV composite appratus 1000kV组合电器	1061	693	42%
Converter valve 换流阀	1,508	1,312	20%	Transformer 换流变压器和柔直变压器	595	3,306	23%	1000kV transformer 1000kV变压器	595	376	23%
Composite apparatus 组合电器	393	365	5%	Inductor 直流场电抗器	249	107	2%	1000kV inductor 1000kV电抗器	249	234	12%
Capacitor 电容器	507	487	7%	DC control and protection 直流控制保护系统	348	308	4%	DC inductor 直流电抗器	348		6%
HVDC control and protection 直流控制保护系统	193	175	3%	Wall bushing 直流穿墙套管	81	242	2%	Inductor 电抗器	81	40	3%
Inductor 电抗器	293	352	5%	Isolating switch 直流隔离开关和接地开关	177	99	2%	HVAC 压型钢板及通风空调系统	177	18	4%
Circuit breaker 交流断路器	86	144	2%	Lightning arrestor 支流避雷器	80	105	1%	Composite apparatus 组合电器	80	24	2%
Measuring instrument 测量装置	11	151	1%	Others 其他	2,442	1,815	27%	Lighting arrestor 避雷器	34	29	2%
Lighting arrester 避雷器	86	79	1%					Capacitor 电容器	48	30	2%
Monitoring system 辅助监控系统	43	35	1%					Fitlerbank capacitor 滤流器组电容器	85		1%
Others 其他	797	504	9%					Others 其他	111	40	3%

Red boxes are Nari Tech's main products

资料来源：State Grid, Data compiled by Goldman Sachs Global Investment Research

A key enabler of a smarter, more flexible and more reliable grid

Nari Tech is a key enabler of a smarter, more flexible and more reliable grid, as the company especially benefits from the structurally growing areas of grid investment, UHV and smart grid investments. Its products range from power generation control solutions, dispatch software, components in substations, distribution and power usage intelligent devices, to downstream control for factories. By product nature, 40% of the company's revenue is software-driven. Ranking by the expected revenue CAGR in 2024E-30E, we expect:

- Grid digitalization revenue (23% of firmwide in 2024E) to deliver 13% CAGR, supported by growing IT spending by grid companies (this segment mainly provides products such as asset management software, ERP software to State Grid/Southern Grid).

- Grid automation: flexible transmission & relay protection revenue (9% of firmwide in 2024E) to deliver 12% CAGR, mainly driven by converter valve tendering from the Direct Current UHV lines, as well as relay protection products to ensure grid reliability. We expect this segment to deliver strong growth in 2025E/26E at 25%/26% yoy due to full UHV construction and tendering pipelines.

- Grid automation: distribution & consumption revenue (14% of firmwide in 2024E) to deliver 12% CAGR, due to the complex electricity information flow and the increasing use of smart meters.

- Power generation revenue (22% of firmwide in 2024E) to deliver 9% CAGR, driven mainly by power generation investment growth and also a low market share of the company and thus high growth potential.

- Grid automation: dispatch revenue (9% of firmwide in 2024E) to deliver 8% CAGR, as complex electricity flows from renewable energy integration drive product upgrades, at a relatively slower growth as product upgrades since 2020 have come near the end.

- Grid automation: substation revenue (14% of firmwide in 2024E) to deliver 8% CAGR, supported by added content (SVC/STATCOM) to substation, as well as smart substation penetration.

- Industrial internet revenue (6% of firmwide in 2024E) to deliver 5% CAGR, driven by industrial application growth.

图表 26: We initiate Nari Tech as it is a key enabler of a smarter and more reliable grid, especially benefitting from the structurally growing areas such as UHV and smart grid investments
Overview of Nari Tech's products in relation to the power grid

POWER GRID	NARI TECH RELEVANT PRODUCTS & MKT SHARE				GROWTH DRIVERS	
	Nari Tech revenue segmentation	2024E Revenue Mix	Key products	Market Share	Growth drivers	2024E-30E revenue CAGR
Grid Digitalization	Grid Digitalization	23%	MES systems for grid assets	high	- Grid digitalization, growing IT spending	13%
Power generation	Power generation	22%	Integrated control of all energy sources	low	- Power generation investment growth - Intelligent control of renewable energy	9%
Dispatch system	Grid Automation: Dispatch	9%	Dispatch hardware / Dispatch software	53% / 70%	- Smart grid: Complex electricity flow from integration of renewable energy causes product upgrade	8%
UHV / High voltage	Grid Automation: Flexible transmission & relay protection	9%	Converter valve / Relay protection	37% / 34%	- UHV: Cross-provincial transmission of renewable energy - Smart grid: More protection required to ensure reliability of the grid given the volatile nature of renewable energy	12%
HV to LV substation	Grid Automation: Substation	14%	SVC/STATCOM	56%	- Smart grid: Increased substation capacity for more power generation and smart substation penetration	8%
Distribution / Consumption	Grid Automation: Distribution & Consumption	14%	Smart meter	5%	- Smart grid: complex electricity information flow due to varied users, distributed energy sources, reformed power system, increased use of smart meters	12%
Industrial Internet	Industrial Internet	6%	PLC, SCADA, energy management system	low	- Industrial economy growth	5%

资料来源：State Grid, 公司数据, 高盛全球投资研究部

Nari Tech is a comprehensive power equipment supplier with a broad product portfolio spanning across power generation solutions, dispatch system, transmission and distribution equipment. Unlike global peers like Siemens (mainly distribution equipment), Siemens Energy (mainly transmission equipment), GE Vernova (mainly generation solutions) and other domestic competitors that specialize in select segments, Nari Tech integrates hardware and software solutions across the supply chain. This unique positioning enables Nari Tech to address the full spectrum of China's power grid modernization needs, giving it a competitive edge in both scope and relevance.

图表 27: Nari Tech has a comprehensive product offering among grid equipment supply chain, covering both high-voltage transmission equipment and low-voltage distribution equipment, with emphasis on secondary equipment

		Siemens SIEGn.DE	Siemens Energy ENR1n.DE	GE Vernova GEV	ABB ABBN.S	Schneider SCHN.PA	Eaton ETN	Nari Tech 600406.SS	XJ Electric 600895.SS	XD 000400.SZ	Pinggao 603556.SS	Sifang 601126.SS	Sieyuan 601567.SS	TBEA 002028.SZ
Electricity generation	Total solution		✓	✓	✓			✓	✓	✓		✓		✓
Grid software	Dispatching system	✓	✓	✓	✓			✓				✓		
High-voltage transmission equipment	Transformers, circuit breakers		✓	✓	✓				✓	✓	✓		✓	
	Converter valve		✓	✓	✓			✓	✓	✓		✓		✓
	Relay protection		✓	✓	✓			✓	✓			✓		
Medium/Low voltage distribution equipment	Transformer, switchgears	✓			✓	✓	✓			✓	✓	✓		✓
	Control and protection	✓			✓	✓	✓	✓	✓			✓	✓	
Consumption	Smart meter	✓	✓	✓	✓	✓	✓	✓	✓					

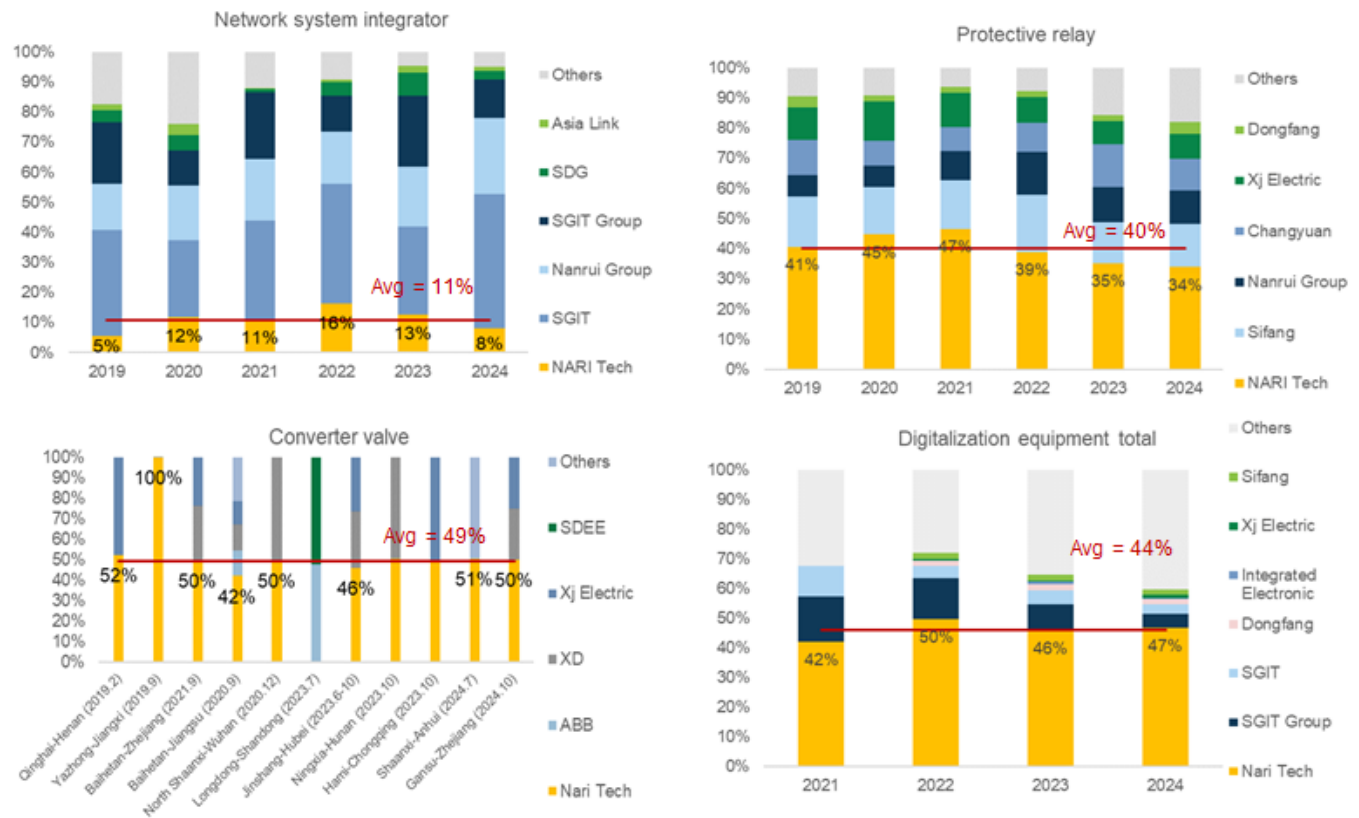资料来源：公司数据, Data compiled by Goldman Sachs Global Investment Research

Likely to maintain leadership in various software/hardware technologies

Nari Tech is a leader in many product categories: In 2024, Nari Tech had a 70% market share in digitalization software, ranking No.1; it also held a 53% market share in digitalization hardware, ranking No.1; it held a 47% market share for UHV converter valves, ranking as No.1. Within substation tendering, it held a 56%/34%/8% market share in SVC&STATCOM/protective relay/network system integrator, ranking No.1/No.1/No.4. For smart meters, Nari Tech held a 5% market share, ranking No.1 in a very scattered market.

Market share also remained relatively stable over the past few years, reflecting a consistent competitive landscape and highlighting Nari Tech's leading advantages. We attribute this stability to the company's strong R&D capabilities, superior product performance, and robust backing of its largest shareholder, which has solidified its position in the industry.
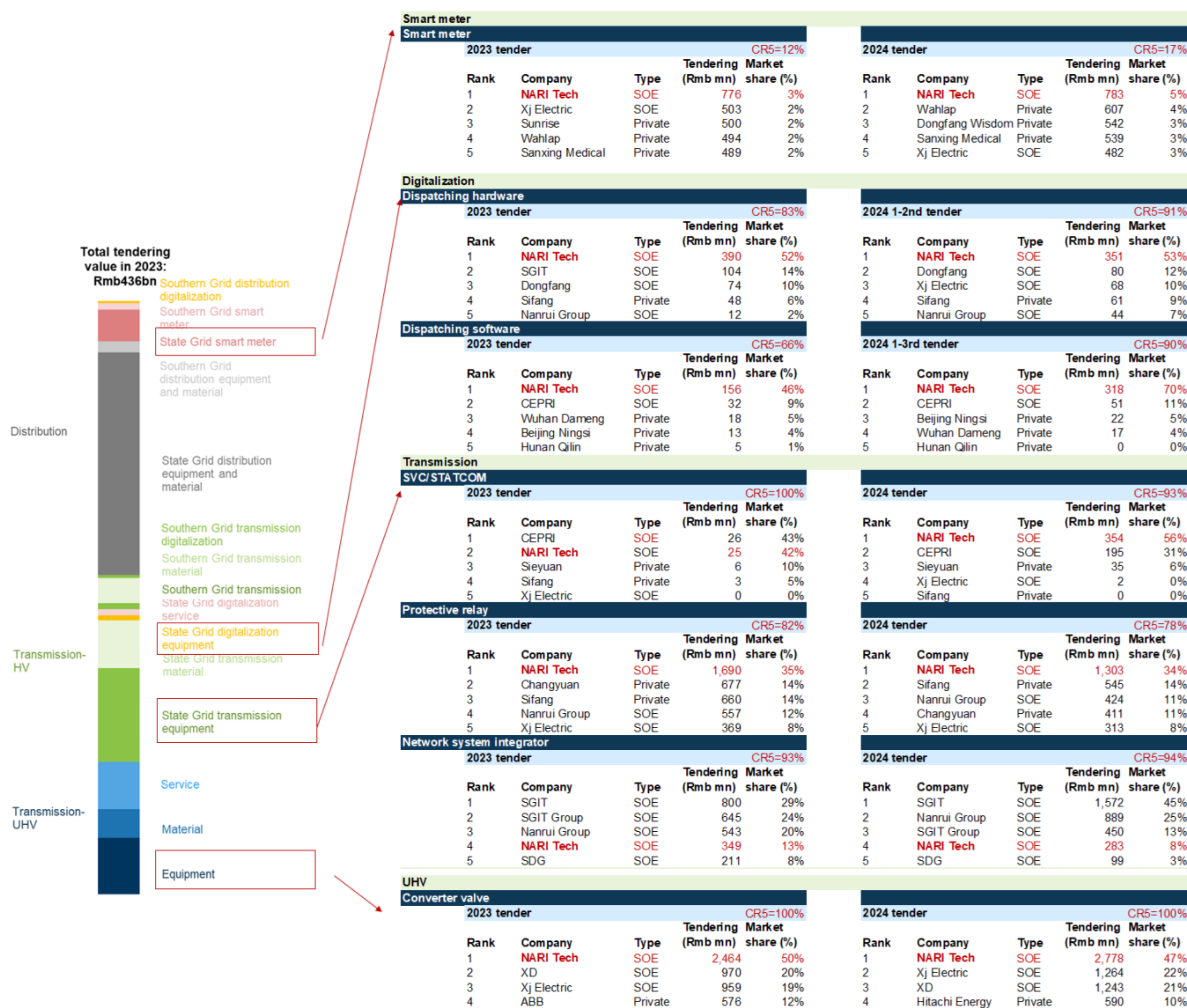
图表 28: Nari Tech's market share for various products has been stable
Competition landscape for Nari Tech's products in history

资料来源：State Grid, Data compiled by Goldman Sachs Global Investment Research

图表 29: Nari Tech is dominant in digitalization (dispatch hardware/software), SVC/STATCOM, protective relay, and converter valve

Tendering overview and competition landscape of Nari Tech's products

Smart meter

		2023 tender			CR5=12%			2024 tender			CR5=17%
Rank	Company	Type	Tendering (Rmb mn)	Market share (%)		Rank	Company	Type	Tendering (Rmb mn)	Market share (%)	
1	NARI Tech	SOE	776	3%		1	NARI Tech	SOE	783	5%	
2	Xj Electric	SOE	503	2%		2	Wahlap	Private	607	4%	
3	Sunrise	Private	500	2%		3	Dongfang Wisdom	Private	542	3%	
4	Wahlap	Private	494	2%		4	Sanxing Medical	Private	539	3%	
5	Sanxing Medical	Private	489	2%		5	Xj Electric	SOE	482	3%	

Digitalization

Dispatching hardware

		2023 tender			CR5=83%			2024 1-2nd tender			CR5=91%
Rank	Company	Type	Tendering (Rmb mn)	Market share (%)		Rank	Company	Type	Tendering (Rmb mn)	Market share (%)	
1	NARI Tech	SOE	390	52%		1	NARI Tech	SOE	351	53%	
2	SGIT	SOE	104	14%		2	Dongfang	SOE	80	12%	
3	Dongfang	SOE	74	10%		3	Xj Electric	SOE	68	10%	
4	Sifang	Private	48	6%		4	Sifang	Private	61	9%	
5	Nanrui Group	SOE	12	2%		5	Nanrui Group	SOE	44	7%	

Dispatching software

		2023 tender			CR5=66%			2024 1-3rd tender			CR5=90%
Rank	Company	Type	Tendering (Rmb mn)	Market share (%)		Rank	Company	Type	Tendering (Rmb mn)	Market share (%)	
1	NARI Tech	SOE	156	46%		1	NARI Tech	SOE	318	70%	
2	CEPRI	SOE	32	9%		2	CEPRI	SOE	51	11%	
3	Wuhan Dameng	Private	18	5%		3	Beijing Ningsi	Private	22	5%	
4	Beijing Ningsi	Private	13	4%		4	Wuhan Dameng	Private	17	4%	
5	Hunan Qilin	Private	5	1%		5	Hunan Qilin	Private	0	0%	

Transmission

SVC/STATCOM

		2023 tender			CR5=100%			2024 tender			CR5=93%
Rank	Company	Type	Tendering (Rmb mn)	Market share (%)		Rank	Company	Type	Tendering (Rmb mn)	Market share (%)	
1	CEPRI	SOE	26	43%		1	NARI Tech	SOE	354	56%	
2	NARI Tech	SOE	25	42%		2	CEPRI	SOE	195	31%	
3	Sieyuan	Private	6	10%		3	Sieyuan	Private	35	6%	
4	Sifang	Private	3	5%		4	Xj Electric	SOE	2	0%	
5	Xj Electric	SOE	0	0%		5	Sifang	Private	0	0%	

Protective relay

		2023 tender			CR5=82%			2024 tender			CR5=78%
Rank	Company	Type	Tendering (Rmb mn)	Market share (%)		Rank	Company	Type	Tendering (Rmb mn)	Market share (%)	
1	NARI Tech	SOE	1,690	35%		1	NARI Tech	SOE	1,303	34%	
2	Changyuan	Private	677	14%		2	Sifang	Private	545	14%	
3	Sifang	Private	660	14%		3	Nanrui Group	SOE	424	11%	
4	Nanrui Group	SOE	557	12%		4	Changyuan	Private	411	11%	
5	Xj Electric	SOE	369	8%		5	Xj Electric	SOE	313	8%	

Network system integrator

		2023 tender			CR5=93%			2024 tender			CR5=94%
Rank	Company	Type	Tendering (Rmb mn)	Market share (%)		Rank	Company	Type	Tendering (Rmb mn)	Market share (%)	
1	SGIT	SOE	800	29%		1	SGIT	SOE	1,572	45%	
2	SGIT Group	SOE	645	24%		2	Nanrui Group	SOE	889	25%	
3	Nanrui Group	SOE	543	20%		3	SGIT Group	SOE	450	13%	
4	NARI Tech	SOE	349	13%		4	NARI Tech	SOE	283	8%	
5	SDG	SOE	211	8%		5	SDG	SOE	99	3%	

UHV

Converter valve

		2023 tender			CR5=100%			2024 tender			CR5=100%
Rank	Company	Type	Tendering (Rmb mn)	Market share (%)		Rank	Company	Type	Tendering (Rmb mn)	Market share (%)	
1	NARI Tech	SOE	2,464	50%		1	NARI Tech	SOE	2,778	47%	
2	XD	SOE	970	20%		2	Xj Electric	SOE	1,264	22%	
3	Xj Electric	SOE	959	19%		3	XD	SOE	1,243	21%	
4	ABB	Private	576	12%		4	Hitachi Energy	Private	590	10%	

Total tendering value in 2023: Rmb436bn

- Southern Grid distribution digitalization
- Southern Grid smart meter
- State Grid smart meter
- Southern Grid distribution equipment and material
- State Grid distribution equipment and material
- Southern Grid transmission digitalization
- Southern Grid transmission material
- Southern Grid transmission service
- State Grid digitalization service
- State Grid digitalization equipment
- State Grid transmission material
- State Grid transmission equipment

Distribution

Transmission-HV

Transmission-UHV

- Service
- Material
- Equipment

Nari Tech's ultimate controlling shareholder is the State Grid Electric Power Research Institute (SGEPRI, or originally established as the Nanjing Automation Research Institute).

Nari Tech's parent company, Nari Group, was fully funded and established by SGEPRI in 1993. In 2001, Nari Group initiated the creation of Nari Tech, incorporating mature business units from within the group, including the Grid Division (with flagship products like the OPEN2000 dispatching system), the System Control Division (known for its substation automation systems), and the Industrial Control Division (which developed distributed control systems for thermal power plants). Nari Tech was listed on the A-share market in 2003.

图表 30: With State Grid being its biggest shareholder, Nari Tech has natural advantages to maintaining its market share leadership

Nari Tech's shareholder structure
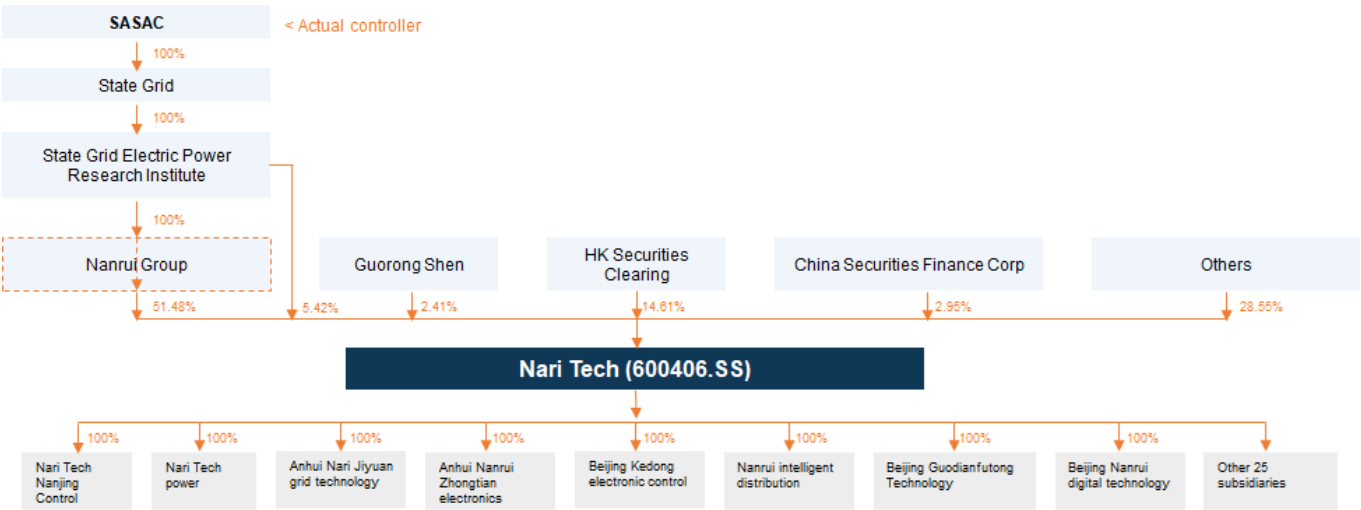
Nari Tech proposed to transfer Nanrui Group's share to State Grid Electric Power Research Institute on Dec 23, 2024, but the transfer is not finalized yet.

资料来源：公司数据, Data compiled by Goldman Sachs Global Investment Research

Potential catalysts

China grid investment policy stance typically key catalyst

For upcoming catalysts, we need to closely watch the State Grid's work plans (whether to further raise capex plan by mid-July 2025 as they did in 2024), the Two Sessions in March 2025 for energy policy direction, and the release of the 15th Five-Year Energy/Grid Plan in 2026, which will shape the future of grid investments and renewable energy policy. We expect further valuation upside to come from AI capex growth news which may lead to the expansion of AI-related power demand.

Key catalysts in the past mainly revolve around significant policies targeting the grid segment:

- 2015 Mar: Deepening the Reform of Electric Power System (Document No. 9) was issued to establish an open and transparent electricity market system.

- 2018 Jul: Three-Year Action Plan for Blue Sky Defense was introduced, emphasizing the need for UHV networks to reduce air pollution and transition to clean energy sources.

- 2019 Mar: NEA released policies on electricity IoT, highlighting smart grids, data sharing, and energy efficiency.

- 2020 May: New infrastructure initiatives listed UHV transmission as one of the key focus areas.

- 2020 Sep: China's pledge to achieve carbon neutrality by 2060 brought further support for renewable energy and grid modernization.

- 2021 Jun: NDRC announced that starting from January 2022, new onshore wind and solar projects would transition to grid-parity pricing instead of subsidies.

- 2022 Dec: NDRC and NEA jointly released a roadmap to accelerate the development of a unified electricity market across China.

The two red-shaded boxes in the chart below represent phases of share price decline. The first decline coincided with a broader market sell-off aligned with the CSI300 index downturn, while the second can be attributed to renewable energy subsidy phase-out and concerns about the transition to grid-parity pricing.

图表 31: Key catalysts include 1) any step up of grid investment during Two Sessions in March 2025 or by mid-2025 as State Grid did in 2024; 2) release of the 15th Five Year Energy/Grid plan in 2026
Share price performance review and key catalysts ahead
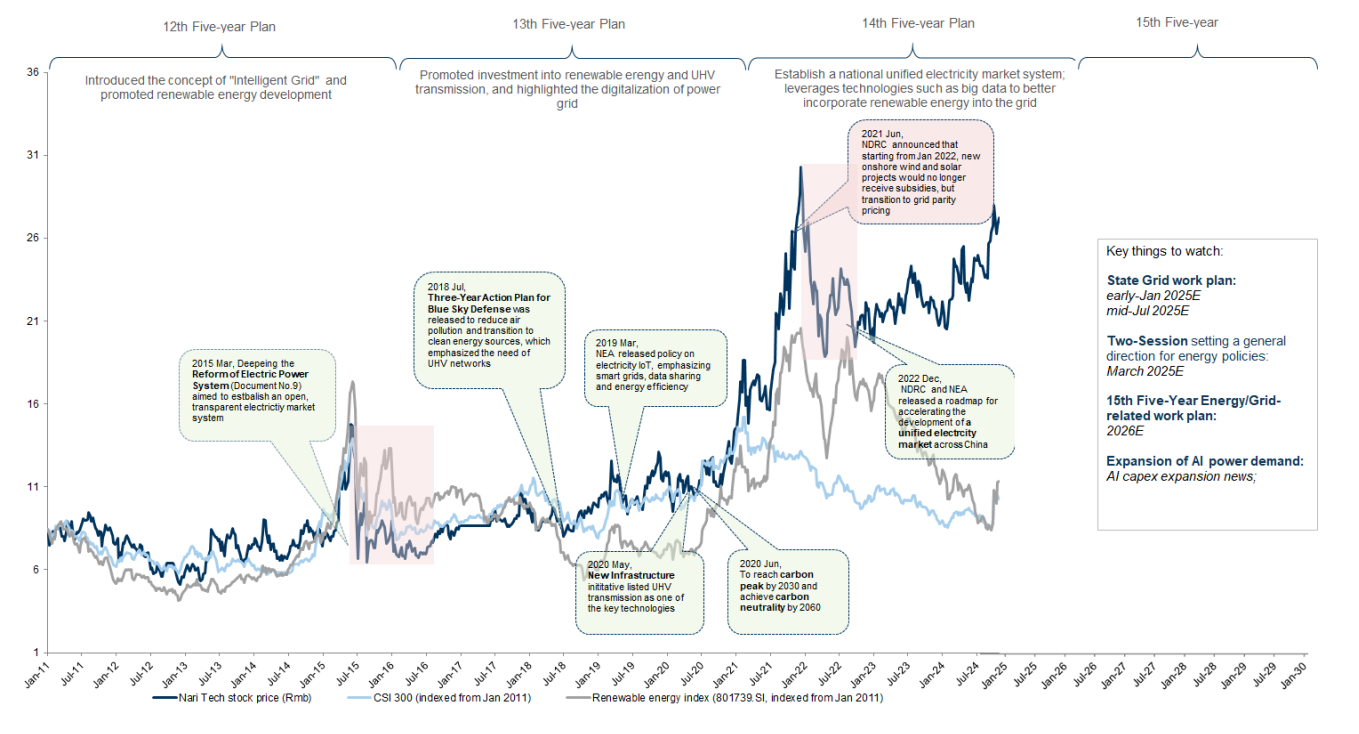
资料来源: State Grid, 万得, 国家发改委, 高盛全球投资研究部

图表 32: Nari Tech has been the leading large cap stock in each historical China domestic power grid upcycle, and we believe it's likely to outperform ahead driven by domestic UHV and smart grid built-out
Share price history for power equipment stocks and drivers
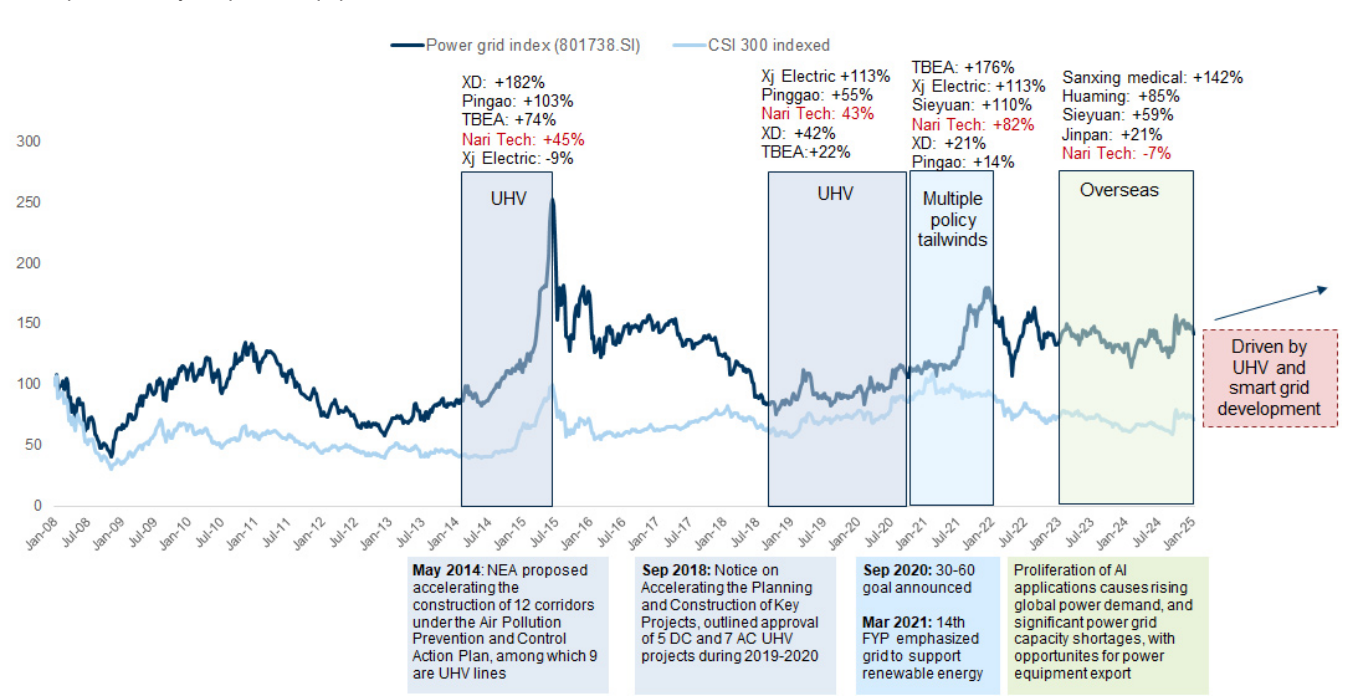
资料来源: 万得, IEA, 国家发改委, Data compiled by Goldman Sachs Global Investment Research

Further upside may be driven by AI demand

We expect global data center demand to grow 165% by 2030E compared to 2023, with its contribution rising from 1%-2% to 3%-4% of global power consumption. This is mainly due to AI queries consuming up to 10X more power than traditional queries (report link). Our GS team estimates that US data center demand will more than triple by 2030E, driven by hyperscalers' capex growth (report link).

Recently, there have been significant progress in China AI and large model space, and we expect AI to take up a more significant portion of total electricity consumption. With Doubao's (Bytedance's large model) MAU (monthly active users) rising to 60mn as of Nov 2024 according to AICPB, securing the No.2 spot globally and daily tokens reaching 40 trn (announced on the 2024 Volcano Engine Force Conference on Dec 18, 2024), Bytedance is set to embark on intensive AI capex investment in China (news). Bytedance's leading large model may prompt other customer service platforms (CSPs) to also expand their capex significantly.

The positive progress in model development and end applications could mark a start to an AI capex and application era in China, further boosting power demand. We expect data centers' contribution to total power consumption will rise from 1.6% in 2023 to 5% in 2030E with AI taking up around 12% on average within data centers.

However, technological advances may increase AI model training efficiency. For example, DeepSeek-V3, developed by Chinese company Huanfang Quantitative, was launched on Dec 24, 2024 and is based on its self-developed Mixture of Experts (MoE) model architecture. The model increased its generation speed significantly vs. its V2.5, from 20 TPS (transactions per second) to 60 TPS, featuring 671bn parameters and was trained in approximately two months at a cost of US$5.58mn, utilizing far fewer computing resources than models developed by larger tech companies. The model only used 2.8mn hours of GPU compute (one tenth of that used by Llama 3).

Overall, despite the intermittent advances in AI model training efficiency and thus savings in power consumption, we still believe AI applications are in the early stage in China, poised for compute and inference growth, with rising power demand from AGI applications, as well as more energy-consuming terminal charging devices (such as humanoid robots, etc.) yet to come.

图表 33: We expect China's data center power demand to rise from 1.6% of total in 2023 to 5% in 2030E, with AI taking up around 12% of data center power demand

Data center demand for global, US and China

Global data center power demand grows 165% by 2030 vs. 2023, rising from 1-2% to 3-4% of global power demand by 2030, per GS estimates

Global data center electricity consumption, TWh; includes AI and excludes cryptocurrency

Source: Masanet et al. (2020), Cisco, IEA, Goldman Sachs Global Investment Research

AI servers and ChatGPT queries could be up to 10x more energy intensive than traditional servers and traditional Google searches

Source: 650 Group, Google, SemiAnalysis

US: Power demand from data centers will more than triple in 2030E vs 2020, rising to 8% of total power demand from 3% currently (with AI taking up 20% of data center power demand), lifting total power consumption from ~0% CAGR to 2.4%

Data center electricity consumption, TWh (LHS) and 3-year rolling average power efficiency gains yoy, % (RHS)

US cloud hyperscaler capex trend

China: We expect data center power demand to rise from 1.6% of total demand in 2023 to 5% in 2030E, with AI demand taking up around 12% of total data center demand

Data center electricity demand (GWh)

China's large internet companies/CSPs' capex reached record high in 3Q24 with 115% yoy growth partially boosted by Gen-AI related Capex

资料来源: Masent et al (2020), Cisco, IEA, 650 Group, SemiAnalysis, FactSet, Haver, S&P Global, Taiwan Energy Administration, Ministry of Economic Affairs (MOEAEA), 万得, 公司数据, 高盛全球投资研究部

图表 34: Since Chatgpt-4's release in March 2023, US power equipment stocks have rallied in response to expanding electricity demand

US power equipment share price performance with AI-related power surge
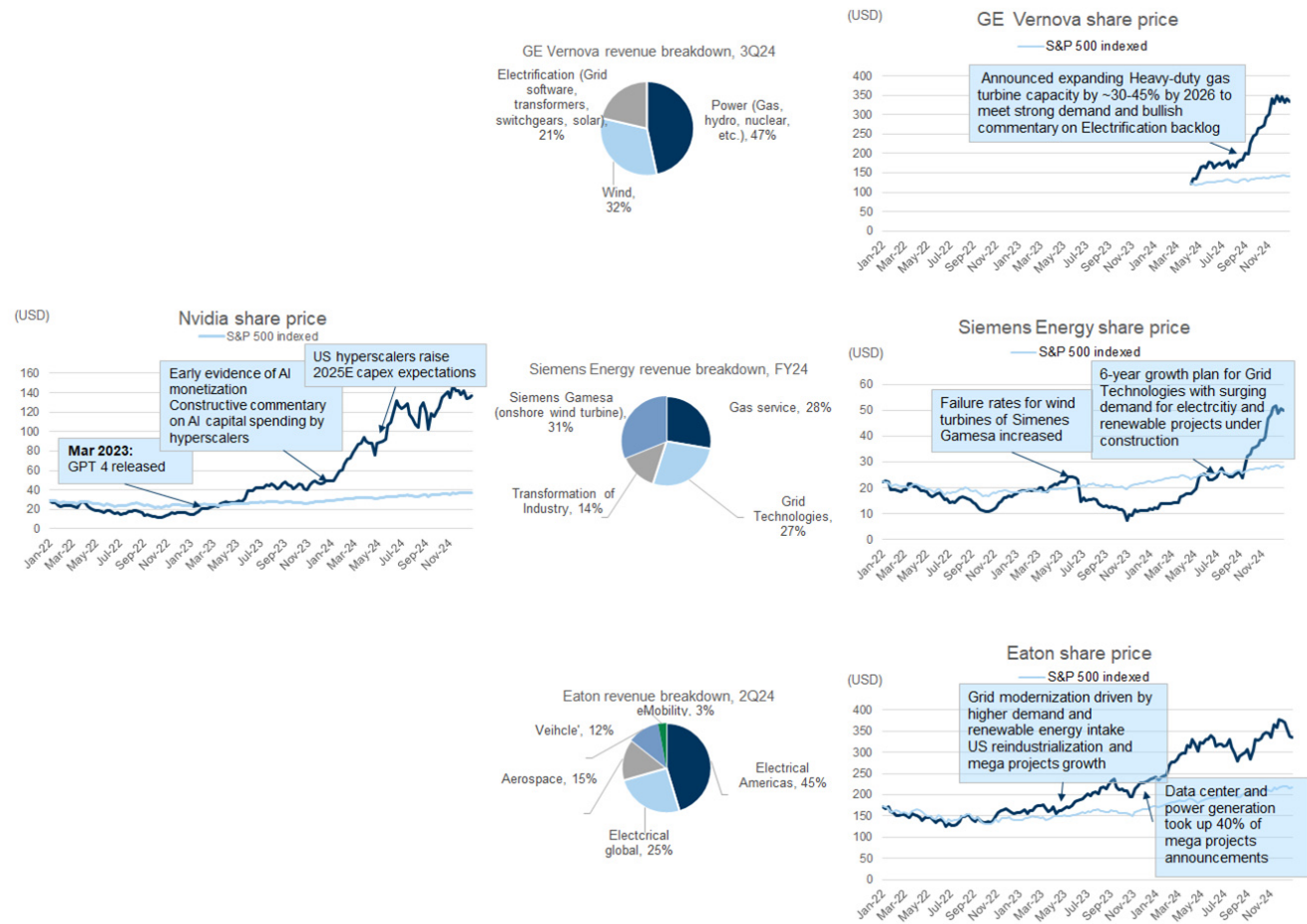
Solid financial performance vs. peers

Income statement

Revenue: We forecast Nari Tech's revenue/net profit to deliver 10%/11% CAGR in 2024-30E, driven by leading segments such as power grid digitalization/power grid automation delivering 13%/10%. Among power grid automation segments, we believe relay protection and flexible transmission (UHV)/distribution and consumption segments will outperform the segment average at 12%/12% CAGR, with relay protection and flexible transmission maintaining high growth of 25%/26% in 2025E/26E.

Margin: We forecast Nari Tech's gross profit margin (GPM) to stay stable at 28%, maintaining its out-performance versus most domestic and overseas peers, reflecting a stable competitive landscape for high-voltage equipment and digitalization products. Similarly, we expect Nari Tech's EBIT margin to improve from 14.9% in 2024 to 16.2% in 2030E, supported by the company's effort to lower SG&A expenses. For ROE, we project Nari Tech to improve from 16.5% in 2024 to 18.3% in 2030E, further demonstrating its solid financial performance compared to the majority of its domestic and international peers.

图表 35: We forecast Nari Tech's revenue/net profit to deliver 10%/11% CAGR in 2024-30E

Nari Tech revenue forecast	Unit	2020	2021	2022	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2024-30E CAGR
Power Grid Automation													
Revenue	Rmb mn	22,065	24,293	24,993	25,635	26,455	28,977	32,343	34,892	38,000	41,828	46,095	10%
yoy	%		10%	3%	3%	3%	10%	12%	8%	9%	10%	10%	
Among: Relay protection and flexible transmission		6,014	6,142	6,377	5,127	5,127	6,409	8,075	8,640	9,072	9,526	10,002	
Among: Dispatch		4,413	4,859	4,999	5,127	5,332	5,572	5,906	6,320	6,889	7,536	8,245	
Among: Transformation/substation		6,619	7,288	7,498	7,691	7,998	8,358	8,860	9,480	10,333	11,304	12,367	
Among: Distribution and consumption		5,018	6,004	6,119	7,691	7,998	8,638	9,502	10,452	11,706	13,462	15,481	
China power grid investment	Rmb bn	470	495	501	528	610	690	755	776	807	871	948	8%
yoy	%	-6%	5%	1%	5%	16%	13%	9%	3%	4%	8%	9%	
Power Grid Digitalization													
Revenue	Rmb mn	6,501	7,611	9,146	11,134	12,804	14,597	16,494	18,474	20,690	23,173	26,649	13%
yoy	%		17%	20%	22%	15%	14%	13%	12%	12%	12%	15%	
Power Generation													
Revenue	Rmb mn	5,373	5,292	7,007	9,638	12,336	14,295	15,689	16,909	18,229	19,658	21,204	9%
yoy	%		-2%	32%	38%	28%	16%	10%	8%	8%	8%	8%	
Among: ESS				701	2,891	4,048	4,857	5,440	5,930	6,464	7,045	7,679	
Among: Wind and solar				3,504	2,891	4,048	4,857	5,440	5,930	6,464	7,045	7,679	
Among: Other power generation				2,803	3,855	4,241	4,580	4,809	5,049	5,302	5,567	5,845	
China power generation investment	Rmb bn	524	553	721	968	1,221	1,439	1,505	1,654	1,894	2,061	2,276	11%
yoy	%		5%	30%	34%	26%	18%	5%	10%	14%	9%	10%	
Industrial Internet													
Revenue	Rmb mn	2,668	2,939	3,245	3,169	3,327	3,494	3,668	3,852	4,044	4,247	4,459	5%
yoy	%	19%	10%	10%	-2%	5%	5%	5%	5%	5%	5%	5%	
Others													
Revenue	Rmb mn	1,896	2,276	2,438	1,998	1,798	1,798	1,798	1,798	1,798	1,798	1,798	0%
yoy	%	28%	20%	7%	-18%	-10%	0%	0%	0%	0%	0%	0%	
Financial summary	**Unit**	**2020**	**2021**	**2022**	**2023**	**2024E**	**2025E**	**2026E**	**2027E**	**2028E**	**2029E**	**2030E**	
Total revenue	Rmb mn	38,502	42,411	46,829	51,573	56,721	63,160	69,993	75,924	82,762	90,704	100,205	10%
yoy	%	19%	10%	10%	10%	10%	11%	11%	8%	9%	10%	10%	
Gross margin	%	27%	27%	27%	27%	28%	28%	28%	28%	28%	28%	28%	
Operating margin	%	15%	15%	15%	14%	15%	16%	16%	16%	16%	16%	16%	
Net margin	%	13%	13%	14%	14%	14%	15%	15%	15%	15%	15%	15%	
EPS	Rmb	0.61	0.71	0.80	0.89	1.00	1.16	1.29	1.41	1.55	1.71	1.89	11%
yoy	%	12%	16%	14%	11%	12%	15%	12%	9%	10%	10%	11%	
ROE	%	15%	16%	16%	16%	16%	18%	18%	18%	18%	18%	18%	

资料来源: 公司数据, 高盛全球投资研究部

图表 36: Nari Tech has solid financial performance, with leading GPM/OPM/ROE as well as high R&D intensity compared to peers

Nari Tech's financial performance vs. peers
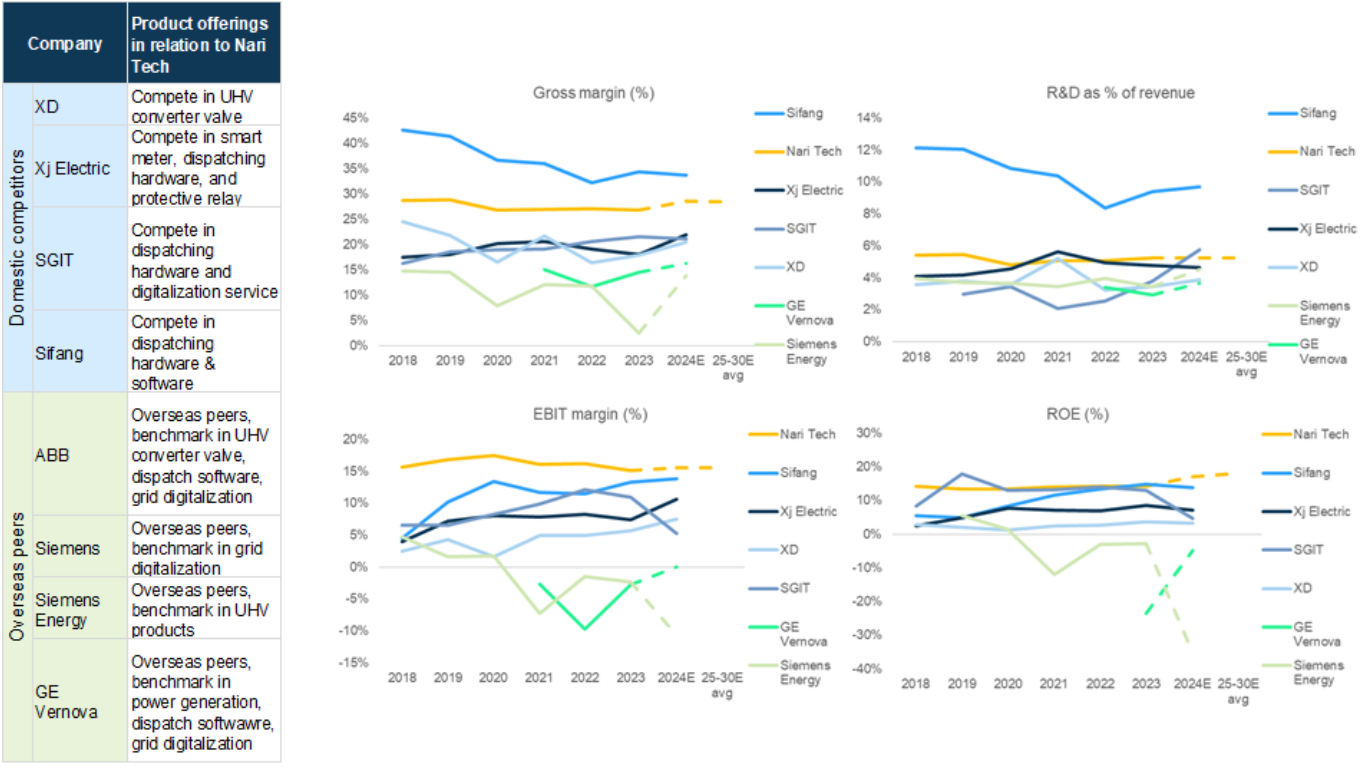
资料来源: 公司数据, 万得, 高盛全球投资研究部

Balance sheet

We forecast cash conversion days for Nari Tech to stabilize at 271 days over 2024-30E, with receivables/accounts payables/inventory days stable at 187/95/11 days respectively. Though the cash collection turnover days is long, we don't view this as a financial risk, due to reliable counterparties (State Grid/South Grid as SOEs) and a low historical incidence of bad debt.

Cash flow statement

Capex: We forecast Nari Tech's capex spending to be Rmb1.7bn in 2025E, mainly spent towards production line upgrade, infrastructure and a continued spending for IGBT module production (they plan to expand the IGBT production capacity from 0.2mn units to 0.3mn units).

Dividends: Nari Tech's dividend payout in 2023 was 60% (an increase versus 40% in previous years) and we forecast its dividend payout to stabilize at 50% in 2025-30E.

图表 37: Financial summary of Nari Tech

Income statement (Rmb mn)	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Total revenue	51,573	56,721	63,160	69,993	75,924	82,762	90,704	100,205
Cost of goods sold	(37,754)	(40,953)	(45,475)	(50,395)	(54,665)	(59,588)	(65,307)	(72,148)
SG&A	(3,352)	(3,800)	(3,916)	(4,340)	(4,707)	(5,131)	(5,624)	(6,213)
R&D	(2,712)	(3,120)	(3,411)	(3,710)	(3,948)	(4,221)	(4,626)	(5,110)
Other operating profit/(expense)	(326)	(397)	(442)	(420)	(456)	(414)	(454)	(501)
EBITDA	9,073	10,351	11,990	13,403	14,646	16,149	17,701	19,530
Depreciation & amortization	(1,644)	(1,900)	(2,074)	(2,274)	(2,499)	(2,742)	(3,007)	(3,297)
EBIT	7,430	8,451	9,916	11,129	12,148	13,407	14,694	16,233
Interest income	535	415	368	390	436	511	591	671
Interest expense	(38)	(4)	(6)	(6)	(6)	(6)	(6)	(6)
Income/(loss) from uncons. subs.	(9)	(1)	-	-	-	-	-	-
Others	682	653	742	823	892	973	1,066	1,178
Pretax profits	8,600	9,516	11,020	12,335	13,471	14,885	16,345	18,076
Income tax	(950)	(959)	(1,141)	(1,294)	(1,428)	(1,600)	(1,758)	(1,945)
Minorities	(466)	(516)	(598)	(669)	(730)	(807)	(886)	(980)
Net income pre-preferred dividends	7,184	8,040	9,281	10,373	11,312	12,478	13,701	15,151
Preferred dividends	-	-	-	-	-	-	-	-
Net income (pre-exceptionals)	7,184	8,040	9,281	10,373	11,312	12,478	13,701	15,151
Post-tax exceptionals	-	-	-	-	-	-	-	-
Net income	7,184	8,040	9,281	10,373	11,312	12,478	13,701	15,151
EPS (basic, pre-except) (Rmb)	0.89	1.00	1.16	1.29	1.41	1.55	1.71	1.89
EPS (basic, post-except) (Rmb)	0.89	1.00	1.16	1.29	1.41	1.55	1.71	1.89
EPS (diluted, post-except) (Rmb)	0.89	1.00	1.16	1.29	1.41	1.55	1.71	1.89
DPS (Rmb)	0.54	0.60	0.58	0.65	0.70	0.78	0.85	0.94
Dividend payout ratio (%)	60.24	60.00	50.00	50.00	50.00	50.00	50.00	50.00

Balance sheet (Rmb mn)	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Cash & equivalents	16,614	14,707	15,589	17,453	20,442	23,642	26,852	29,959
Accounts receivable	26,485	29,128	32,435	35,944	38,990	42,501	46,579	51,459
Inventory	9,795	10,625	11,798	13,074	14,182	15,459	16,943	18,718
Other current assets	14,320	15,208	15,208	15,208	15,208	15,208	15,208	15,208
Total current assets	67,214	69,668	75,030	81,679	88,823	96,811	105,583	115,343
Net PP&E	10,401	10,179	10,001	9,961	9,881	9,769	9,636	9,502
Net intangibles	2,002	2,025	2,034	2,031	2,014	1,984	1,940	1,883
Total investments	241	254	254	254	254	254	254	254
Other long-term assets	6,230	8,379	8,379	8,379	8,379	8,379	8,379	8,379
Total assets	86,087	90,505	95,698	102,303	109,350	117,196	125,791	135,361
Accounts payable	1,156	1,254	1,392	1,543	1,674	1,824	1,999	2,209
Short-term loans	-	-	-	-	-	-	-	-
Other current liabilities	33,984	34,481	34,297	34,843	35,313	35,896	36,507	37,232
Total current liabilities	35,140	35,735	35,690	36,386	36,986	37,720	38,507	39,441
Long-term debt	27	117	117	117	117	117	117	117
Other long-term liabilities	542	542	542	596	656	721	794	873
Total long-term liabilities	569	659	659	713	773	838	911	990
Total liabilities	35,709	36,394	36,349	37,099	37,759	38,559	39,417	40,431
Preferred shares	-	-	-	-	-	-	-	-
Total common equity	47,191	50,407	55,048	60,234	65,890	72,129	78,980	86,555
Minority interest	3,188	3,704	4,302	4,970	5,701	6,508	7,395	8,375
Total liabilities & equity	86,087	90,505	95,698	102,303	109,350	117,196	125,791	135,361
BVPS	6.27	6.74	7.39	8.12	8.91	9.79	10.75	11.82

Cash flow statement (Rmb mn)	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Net income pre-preferred dividends	7,184	8,040	9,281	10,373	11,312	12,478	13,701	15,151
D&A add-back	1,644	1,900	2,074	2,274	2,499	2,742	3,007	3,297
Minorities interests add-back	466	516	598	669	730	807	886	980
Net (inc)/dec working capital	1,856	(3,375)	(4,341)	(4,635)	(4,023)	(4,638)	(5,387)	(6,445)
Other operating cash flow	295	(901)	-	54	60	66	72	79
Cash flow from operations	11,444	6,180	7,611	8,735	10,577	11,456	12,279	13,063
Capital expenditures	(1,951)	(1,501)	(1,705)	(2,030)	(2,202)	(2,400)	(2,630)	(2,906)
Acquisitions	(3,802)	(2,149)	-	-	-	-	-	-
Divestitures	-	-	-	-	-	-	-	-
Others	(4)	(200)	(200)	(200)	(200)	(200)	(200)	(200)
Cash flow from investments	(5,758)	(3,850)	(1,905)	(2,230)	(2,402)	(2,600)	(2,830)	(3,106)
Dividends paid (common & pref)	(2,849)	(4,327)	(4,824)	(4,641)	(5,186)	(5,656)	(6,239)	(6,851)
Inc/(dec) in debt	(788)	90	-	-	-	-	-	-
Common stock issuance (repurchas	-	-	-	-	-	-	-	-
Other financing cash flows	(66)	-	-	-	-	-	-	-
Cash flow from financing	(3,704)	(4,237)	(4,824)	(4,641)	(5,186)	(5,656)	(6,239)	(6,851)
Total cash flow	1,983	(1,907)	882	1,864	2,989	3,200	3,210	3,107

| Ratios	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E
ROE (%)	16.0	16.5	17.6	18.0	17.9	18.1	18.1	18.3
ROA (%)	8.8	9.1	10.0	10.5	10.7	11.0	11.3	11.6
Cash conversion days	250.8	259.2	257.3	257.7	260.4	259.8	259.1	258.1
Inventory days	87.4	91.0	90.0	90.1	91.0	90.8	90.5	90.2
Receivables days	174.5	178.9	177.9	178.3	180.1	179.7	179.2	178.6
Payable days	11.2	10.7	10.6	10.6	10.7	10.7	10.7	10.6
Net debt/equity (%)	(32.9)	(27.0)	(26.1)	(26.6)	(28.4)	(29.9)	(31.0)	(31.4)
Interest cover - EBIT (X)	194.3	na	na	na	na	na	na	na
Growth & margins (%)	2023	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Sales growth	10.1	10.0	11.4	10.8	8.5	9.0	9.6	10.5
EBITDA growth	7.7	14.1	15.8	11.8	9.3	10.3	9.6	10.3
EBIT growth	5.1	13.8	17.3	12.2	9.2	10.4	9.6	10.5
Net income growth	11.4	11.9	15.4	11.8	9.1	10.3	9.8	10.6
EPS growth	11.5	11.9	15.4	11.8	9.1	10.3	9.8	10.6
Gross margin	26.8	27.8	28.0	28.0	28.0	28.0	28.0	28.0
EBITDA margin	17.6	18.2	19.0	19.1	19.3	19.5	19.5	19.5
EBIT margin	14.4	14.9	15.7	15.9	16.0	16.2	16.2	16.2
Net margin	13.9	14.2	14.7	14.8	14.9	15.1	15.1	15.1

资料来源: 公司数据, 高盛全球投资研究部

Valuation

We use a 2025E P/E valuation methodology to derive our 12-month target price for Nari Tech, in line with our China Industrial Tech coverage. Our target 25X 2025E P/E multiple is based on a premium to its historical PEG average of 1.7X (against its 11% long-run EPS CAGR), slightly above the regression lines for our China Industrial Tech coverage and global GS-covered power equipment companies, and as we expect valuation expansion to be driven by 1) strong 2025E grid investment; 2) multi-year structural grid investment ahead driven by intake of renewable energy; 3) expanding AI power demand potentially. We believe Nari Tech deserves a valuation premium mainly due to its stable EPS growth and leading shareholder return within our coverage (in 2nd quartile for ROE at 18.3% and 1st quartile for CROCI at 24.1%). Additionally, 40% of the company's revenue falls in the category of software and thus we believe the valuation should resemble those of the industrial software companies (Baosight, Supcon, Bochu, etc.). Our 12-month target price is Rmb29.0, implying 26% upside.

Nari Tech is currently undervalued compared to its own historical track record as well as domestic peers. Shares are trading at 20X 12-month forward P/E, vs. its own historical average of 22.1X and domestic peers' historical average of 28X, and vs overseas peers' historical average of 39X (or 17X excluding Siemens Energy and GE Vernova). We think Nari Tech's valuation could expand based on: 1) strong 2025 State Grid spending; 2) to a lesser extent, stronger AI data center demand to drive valuation expansion. Nari Tech is trading at 16X 12-month forward EV/EBITDA, vs. its historical avg of 18.7X and domestic peers' average of 19.2X, vs overseas peers' average of 12.6X.

We assign an M&A rank of 3 for Nari Tech, due to its large market cap, concentrated shareholder structure, with shares indirectly held by the State Grid and SASAC as the actual controller.

图表 38: Nari Tech vs. our China Industrial Tech coverage in terms of 2025E target P/E multiple correlation with long-term EPS CAGR
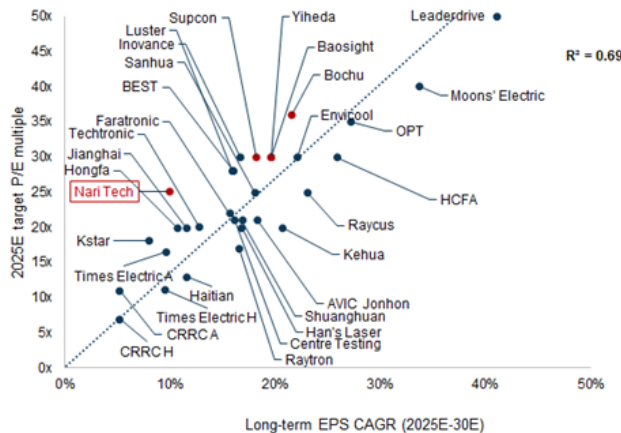
Those in red are similar industrial software companies in our coverage.

资料来源: 公司数据, 高盛全球投资研究部

图表 39: Nari Tech vs. our GS-covered overseas peers in terms of 2025E target P/E multiple correlation with long-term EPS CAGR
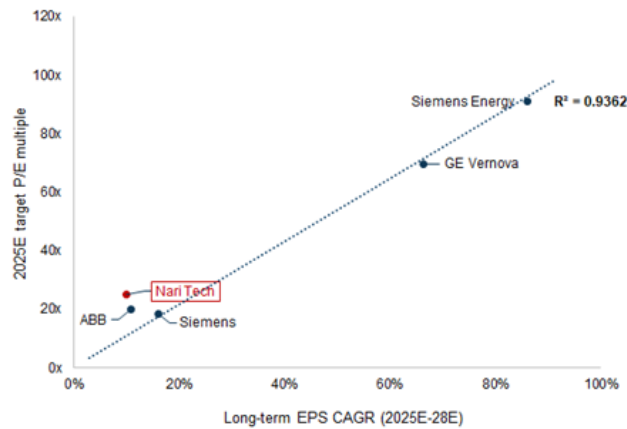
We used target price-implied 2025E P/E multiple for overseas peers, 2025-26E EPS yoy for GE Vernova.

资料来源: 公司数据, 高盛全球投资研究部

图表 40: We forecast Nari Tech to have an average ROE of 18.3% in 2025E-30E, towards the top of the 2nd quartile among our coverage

Average ROE (2025E-30E) under China Industrial Tech coverage
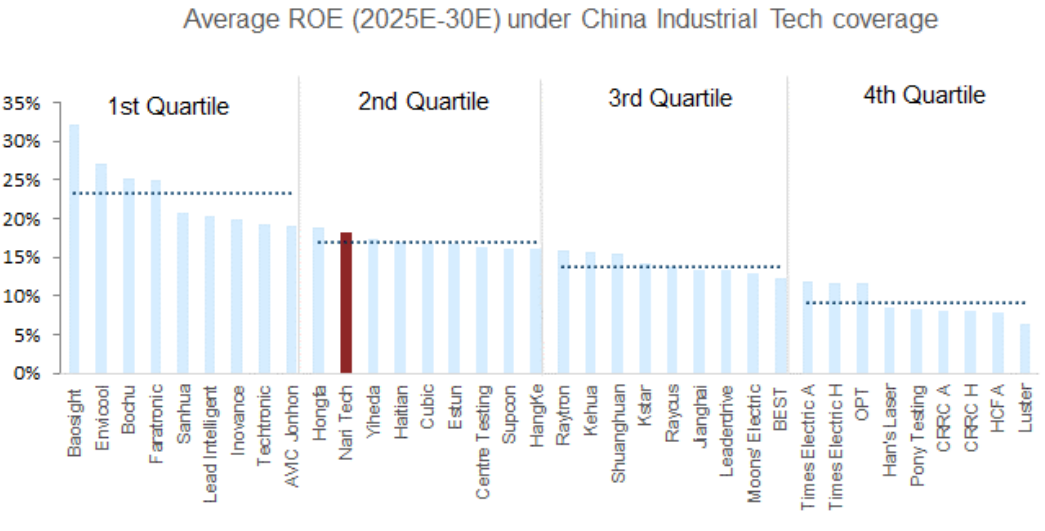
资料来源: 公司数据, 高盛全球投资研究部

图表 41: We forecast Nari Tech to have an average CROCI of 24.1% in 2025E-30E, in the 1st quartile among our coverage

Average CROCI (2025E-30E) under China Industrial Tech coverage
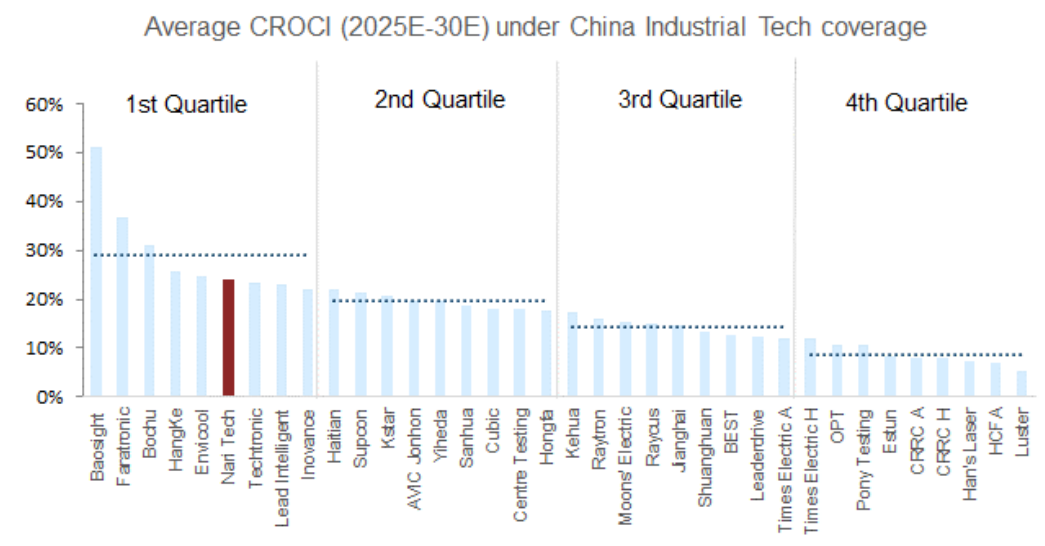
资料来源: 公司数据, 高盛全球投资研究部

图表 42: Nari Tech's ROE and CROCI vs. global peers
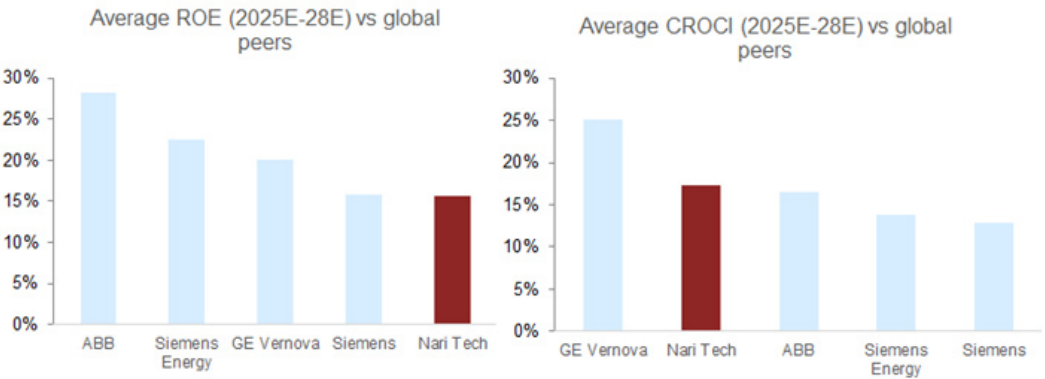
We used 2025-26E average ROE and CROCI for GE Vernova

资料来源：高盛全球投资研究部

图表 43: Nari Tech is trading at 20X 12-m forward P/E, vs. its own historical average of 22.1X and domestic peers' historical average of 28X

12-m forward P/E for Nari Tech and domestic peers
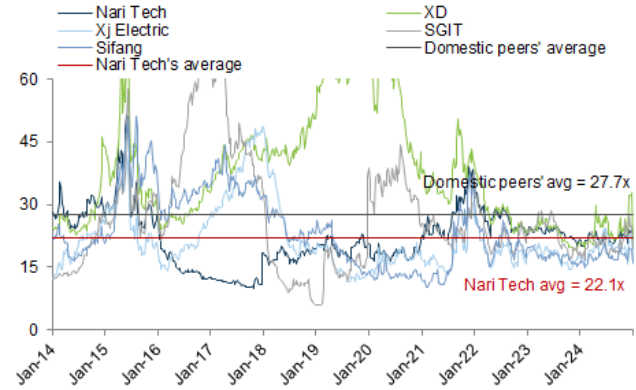
资料来源：公司数据, 高盛全球投资研究部

图表 44: Nari Tech is trading at 20X 12-m forward P/E vs. overseas peers' average of 39X or 17X excluding Siemens Energy and GE Vernova

12-m forward P/E for Nari Tech and overseas peers
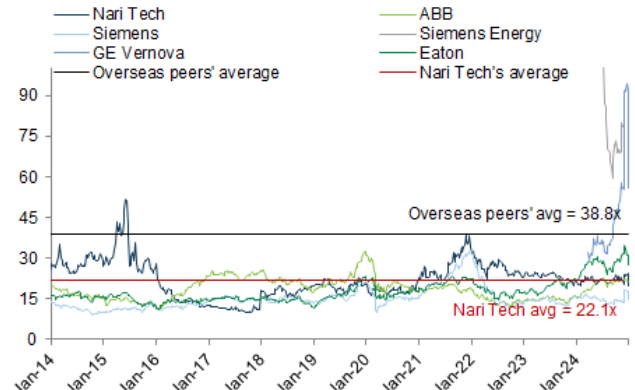
资料来源：公司数据, 高盛全球投资研究部

图表 45: Nari Tech is trading at 16X 12-m forward EV/EBITDA vs. its historical average of 18.7X and domestic peers' average of 19.2X.

12-m forward EV/EBITDA for Nari Tech and domestic peers
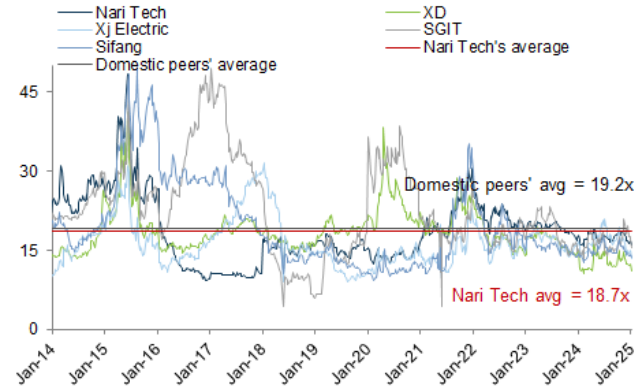
资料来源：公司数据, 高盛全球投资研究部

图表 46: Nari Tech is trading at 16X 12-m forward EV/EBITDA vs. overseas peers historical average of 12.6X

12-m forward EV/EBITDA for Nari Tech and overseas peers
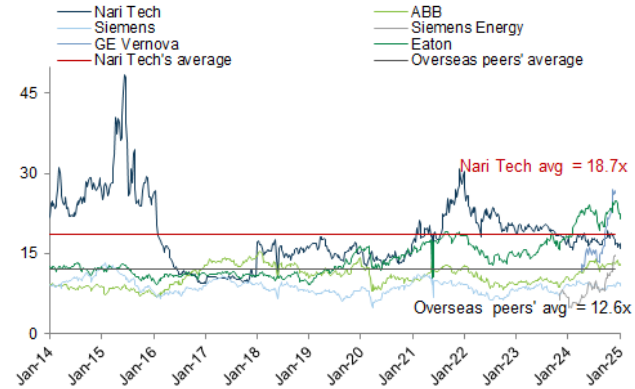
资料来源：公司数据, 高盛全球投资研究部

图表 47: Nari Tech's valuation vs. domestic and global peers

Company	Ticker	PCY	Last closing price (PCY)	12m-Target price	Upside/(downside)	Rating	Mkt Cap (US$bn)	NI CAGR 2024-26E	P/E				P/B				EV/EBITDA				ROE			
									2023	2024E	2025E	2026E	2023	2024E	2025E	2026E	2023	2024E	2025E	2026E	2023	2024E	2025E	2026E
Domestic peers																								
NARI Technology Co., Ltd.	600406.SS	CNY	22.97	29.0	26%	Buy	25.5	14%	25.5x	22.9x	19.7x	17.7x	3.6x	3.6x	3.3x	3.0x	17.8x	17.1x	15.2x	13.2x	16%	14%	15%	15%
Sieyuan Electric Co.,Ltd.	002028.SZ	CNY	74.30	n.a.	n.a.	NC	8.0	15%	36.8x	28.0x	22.5x	18.6x	6.2x	4.7x	4.0x	3.4x	26.7x	22.1x	18.0x	15.0x	16%	17%	18%	18%
China XD Electric Co.,Ltd	601179.SS	CNY	7.27	n.a.	n.a.	NC	5.1	21%	42.1x	29.8x	20.4x	16.0x	1.8x	1.7x	1.6x	1.5x	15.6x	12.9x	9.5x	7.8x	4%	6%	8%	9%
Xj Electric Co.,Ltd.	000400.SZ	CNY	26.35	n.a.	n.a.	NC	3.7	18%	26.4x	21.9x	16.5x	13.1x	2.6x	2.3x	2.1x	1.8x	15.0x	11.4x	9.2x	7.3x	10%	11%	13%	14%
Huaming Power Equipment Co.,Ltd	002270.SZ	CNY	17.00	n.a.	n.a.	NC	2.1	13%	27.9x	23.9x	20.1x	16.8x	4.6x	4.4x	3.9x	3.5x	21.3x	18.7x	15.9x	13.5x	16%	19%	21%	22%
Ningbo Sanxing Medical Electric Co. , Ltd.	601567.SS	CNY	28.98	n.a.	n.a.	NC	5.6	15%	21.5x	17.5x	13.9x	11.3x	4.3x	3.3x	2.8x	2.3x	17.7x	12.5x	10.2x	8.5x	19%	19%	21%	22%
Henan Pinggao Electric Co.,Ltd	600312.SS	CNY	18.12	n.a.	n.a.	NC	3.4	14%	30.1x	20.4x	16.1x	13.6x	2.6x	2.2x	2.0x	1.8x	14.6x	10.8x	9.0x	7.9x	8%	11%	13%	13%
TBEA Co.,Ltd.	600089.SS	CNY	12.25	n.a.	n.a.	NC	8.5	20%	5.1x	11.0x	8.1x	6.6x	0.9x	0.9x	0.8x	0.8x	3.7x	6.0x	5.0x	5.0x	18%	9%	11%	12%
Zhejiang Chint Electrics Co.,Ltd.	601877.SS	CNY	21.44	n.a.	n.a.	NC	6.4	11%	12.4x	10.4x	9.0x	7.8x	1.3x	1.1x	1.0x	0.9x	8.1x	7.2x	6.4x	5.8x	10%	10%	11%	11%
Hexing Electrical Co.,Ltd.	603556.SS	CNY	36.80	n.a.	n.a.	NC	2.5	14%	18.2x	15.0x	12.4x	10.3x	3.0x	2.5x	2.2x	1.9x	15.1x	11.5x	9.1x	7.7x	16%	16%	18%	19%
State Grid Information&Telecommunication Co.,Ltd	600131.SS	CNY	18.24	n.a.	n.a.	NC	3.0	10%	26.4x	23.4x	20.4x	18.5x	3.8x	3.1x	2.8x	2.4x	18.2x	15.8x	14.0x	13.4x	14%	13%	14%	14%
Median								14%	26.4x	21.9x	16.5x	13.6x	3.0x	2.5x	2.2x	1.9x	15.6x	12.5x	9.5x	7.9x	16%	13%	14%	14%
Global peers																								
Eaton Corp.	ETN	USD	346.28	408	18%	Buy	137.5	7%	38.0x	32.2x	28.9x	25.9x	7.3x	7.2x	6.4x	5.5x	17.8x	25.8x	22.6x	20.1x	20%	22%	23%	23%
Siemens Energy	ENR1n.DE	EUR	51.88	60	16%	Buy	46.1	n.m.	n.m.	n.m.	79.6x	19.8x	4.6x	4.3x	4.7x	4.0x	n.m.	11.2x	16.4x	9.1x	-34%	-2%	6%	22%
GE Vernova	GEV	USD	401.41	446	11%	Buy	110.0	36%	n.m.	107.0x	69.9x	42.0x	13.2x	10.6x	10.5x	10.5x	n.m.	49.5x	30.7x	20.7x	-9%	11%	15%	25%
Siemens AG	SIEGn.DE	EUR	200.85	200	0%	Buy	162.3	2%	17.3x	16.4x	17.6x	15.3x	3.1x	2.8x	2.6x	2.5x	8.9x	9.7x	9.9x	8.7x	15%	15%	17%	14%
ABB Ltd.	ABBN.S	CHF	50.70	53	5%	Neutral	119.3	3%	21.7x	19.5x	19.7x	17.6x	7.0x	6.3x	5.6x	5.0x	12.0x	16.8x	15.4x	13.8x	32%	32%	29%	29%
Schneider Electric	SCHN.PA	EUR	258.95	214	-17%	Sell	148.6	5%	33.5x	30.8x	28.4x	25.4x	4.9x	4.8x	4.5x	4.1x	12.1x	18.2x	16.2x	14.9x	17%	17%	18%	18%
Median					8%			5%	27.6x	30.8x	28.6x	22.6x	6.0x	5.6x	5.1x	4.6x	12.1x	17.5x	16.3x	14.4x	16%	16%	17%	22%

Pricing is as of Jan 17, 2025 close. NC stands for not covered.

资料来源: 万得, 公司数据, 高盛全球投资研究部

Key risks

1) Weaker-than-expected fiscal support and weaker-than-expected State Grid investment in 2025E: We currently expect power grid investment by the State Grid to stay elevated in 2025E at Rmb690bn, slightly higher than its announced capex plan of Rmb650bn on Jan 15, 2025. We expect possibly further raised capex or their actual investment exceeding their announced target, due to renewable energy waiting for grid capacity. If they do not raise capex target by mid-2025E like they did in 2024, or they do not exceed their announced capex plan, grid investment will come below our expectations. We also expect strong fiscal stimulus support, such as the power equipment large-scale upgrade plan. Also if the financial situation of State Grid deteriorates, resulting in budget cuts, grid investment may come below our expectations, directly impacting all Nari Tech's product lines' revenues.

2) UHV project approval pace might fall behind its announced work plan, i.e., under six projects start construction in 2025: UHV project approvals and construction require extensive coordination across multiple provinces, involving agreements on land use, routing, cost-sharing, which can be time-consuming and complex. Additionally, thorough environmental assessments and potential delays in obtaining necessary permits could further slow progress, increasing the risk of falling behind our projected construction starts of six lines in 2025E. Fewer-than-expected UHV projects construction starts will result in below-expectations revenue recognition for Nari Tech's converter valve products.

Investment thesis, PTRM

Investment Thesis

Nari Tech is a leading power equipment player in China, holding dominant positions in UHV converter valves, grid digitalization, dispatch software, automation solutions, and secondary equipment such as SVC/STATCOM systems and relay protection at 34%-70% market share. We are positive on Nari Tech as a structural beneficiary of the incremental investment towards China's power grid modernization needs, ensuring a smarter, more flexible and more reliable grid, particularly as the challenges of integrating intermittent and volatile renewable energy sources grow. We believe Nari Tech can deliver solid 10%/11% revenue/net profit CAGR over 2024-30E, outperforming China's grid investment of 8% CAGR as the company especially benefits from the structurally-growing areas of grid investment, ultra-high-voltage (UHV) and smart grid. We expect the company to maintain its leadership in its product portfolio due to its dominant position in a stable market landscape and relationship with the State Grid. Key catalysts include State Grid's work plans, the Two Sessions in March 2025 for energy policy direction, and the release of the 15th Five-Year Energy/Grid Plan in 2026, and AI-related capex growth news. Nari Tech is currently undervalued compared to its own historical track record as well as domestic peers. However, we expect the company's strong financial profile (GPM/OPM at 28%/16% and a leading ROE of 18% expected in 2024-30E) and its software-heavy revenue mix (40% of total 2024E revenue) to support a valuation premium for Nari Tech among its China industrial tech peers, and hence we are Buy-rated on Nari Tech.

Price Target Risks & Methodology

Our 12-month target price of Rmb29.0 is based on 25X 2025E P/E. Key risks include: 1) Lower-than-expected fiscal support and the State Grid announcement for 2025 budget, 2) UHV project approval pace falling behind its announced work plan.

600406.SS	12m Price Target: Rmb29.0	Price: Rmb22.97	Upside: 26.3%

Buy	GS Forecast				
		12/23	12/24E	12/25E	1/26E
Market cap: Rmb186.7bn / $25.5bn	Revenue (Rmb mn)	51,573.3	56,721.0	63,159.8	69,992.7
Enterprise value: Rmb176.4bn / $24.1bn	EBITDA (Rmb mn)	9,073.2	10,351.4	11,989.7	13,402.5
3m ADTV :Rmb762.8mn/ $104.1mn	EPS (Rmb)	0.89	1.00	1.16	1.29
China					
China Industrial Tech & Machinery					
M&A Rank: 3					
Leases incl. in net debt & EV?: No					
		6/24	9/24	12/24E	--
	EPS (Rmb)	0.26	0.22	0.24	--

Source: Company data, Goldman Sachs Research estimates, FactSet. Price as of 17 Jan 2025 close.

信息披露附录

申明

本人，杜茜，在此申明，本报告所表述的所有观点准确反映了本人对上述公司或其证券的个人看法。此外，本人薪金的任何部分不曾与，不与，也将不会与本报告中的具体推荐意见或观点直接或间接相关。

高盛要素概要

高盛要素概要部分通过将一只股票的主要指标与市场（即我们的覆盖范围）和可比同业相比较来评价该股的投资背景。四个主要指标是增长、财务回报、估值倍数（估值）和综合状况（增长、财务回报、估值倍数的综合情况）。增长、财务回报和估值倍数是运用每只股票具体指标的正常化排名计算。随后取这些指标正常化排名的均值并转化为相关指标的百分位。每项指标的具体计算方式可能随着财务年度、行业和所属地区的不同而有所变化，但标准方法如下：

增长指标是基于一只股票的预期销售增速、EBITDA增速和每股盈利增速（金融股仅采用每股盈利和销售增速），较高的百分位表示公司增长较快。财务回报是基于一只股票的预期净资产回报率、ROCE和CROCI（金融股仅采用净资产回报率），较高的百分位表示公司的财务回报较高。估值倍数基于一只股票的预期市盈率、市净率、股价/股息、EV/EBITDA、EV/FCF、EV/DACF（EV/经债务调整的现金流）（金融股仅采用市盈率、市净率和股价/股息），较高的百分位表示公司的估值倍数较高。综合状况百分位为增长百分位、财务回报百分位和（100% - 估值倍数百分位）的平均值。

财务回报和估值倍数使用高盛分析师在财政年度末对未来至多3个季度的预测。增长使用未来至少7个季度的财政年度预测与未来至少3个季度的财政年度预测的比较（所有指标均使用每股数据）。

如需了解高盛要素概要更具体的计算，请联络您的高盛代表。

并购评分

在我们的全球覆盖范围中，我们使用并购框架来分析股票，综合考虑定性和定量因素（各行业和地区可能会有所不同）以计入某些公司被收购的可能性。然后我们按照从1到3对公司进行并购评分，其中1分代表公司成为并购标的的概率较高(30%-50%)，2分代表概率为中等(15%-30%)，3分代表概率较低(0%-15%)。对于评分为1或2的公司，我们按照研究部统一标准将并购因素体现在我们的目标价格当中。并购评分为3被认为意义不大，因此不予体现在我们的目标价格当中，分析师在研究报告中可以予以讨论或不予讨论。

Quantum

Quantum是提供具体财务报表数据历史、预测和比率的高盛专有数据库，它可以用于对单一公司的深入分析，或在不同行业和市场的公司之间进行比较。

信息披露

NARI Technology 的股票评级是相对于其所属研究范围内的其他公司的相对评级： AVIC Jonhon, Best, Bochu, CRRC Corp. (A), CRRC Corp. (H), Centre Testing Intl Group, Estun Automation Co., Faratronic, HCFA, Haitian International Holdings, Han's Laser Technology, HangKe Technology, Hongfa Technology, Kehua Data Co., Lead Intelligent, Leader Harmonious Drive Systems Co., Luster LightTech Co., Moons' Electric, NARI Technology, Nantong Jianghai Capacitor Co., OPT Machine Vision Tech Co., Pony Testing, Raytron Technology, Sanhua Intelligent Controls, Shanghai Baosight Software, Shenzhen Envicool Technology, Shenzhen Inovance Technology Co., Shenzhen Kstar Science & Tech, Shuanghuan Driveline, Techtronic Industries, Wuhan Raycus Fiber Laser Tech, Yiheda Automation, Zhejiang Supcon Technology Co., Zhuzhou CRRC Times Electric Co. (A), Zhuzhou CRRC Times Electric Co. (H)

与公司有关的法定披露

以下信息披露了高盛集团(及其关联公司，并称为"高盛")与高盛全球投资研究部所研究的并在本研究报告中提及的公司之间的关系。

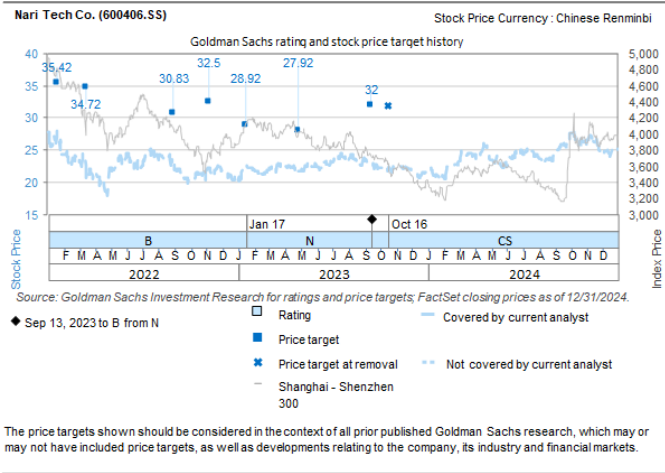没有对下述公司的具体信息披露： NARI Technology (Rmb22.87)

评级分布/投资银行关系

高盛投资研究部的全球研究覆盖范围

	评级分布			投资银行关系		
	买入	持有	卖出	买入	持有	卖出
全球	48%	34%	18%	64%	57%	43%

截至2025年1月1日，高盛全球投资研究部对3,021种股票评定了投资评级。高盛给予股票在各种地区投资名单中的买入和卖出评级；未给予这些评级的股票被视为中性评级，根据FINRA的披露要求，这些评级分别对应买入，持有及卖出。详情见以下"公司评级，研究范围和相关定义"部分。投资银行关系表反映了高盛在过去12个月已提供投资银行服务的公司在各评级类别中所占的比例。

目标价格和评级历史图

Nari Tech Co. (600406.SS)　　　　　　　　　　Stock Price Currency : Chinese Renminbi

Goldman Sachs rating and stock price target history

Source: Goldman Sachs Investment Research for ratings and price targets; FactSet closing prices as of 12/31/2024.

◆ Sep 13, 2023 to B from N

□ Rating　　　　　　　　　　— Covered by current analyst
■ Price target
✕ Price target at removal　　　⋯ Not covered by current analyst
— Shanghai - Shenzhen 300

The price targets shown should be considered in the context of all prior published Goldman Sachs research, which may or may not have included price targets, as well as developments relating to the company, its industry and financial markets.

法定披露

美国法定披露

任何本报告中研究企业所需的特定公司法定披露见上文：包括即将进行交易的承销商或副承销商，1%或其他股权，特定服务的补偿，客户关系种类，之前担任承销商或副承销商的公开发行，担任董事，担任股票做市及／或专家的角色。高盛担任或可能担任本报告中所涉及发行方的债券（或相关衍生品）的交易对手。

以下为额外要求的披露：股权及重大利益冲突：高盛的政策是禁止其分析师、分析师属下专业人员及其家庭成员持有分析师负责研究的任何公司的证券。分析师薪酬：分析师薪酬部分取决于高盛的盈利，其中包括投资银行的收入。分析师担任高级职员或董事：高盛的政策通常禁止其分析师、分析师属下人员及其家庭成员担任分析师负责研究的任何公司的高级职员、董事或顾问。非美国分析师：非美国分析师可能与高盛无关联，因此可以不受FINRA 2241条FINRA 2242条对于与所研究公司的交流、公开露面及持有交易证券的限制。

评级分布：见上文评级分布披露。价格表：见上文价格表，其中包括之前的评级变化和价格目标的变化，若为电子报告，或本报告分析对象包含多家公司，请参阅高盛网站：https://www.gs.com/research/hedge.html。

美国以外司法管辖区规定的额外披露

以下为除了根据美国法律法规规定作出的上述信息披露之外其他司法管辖区法律所要求的披露。澳大利亚: Goldman Sachs Australia Pty Ltd及其相关机构不是澳大利亚经授权的存款机构（1959年《银行法》所定义），因此不在澳大利亚境内提供银行服务，也不经营银行业务。本研究报告或本报告的其他形式内容只可分发予根据澳大利亚公司法定义的"批发客户"，在事先获得高盛许可的情况下可以有例外。在撰写研究报告期间，Goldman Sachs Australia全球投资研究部的职员可能参与本研究报告中所讨论证券的发行公司或其他实体组织的现场调研或会议。在某些情况下，如果视具体情形Goldman Sachs Australia认为恰当或合理，此类调研或会议的成本可能部分或全部由该证券发行人承担。如本报告内容包含任何金融产品建议，则该建议仅为一般建议，且高盛提出该建议时并未考虑客户的目标、财务状况或需求。客户在就此类建议采取行动之前，应结合其自身目标、财务状况需求来考虑该建议的适当性。高盛澳大利亚和新西兰的利益披露，以及高盛澳大利亚卖方研究独立性制度声明请参见https://www.goldmansachs.com/disclosures/australia-new-zealand/index.html。巴西: 与CVM Resolution n. 20相关的信息披露请参阅https://www.gs.com/worldwide/brazil/area/gir/index.html。根据CVM Resolution n. 20第20条，在适用的情况下，对本研究报告内容负主要责任的巴西注册分析师为本报告开头部分标明的第一作者，除非报告未另有说明。加拿大: 这些信息仅供您参考，在任何情况下都不应被理解为Goldman Sachs & Co. LLC对加拿大证券购买者进行有关任何加拿大证券交易的广告、要约或征求行为。Goldman Sachs & Co. LLC 未在适用的加拿大证券法下注册为任何加拿大司法管辖区内的交易商，通常不被允许交易加拿大证券，并且可能被禁止在加拿大某些司法管辖区内销售某些证券和产品。若您想在加拿大交易任何加拿大证券或其他产品，请联系 Goldman Sachs Canada Inc. (高盛集团的关联机构) 或其他已注册的加拿大交易商。香港: 可从高盛（亚洲）有限责任公司获取有关本报告内研究公司的证券的额外资料。印度: 可从高盛（印度）证券私人有限公司（分析师　印度证券交易委员会(SEBI) 编号INH000001493，地址951-A, Rational House, Appasaheb Marathe Marg, Prabhadevi, Mumbai 400 025, India, 公司编号 U74140MH2006FTC160634, 电话 +91 22 6616 9000, 传真 +91 22 6616 9001）获取有关本报告中研究对象或所提及公司的额外资料。高盛可能持有本报告中研究对象或所提及公司的证券（1956年印度《证券合同(管理)法》条款2(h)之定义）的1%或更高比例。证券市场投资会受到市场风险的影响。请在投资之前仔细阅读所有相关文件。在SEBI注册并获得NISM认证并非对该中间机构表现的担保，亦不能对投资者回报做出保障。高盛（印度）证券私人有限公司投资者支持部门电邮：india-client-support@gs.com。合规负责人: Anil Rajput |电话: ＋91 22 6616 9000 | 电邮：anil.m.rajput@gs.com。日本: 见下文。韩国: 除非高盛另行同意，本报告无论以何种方式取得，仅供《金融服务与资本市场法》定义的"专业投资者"使用。可从高盛（亚洲）有限责任公司首尔分公司获取有关本报告所研究公司的额外资料。新西兰: Goldman Sachs New Zealand Limited及其关联机构并非1989年新西兰储备银行法定义的"注册银行"或"存款机构"。本研究报告以及本报告的其他形式内容只可分发给2008年财务顾问法案定义的"批发客户"，在事先获得高盛许可的情况下可以有例外。高盛澳大利亚和新西兰的利益披露请参见 https://www.goldmansachs.com/disclosures/australia-new-zealand/index.html。俄罗斯: 在俄罗斯联邦分发的研究报告并非俄罗斯法律所定义的广告，而是不以产品推广为主要目的的信息和分析，也不属于俄罗斯法律所界定的评估行为。研究报告不构成俄罗斯法律法规定义上的个性化投资建议，并非针对某个具体客户，在报告准备阶段也未分析特定客户的财务状况、投资特征或风险特征。高盛不对某个客户或任何其他人基于本报告可能做出的任何投资决策承担责任。新加坡: 高盛（新加坡）私人公司（公司编号: 198602165W）（受新加坡金融管理局监管）为本研究报告承担法律责任，若有由本研究报告所引发或与本研究报告相关的任何事宜，请联系高盛（新加坡）私人公司。台湾: 本信息仅供参考，未经允许不得翻印。投资者应当谨慎考虑他们自身的投资风险，投资结果由投资者自行负责。英国: 在英国根据金融市场行为监管局的定义可被分类为私人客户的人士参阅本报告的同时应当参阅高盛以往对本报告研究企业的研究报告，并应当参考高盛国际已经发给这些客户的风险警告资料。该风险警告资料复本，以及本报告中采用部分金融辞汇的解释可向高盛国际索取。

欧盟和英国: 与欧盟委员会实施条例 (EU) (2016/958)（欧盟议会和欧盟理事会条例(EU) No 596/2014的补充条款，规定了有关投资建议或其他投资策略的推荐或建议之信息的客观陈述，以及对特定利益或利益冲突进行披露的技术安排应达到的监管技术标准；英国脱离欧盟和欧洲经济区之后该实施条例被纳入英国国内法律法规）第6(2)条相关的披露信息可在https://www.gs.com/disclosures/europeanpolicy.html上获取，该网址介绍在处理和投资研究有关的利益冲突时参照的欧洲政策。

日本: 高盛证券株式会社是在关东财务局注册（注册号：No. 69）的金融工具交易商，同时也是日本证券业协会日本金融期货业协会、第二类金融工具协会、日本投资信托协会以及日本投资顾问协会的成员。股票买卖需要缴纳与客户事先约定的佣金及消费税。关于日本证券交易所、日本证券交易商协会或日本证券金融公司所要求的适用的信息披露，请参见与公司有关的法定披露部分。

公司评级、研究范围和相关定义

买入、中性、卖出：分析师建议将评为买入或卖出的股票纳入地区投资名单。只股票在投资名单中评为买入或卖出由其相对于所属研究范围的总体潜在回报决定。任何未获得买入或卖出评级且拥有活跃评级（即不属于暂停评级、暂无评级、暂停研究或没有研究的股票）的股票均被视为中性评级。每个地区管理着地区强力买入名单，该名单选自各地区投资名单上评级为买入的股票，以总体潜在回报规模和/或实现回报的可能性为主要依据确立各自研究范围内的投资建议。将股票加入或移出此类强力买入名单，由各地区的投资评估委员会或其他指定委员会进行管理，并不意味着分析师对这些股票的投资评级发生了改变。

总体潜在回报：代表当前股价低于或高于一定时间范围内预测目标价格的幅度，包括所有已付或预期股息。分析师被要求对研究范围内的所有股票给出目标价格。总体潜在回报、目标价格及相关时间范围在每份加入投资名单或重申维持在投资名单的研究报告中都有注明。

研究范围：每个研究范围的所有股票名单可登陆https://www.gs.com/research/hedge.html通过主要分析师、股票和研究范围进行查询。

暂无评级(NR)：在高盛于涉及该公司的一项合并交易或战略性交易中担任咨询顾问时，或由于高盛参加一项交易而存在法律、监管或政策的限制时，或当该公司是一家处于初期阶段的生物科技公司时，并在某些其他情况下，投资评级、目标价格和盈利预测（如相关）根据高盛的政策未予提供或已经予以暂停。暂停评级(RS)：由于缺乏足够的基础去确定投资评级或价格目标，我们已经暂停对这种股票给予投资评级和目标价格。此前对这种股票作出的投资评级和目标价格(如有的话)将不再有效，因此投资者不应依赖该等资料。暂停研究(CS)：我们已经暂停对该公司的研究。没有研究(NC)：我们没有对该公司进行研究。不存在或不适用(NA)：此资料不存在或不适用。无意义(NM)：此资料无意义，因此不包括在报告内。

全球产品；分发机构

高盛全球投资研究部在全球范围内为高盛的客户制作并分发研究产品。高盛分布在其全球各办事处的分析师提供行业和公司的研究，以及宏观经济、货币、商品及投资组合策略的研究。本研究报告在澳大利亚由Goldman Sachs Australia Pty Ltd（ABN 21 006 797 897）分发；在巴西由Goldman Sachs do Brasil Corretora de Tí tulos e Valores Mobiliários S.A.分发；Public Communication Channel Goldman Sachs Brazil：0800 727 5764和/或contatogoldmanbrasil@gs.com。工作日（假期除外）上午9点至下午6点。Canal de Comunicação com o Pú blico Goldman Sachs Brasil: 0800 727 5764 e/ou contatogoldmanbrasil@gs.com. Horá rio de funcionamento: segunda-feira à sexta-feira (exceto feriados), das 9h à s 18h；在加拿大由Goldman Sachs & Co. LLC 分发；在香港由高盛（亚洲）有限责任公司分发；在印度由高盛（印度）证券私人有限公司分发；在日本由高盛证券株式会社分发；在韩国由高盛（亚洲）有限责任公司首尔分公司分发；在新西兰由Goldman Sachs New Zealand Limited 分发；在俄罗斯由高盛OOO 分发；在新加坡由高盛（新加坡）私人公司（公司号：198602165W）分发；在美国由高盛集团分发。高盛国际已批准本研究报告在英国分发。

高盛国际（由审慎监管局授权并接受金融市场行为监管局和审慎监管局的监管）已批准本研究报告在英国分发。

欧洲经济区：由高盛国际（由审慎监管局授权并接受金融市场行为监管局和审慎监管局的监管）向欧洲经济区内的以下司法管辖区分发研究报告：卢森堡大公国、意大利、比利时王国、丹麦王国、挪威王国、芬兰共和国和爱尔兰共和国；由GSI - Succursale de Paris （巴黎分公司；由法国审慎监管管理局授权并接受审慎监管管理局和金融市场管理局的监管）在法国分发研究报告；由GSI - Sucursal en España （马德里分公司；在西班牙由国家证券市场委员会授权）在西班牙王国分发研究报告；由GSI - Sweden Bankfilial（斯德哥尔摩分公司；由瑞典金融监管局按照瑞典证券市场法 (Sw. lag (2007:528) om värdepappersmarknaden) 第4章第4节）在瑞典王国分发研究报告；Goldman Sachs Bank Europe SE是一家在德国注册成立的信贷机构，在单一监管机制下接受欧洲央行的直接审慎监管，在其他方面接受德国联邦金融监管局(Bundesanstalt fü r Finanzdienstleistungsaufsicht, BaFin)和德国联邦银行的监督，由该机构向德意志联邦共和国和欧洲经济区内高盛国际未获授权分发研究报告的司法管辖区分发研究报告，此外，由GSBE哥本哈根分公司filial af GSBE, Tyskland（接受丹麦金融监管局的监督）在丹麦王国分发研究报告；由GSBE - Sucursal en España（马德里分公司；在有限范围内接受西班牙银行的地方监管）在西班牙王国分发研究报告；由GSBE - Succursale Italia（米兰分公司；在相关适用范围内，接受意大利银行(Banca d' Italia)和意大利金融市场监管局(Commissione Nazionale per le Societ à e la Borsa "Consob")的地方监管）在意大利分发研究报告；由GSBE - Succursale de Paris （巴黎分公司；接受金融市场管理局和审慎监管管理局的监管）在法国分发研究报告；由GSBE - Sweden Bankfilial（斯德哥尔摩分公司；在一定范围内接受瑞典金融监管局(Finansinpektionen)的地方监管）在瑞典王国分发研究报告。

一般性披露

本研究报告仅供我们的客户使用。除了与高盛相关的披露，本研究报告是基于我们认为可靠的目前已公开的信息，但我们不保证该信息的准确性和完整性，客户也不应该依赖该信息是准确和完整的。报告中的信息、观点、估算和预测均截至报告的发表日，且可能在不事先通知的情况下进行调整。我们会适时地更新我们的研究，但各种规定可能会阻止我们这样做。除了一些定期出版的行业报告之外，绝大多数报告是在分析师认为适当的时候不定期地出版。

高盛是一家集投资银行、投资管理和证券经纪业务于一身的全球性综合服务公司。全球投资研究部所研究的大部分公司与我们保持着投资银行业务和其它业务关系。美国证券经纪交易商高盛是SIPC(https://www.sipc.org)的成员。

我们的销售人员、交易员和其它专业人员可能会向我们的客户及自营交易部提供与本研究报告中的观点截然相反的口头或书面市场评论或交易策略。我们的资产管理部门、自营交易部和投资业务部可能会做出与本报告的建议或表达的意见不一致的投资决策。

本报告中署名的分析师可能已经与包括高盛销售人员和交易员在内的我们的客户讨论，或在本报告中讨论交易策略，其中提及可能会对本报告讨论的证券市场价格产生短期影响的推动因素或事件，该影响在方向上可能与分析师发布的股票目标价格相反。任何此类交易策略都区别于且不影响分析师对于该股的基本评级，此类评级反映了某只股票相对于报告中描述的研究范围内股票的回报潜力。

我公司及其关联机构、高级职员、董事和雇员，除法规及高盛的制度所禁止的情况外，将不时地对本研究报告所涉及的证券或衍生工具持有多头或空头头寸，担任上述证券或衍生工具的交易对手，或买卖上述证券或衍生工具。

在高盛组织的会议上的第三方演讲嘉宾（包括高盛其它部门人员）的观点不一定反映全球投资研究部的观点，也并非高盛的正式观点。

在此提到的任何第三方，包括销售人员、交易员和其它专业人士或其家庭成员，可能持有本报告提及的且与本报告分析师所表达的观点不一致的产品头寸。

在任何要约出售股票或征求购买股票要约的行为为非法的司法管辖区内，本报告不构成该等出售要约或征求购买要约。本报告不构成个人投资建议，也没有考虑到个别客户特殊的投资目标、财务状况或需求。客户应考虑本报告中的任何意见或建议是否符合其特定状况，以及(若有必要)寻求专家的意见，包括税务意见。本报告中提及的投资价格和价值以及这些投资带来的收入可能会波动。过去的表现并不代表未来的表现，未来的回报也无法保证，投资者可能会损失本金。外汇汇率波动有可能对某些投资的价值或价格或来自这一投资的收入产生不良影响。

某些交易，包括牵涉期货、期权和其它衍生工具的交易，有很大的风险，因此并不适合所有投资者。投资者可以向高盛销售代表取得或通过https://www.theocc.com/about/publications/character-risks.jsp和https://www.fiadocumentation.org/fia/regulatory-disclosures_1/fia-uniform-futures-and-options-on-futures-risk-disclosures-booklet-pdf-version-2018取得当前期权和期货的披露文件。对于包含多重期权买卖的期权策略结构产品，例如，期权差价结构产品，其交易成本可能较高。与交易相关的文件将根据要求提供。

全球投资研究部提供的不同服务层级：根据您对接收沟通信息的频率和方式的个人偏好、您的风险承受能力、投资重心和视角（例如整体市场、具体行业、长线、短线）、您与高盛的整体客户关系的规模和范围、以及法律法规限制等各种因素，高盛全球投资研究部向您提供的服务层级和类型可能与高盛提供给内部和其他外部客户的服务层级和类型有所不同。例如，某些客户可能要求在关于某个证券的研究报告发表之时收到通知，某些客户可能要求我们将内部客户网上提供的分析师基本面分析背后的某些具体数据通过数据流或其它途径以电子方式发送给他们。分析师基本面研究观点（如股票评级、目标价格或盈利预测大幅调整）的改变，在被纳入研究报告、并通过电子形式发表在内部客户网上或通过其它必要方式向有权接收此类研究报告的所有客户大

范围发布之前，不得向任何客户透露。