25 Jul 2023



国电南瑞 NARI Technology (600406 CH)

首次覆盖:能源互联网整体解决方案提供商,电力智能化龙头行稳致远

A top provider of overall solutions for energy internet, walk steady to reach the distance: Initiation

观点聚焦 Investment Focus

首次覆盖优于大市 Initiate with OUTPERFORM

评级 优千大市 OUTPERFORM 现价 Rmb24.06 目标价 Rmb28.33 HTI ESG 3.3-4.0-3.5 MSCI ESG 评级 义利评级 来源: MSCI ESG Research LLC, 盟浪. Reproduced by permission; no further distribution Rmh193 28hn / US\$26 92hn US\$57.50mn 日交易额 (3 个月均值) 发行股票数目 8.033mn

自由流通股(%) 49% 1年股价最高最低值 Rmb24.79-Rmb19.87

注: 现价 Rmb24.06 为 2023 年 7 月 21 日收盘价





		1mth	3mth	12mth
绝对值		4.7%	9.9%	0.6%
绝对值 (美元)		4.6%	5.3%	-5.4%
相对 MSCI China		4.8%	15.4%	12.2%
(Rmb mn)	Dec-22A	Dec-23E	Dec-24E	Dec-25E
营业收入	46,829	53,550	61,509	71,274
(+/-)	10%	14%	15%	16%
净利润	6,446	7,441	8,745	10,196
(+/-)	14%	15%	18%	17%
全面摊薄 EPS	0.96	1.11	1.31	1.52
(Rmb)				
毛利率	27.0%	27.0%	26.9%	26.8%
净资产收益率	16.0%	16.6%	17.4%	18.0%
市及臺	25	22	18	16

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资料来源:公司信息.HTI

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电力智能化龙头,能源互联网整体解决方案提供商。公司是能源 电力智能化为核心的能源互联网整体解决方案提供商,我国能源 电力及工业 控制领域卓越的 IT 企业和电力智能化领军企业,历经 数十年自主创新和产业发展、已形成电网自动化及工业控制、继 电保护及柔性输电、电力自动化信息通信、发电及水利环保四大 业务板块。2022 年营收增速 10.4%, 归母净利润增速 14.2%, 盈 利能力保持稳增长趋势。

以研发为驱动,技术水平国际领先。2020-2022 年公司研发费用 CAGR 为 13.2%, 略高于营收的 13.0%和归母净利润的 11.2%。研发 强度不断提升,费用率从4.82%增加到5.08%,研发重点在在电网 智能化、能源数字化和网外及新兴产业,2022年公司获得专利授 权 434 项, 其中发明专利 403 项; 申请 PCT 专利 20 项; 登记软件 著作权 242 项;发表核心期刊论文 247 篇;22 项科技成果通过中 国电机工程学会组织的技术鉴定等成果,拥有的多项核心技术处 于国际领先水平。

电网投资市场空间广阔,到 2050 年有望达 6360 亿美元,中国是 最大的市场。根据彭博新能源财经报告,2020年,全球电网投资 约为 2350 亿美元, 到 2050 年电网投资需增至 6360 亿美元, 2020 年至 2050 年间,中国是全球最大的单一电网市场,在 30 年的展 望期内,全球电网投资有五分之一(2.9万亿美元)来自中国,根 据国网和南网披露数据,"十四五"期间国网南网合计计划投资超 过 3 万亿元, 同比十三五期间增长 10.5%, 其中国网计划投资 3500 亿美元, 主要投向特高压输电线路建设, 促进三北地区新能 源消纳。南方电网计划投资 6700 亿元, 主要投向数字化和现代化 电网建设。

公司换流阀市占率第一,有望充分受益于直流特高压建设提 速。公司 2023 年全国预计开工"5 直 2 交"特高压交直流线路, 较 2022年增加3条线路,同比增长75%,其中直流增加5条。公司 在直流特高压换流阀市场市占率第一,处于绝对领先地位,未来 将持续受益于直流特高压线路的建设,以及直流输电在深远海风 电项目中的应用。

盈利预测与投资建议:根据电网投资增速及特高压开工招标节 奏, 电网智能化投资占比以及公司订单情况, 我们预计公司 2023-2025 年公司营业收入分别为 535.5/615.1/712.7 亿元, 对应归母净 利润为 74.4/87.5/102.0 亿元, 我们用 DCF 估值法预计的目标价为 28.33 元/股,首次覆盖给予"优大于市"评级。

风险提示: 1、政策落实、电网投资不及预期; 2、市场竞争激烈 导致毛利率大幅下滑; 3、原材料价格大幅上涨; 4、汇率风险。

1. 电力智能化龙头,能源互联网整体解决方案提供商

以能源电力智能化为核心,电力智能化龙头企业。国电南瑞是以能源电力智能化为核心的能源互联网整体解决方案提供商,我国能源电力及工业控制领域卓越的IT企业和电力智能化领军企业。公司以先进的控制技术和信息技术为基础,以"大数据、云计算、物联网、移动互联、人工智能、区块链"等技术为核心,为电网、发电、轨道交通、水利水务、市政公用、工矿等行业和客户提供软硬件产品、整体解决方案及应用服务,历经数十年自主创新和产业发展,已形成电网自动化及工业控制、继电保护及柔性输电、电力自动化信息通信、发电及水利环保四大业务板块。公司是国内电力系统及其自动化领域唯一能够提供全产业链产品和一体化整体解决方案的供应商,综合实力国际领先。

表 1: 公司主要业务

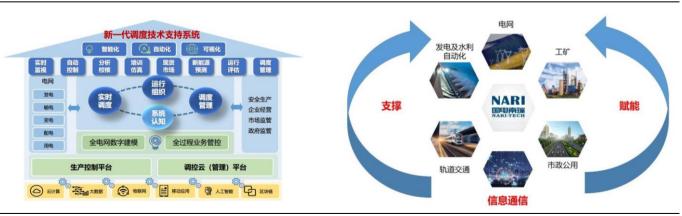
业务板块	主要内容
电网自动化及工业控制	主要产品包括电网安全稳定分析与控制、电网调度自动化、新一代集控系统、电力市场、智能变电站、智能配网、源网荷储协同控制、智慧用电及新型电力负荷管理系统、电动汽车充换电、智慧消防、电网智能传感等领域的产品及服务。
继电保护及柔性输电	主要产品包括电力控制保护、换流阀、潮流控制器等。在继电保护领域,形成从中低压到特高压的全系列继电保护产品
电力自动化信息通信	主要从事电力系统信息通信与安全的产品研发、设备制造、系统集成、工程安装和服务咨询等,业务涵盖电网生产管理、调度管理、电力营销、安监基建、网络与信息安全、信息通信综合监管
发电及水利环保	面向能源、发电、节能环保、水利水务、市政交通等行业,专业从事上述行业相关领域的自动化和信息化产品制造、工程服务与设计咨询、系统集成及工程管理。拥有火电、水电、核电、风电、光伏、抽水蓄能、分布式能源等各种发电类型的机组控制保护及并网解决方案

资料来源:公司年报,HTI

以研发创新为驱动,助力新型电力系统建设。高比例新能源接入导致电力系统"双峰双高"和"双侧随机性"特征明显,电力系统从原来的源随荷动,变成了电源侧和负荷侧均随机波动,给电力系统的稳定运行带来巨大挑战,公司研制的具有"智能、安全、开放、共享"特征的新一代调度技术支持系统正在电网试点。公司将电网自动化同源技术拓展应用至轨道交通、工业控制、智能制造等领域,提供轨道交通自动化、轨道交通信息化、电气化铁路自动化、工矿企业电力自动化等产品研发、设备制造、系统集成、工程安装和服务咨询等。

图 1: 新一代调度技术支持系统

图 2: 电力自动化信息通信



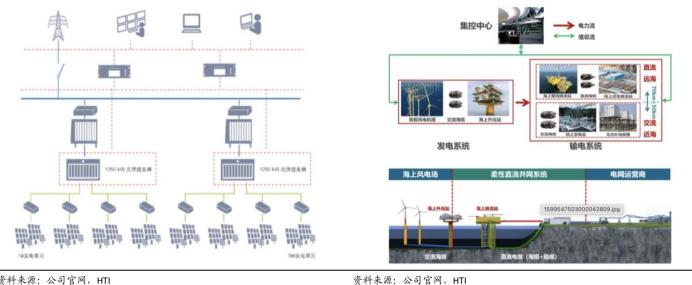
资料来源: 年报,HTI 资料来源: 年报,HTI

海通國際 HAITONG

能够为火电、水电、核电、光伏、风电等能源提供机组控制保护及并网解决方案,技 术水平全球领先。公司成功研制国际领先、世界单机装机容量最大的百万千瓦级巨型 水电机组励磁系统和保护控制产品,拥有完善的抽水蓄能机组的成套设备、智能化的 新能源发电场群集中控制系统等新技术新产品,承担了多个智能化水电厂改造、核电 机组励磁国产化改造及多能互补示范工程。掌握储能核心控制技术包含高效变流技 术、大规模变流器集群协控技术、快速功率控制技术,以及电芯长寿温度管理技术等 等,技术水平领先全球。

图 3: 光伏发电综合自动化解决方案

图 4: 海上风电送出工程整体解决方案



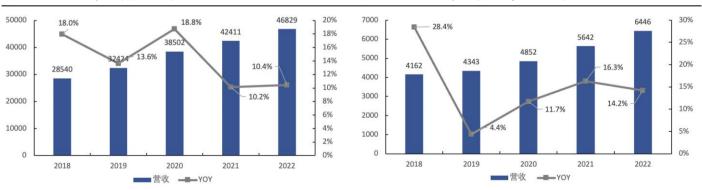
资料来源:公司官网,HTI

2. 营收稳步增长,成本控制能力优秀

近年来公司营收及归母均保持两位数的增速, 我们预计 23 年开始营收及归母将提 速。营收方面, 2018-2021年, 公司营业收入由 285.4亿元增加到 468.3亿元,CAGR 为 13%, 归母净利润方面, 从 41.6 亿元增加到 64.5 亿元, CAGR 为 11.2%, 近 3 年归母净 利润增速均高于营收增速,体现出公司降本增效效果显著,2022年公司新签合同 517.48 亿元, 其中受外部市场环境影响, 特高压、部分工程总包类项目招标及合同签 订出现滞后,合同同比下降 6.91%, 23 年开始进入特高压招标大年,预计合同量将大 幅反弹,电网外业务如新能源发电、储能、环保等业务呈现良好发展势头,新签合同 同比增长 25%, 我们预计 2023-2026 年公司盈利能力都将维持高位。

图 5: 2018-2022 年公司营收及增速

图 6: 2018-2022 年公司归母净利润及增速



资料来源: Wind, HTI 资料来源: Wind, HTI

25 Jul 2023 3 聚焦自动化及工业控制和继电保护及柔性输电,发电机新能源业务营收增速最快。公司自动化及工业控制板块包括电网调度自动化和电气控制自动化,主要面向范围覆盖电力系统输电、调度、变电、配电、用电及综合能源等领域,合计营收从 280.3 亿元增加到 340.1 亿元,占比保持在 73%上下波动;继电保护及柔性输电板块营收同期从60.1 亿元增长到 63.8 亿元,营收占比非常稳定;发电机新能源板块虽然营收占比较低,2022 年为 9%,但是营收增速最快,20-22 年 CAGR 为 28.6%,主要原因是新能源装机增速超预期,强制配储政策推动新型储能并网装机增速翻倍,公司将构网技术应用于储能系统,形成了集中式风冷、液冷储能系统、模块化液冷储能系统、高压直挂式储能系统等全场景构网型系列储能产品,并在国内外取得规模化应用,有力支撑了公司发电及新能源板块营收高增。

图 7: 2020-2022 年公司营收及增速

图 8: 2020-2022 年公司归母净利润及增速



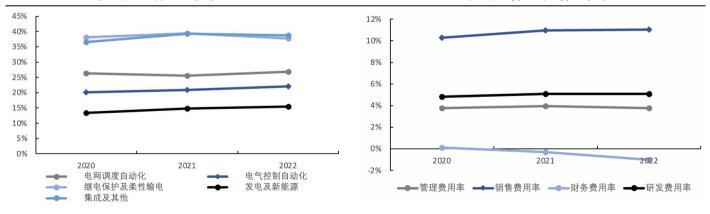
资料来源:Wind,HTI 资料来源:Wind,HTI

自动化及工业控制板块毛利率不断提高,费用率不断下降,研发驱动保证公司产品高技术水平和竞争力。2022年公司综合毛利率达到27%,较2020年提升0.4个百分点,产品依然保持竞争力,公司继电保护及柔性输电和集成业务毛利率最高,基本保持37%以上,自动化及工业控制板块毛利率稳步上升。费用控制方面,公司管理费用稳中有降,财务费用本期金额较上年同期减少,主要系外币汇率变动汇兑收益增长以及利息收入增长所致,研发费用及费用率不断提升,20-22年 CAGR 为13.2%,略高于营收及归母增速。2022年,国电南瑞获专利授权434项,其中发明专利403项;申请PCT专利20项;登记软件著作权242项;发表核心期刊论文247篇;22项科技成果通过中国电机工程学会组织的技术鉴定,核心技术国际领先。

图 9: 2020-2022 年公司各业务毛利率情况

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图 10: 2020-2022 年公司三费及研发费用率情况



资料来源:Wind,HTI 资料来源:Wind,HTI

3. 电网投资市场空间广阔,需求可持续性强

到 2050 年,全球电网至少需要投资 14 万亿美元,来满足电力系统转型需求。根据彭 博新能源财经报告,2020年,全球电网投资约为2350亿美元,到2050年,电网投资 需增至 6360 亿美元,支撑电源建设,满足新增用电需求,并替换现有基础设施,电 网基础设施数字化投资占电网投资的 36%, 即 4.7 万亿美元, 能够提高和扩大电网的 利用率。2020 年至 2050 年间,中国是全球最大的单一电网市场,在 30 年的展望期 内,全球电网投资有五分之一(2.9 万亿美元)来自中国。特高压输电继续占据电网 投资主导地位,美国是当今第二大市场,未来三十年,美国年度电网投资逐年翻一番 不止, 到 2043 年超过 1000 亿美元。

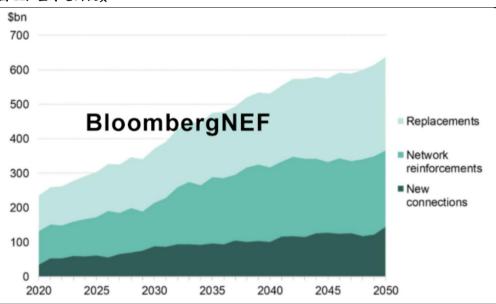


图 11: 全球电网投资

资料来源: 彭博新能源财经, HTI

两网"十四五"电网投资加速,合计投资增速 10.5%。根据国网和南网披露数据,"十四 五"期间国网南网合计计划投资超过3万亿元,同比十三五期间增长10.5%,其中国网 计划投资 3500 亿美元,主要投向特高压输电线路建设,促进三北地区新能源消纳。 南方电网计划投资 6700 亿元,主要投向数字化和现代化电网建设,如提升输电智能 化水平,推进输电线路智能巡视和智能变电站建设等,其中网配电网投资占比超过 50%。

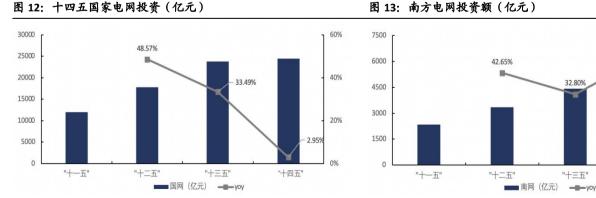


图 12: 十四五国家电网投资(亿元)

资料来源: 国家电网, HTI

资料来源: 南方电网, HTI

60%

40%

20%

51.14%

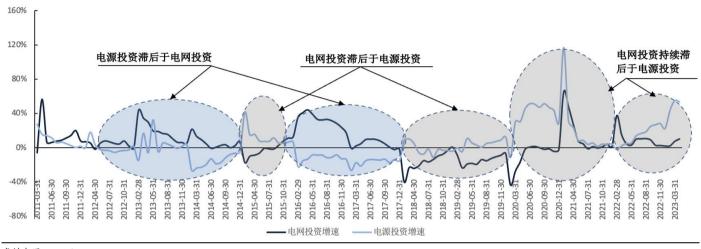
"十四五"

32.80%

"+= #"

2023 年 4 月开始电网投资剪刀差加速修复。根据中电联及国家能源局数据,2019-2022 年,电源投资同比增长 12.6%/29.2%/4.5%/22.8%,同期电网投资同比增长-6.74%/-2.3%/1.1%/2.2%,电源投资远高于电网投资。2023-2025 年传统电源及新能源投资将继续大幅增加,我们预计 2023 年光伏新增装机 120GW,同比增长 37.3%,风电新增装机 75GW,同比增长 99%,火电作为支撑性电源在"三个 8000 万"的指引下新增装机有望达到 50GW/80GW/80GW,短期内重回装机高峰,电源投资增速在"十四五"中后期维持高位,而电网投资方面,2019 年到 2023 年电网投资增速从-6.7%增长到 3.8%,2023 年 4 月和 5 月份电网单月投资增速分别为 16%和 12%,电源与电网投资剪刀差已经开始加速修复。

图 14: 电网投资加速修复



资料来源: Wind, HTI

2023 年特高压预计开工"5 直 2 交",投资总额达 1340 亿元。23 年预计开工"5 直 1 交",5 条直流分别为金上-湖北,陇东-山东,哈密-重庆,宁夏-湖南,藏东南-粤港澳;2条交流分别为为张北-胜利和大同-天津南。按照每条直流线路平均投资成本约为220 亿元,每条交流线路平均投资成本约为120 亿元,投资规模约1340 亿元,23-24年核准及开工数量有望达到15年的高峰,电网设备板块开始高景气周期。

表 2: 特高压建设进度

类型	特高压项目	主体	投运时间	进展
	陕北-武汉	国网	2021年7月	建成
	雅中-江西	国网	2021年6月	建成
	白鹤滩-江苏	国网	2022年7月	建成
	白鹤滩-浙江	国网	2022年12月	建成
	金上-湖北	国网		开工
	陇东-山东	国网		开工
直流	哈密-重庆	国网		可研
	宁夏-湖南	国网	计划 2025 年	可研
	藏东南-粤港澳	国网		可研
	陕西-安徽	国网		项目论证
	陕西-河南	国网		项目论证
	蒙西-京津冀	国网		项目论证
	外电入浙直流	国网		项目论证
	南昌-长沙	国网	2021年12月	建成
	荆门-武汉	国网	2022年12月	建成
	南阳-荆门-长沙	国网	2022年10月	建成
	驻马店-武汉	国网	计划 2023 年	在建
交流	南昌-武汉	国网	计划 2023 年	在建
	福州-厦门	国网	计划 2023 年	在建
	川渝环线	国网	计划 2023 年	在建
	张北-胜利	国网	计划 2025 年	招标
	大同-怀来-天津北-天津 南	国网		预可研

资料来源: 国家电网, HTI

"十三五"期间智能电网投资占比达 12.5%, 预计"十四五"期间两网智能电网投资规模有望超 3900 亿元。根据《国家电网智能化规划总报告(修订稿)》,2009-2020 年共 12 年期间,国家电网在电网智能化方面总共投资约 3741 亿元, 占比 11.1%, 其中"十三五"期间占比达 12.5%, 我们可以了解到国家电网的计划投资远小于实际投资,以"十三五"期间为例,国家电网实际累计投资额达 2.38 万亿元,远超过计划的 1.4 万亿元。"十四五"期间国家电网和南方电网均加大智能化电网投资力度,预计投资占比会在13%以上,结合总投资额 3 万亿元,"十四五"期间智能化电网投资额有望达到 3900 亿元以上。

表 3: 国家电网智能电网投资规模

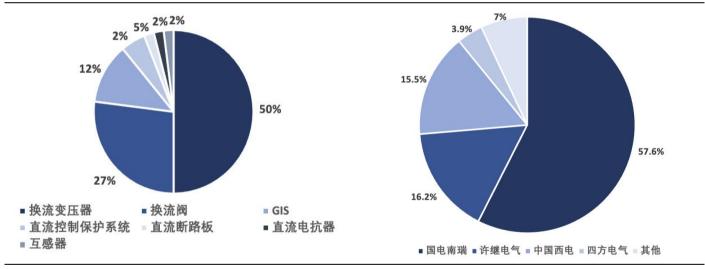
类型	第一阶段	第二阶段	第三阶段	合计
	(2009-2010)	(2011-2015)	(2016-2020)	
电网计划总投资	5510	15000	14000	34510
年均智能化投资	2755	3000	2800	2876
智能化投资	341	1750	1750	3841
年均智能化投资	171	350	350	320
智能化投资占比	6.2%	11.7%	12.5%	11.1%

资料来源: 国家电网, HTI

公司是直流特高压换流阀龙头,市占率稳居第一。特高压直流核心设备成本结构中,换流变压器和换流阀占比最高,分别达到50%和27%,公司在换流阀领域处于绝对核心的地位,市占率达57.6%,2022年特高压直流开工0条,2023年特高压直流线路预计开工5条,弹性巨大,公司作为核心设备供应商将充分收益。展望十五五,海上风电装机将保持高景气度,离岸距离越来越远将推动柔直输电的运用,在柔性输电领域,公司的高压大容量换流阀、控制保护系统和电流电压高速测量装置等关键设备整体达到国际领先水平。有望为公司贡献稳定营收。

图 15: 直流特高压核心设备成本结构

图 16: 换流阀市占率情况



资料来源:国网、南网、华经产业研究院,HTI

资料来源:国网、南网、华经产业研究院,HTI

4.盈利预测及估值

电网调度自动化板块:根据国家电网和南方电网在"十四五"期间的投资规模及增速,以及电网智能化投资占比不断提升,我们预计 2023-2025 年电网调度自动化板块的营收分别为 293.9 亿元/339.5 亿元/393.8 亿元,毛利率分别为 27.0%/26.9%/26.8%。

电气控制自动化板块:根据国家电网和南方电网在"十四五"期间的投资规模及增速,以及电网智能化投资占比不断提升,我们预计 2023-2025 年电气控制自动化营收分别为 96.4 亿元/110.8 亿元/129.7 亿元,毛利率分别为 22.4%/22.4%/22.3%。

继电保护及柔性输电板块:主要产品包括电力控制保护、换流阀、潮流控制器等,根据国家电网和南方电网在"十四五"期间的投资规模及增速,以及特高压输电线路开工条数,电网投资增速,我们预计 2023-2025 年继电保护及柔性输电业务营收分别为67.0亿元/71.0亿元/75.9亿元,毛利率分别为38.0%/38.2%/38.4%。

海通國際 HAITONG 发电及新能源板块: 2022年公司大力拓展储能、水电、太阳能等业务,发电业务营收增速较快,我们预计 2023-2025 年发电业务营收分别为 53.0 亿元/63.6 亿元/76.3 亿元,毛利率分别为 15.5%/16.0%/16.0%。

集成及其它板块: 2022 年公司集成业务板块受到国际项目执行进度影响有所下滑,我们预计,随着疫情扰动消失,2023-2025 年集成及其他板块营收分别为 24.3 亿元/29.1 亿元/35.8 亿元,毛利率分别为 39.0%/39.1%/39.2%。

根据电网投资增速及特高压开工招标节奏,电网智能化投资占比以及公司订单情况,我们预计公司 2023-2025 年公司营业收入分别为 535.5/615.1/712.7 亿元,对应归母净利润为 74.4/87.5/102.0 亿元,我们预计的目标价为 28.33 元/股,首次覆盖给予"优大于市"评级。

图 17: DCF 估值模型

由现金流预测	2022A	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
营业收入	46,829	53,550	61,509	71,274	81,531	90,655	99,126	107,004	114,005	120,505	126,149
YoY	10.4%	14.4%	14.9%	15.9%	14.4%	11.2%	9.3%	7.9%	6.5%	5.7%	4.7%
EBIT	7,385	8,752	10,290	11,997	13,792	15,403	16,586	17,729	18,727	19,800	20,734
YoY	9.9%	18.5%	17.6%	16.6%	15.0%	11.7%	7.7%	6.9%	5.6%	5.7%	4.7%
EBIT Margin	15.8%	16.3%	16.7%	16.8%	16.9%	17.0%	16.7%	16.6%	16.4%	16.4%	16.4%
EBIT*(1 - t)	6,467	7,702	9,056	10,557	12,137	13,555	14,596	15,602	16,480	17,424	18,246
+ 折旧和摊销	139	1,237	1,483	1,765	1,933	2,262	2,625	3,021	3,186	3,614	4,073
- 营运资本变化	(2,225)	4,230	(4,718)	3,215	(5,027)	3,108	(4,458)	3,072	(4, 357)	3,205	(4,285)
- 资本性支出	(3,415)	(3,500)	(4, 100)	(4,700)	(5,300)	(5,900)	(6,500)	(7, 100)	(7,700)	(8,300)	(8,900)
自由现金流	966	9,668	1,720	10,837	3,743	13,025	6,263	14,595	7,609	15,943	9,134
YoY		900.6%	-82.2%	529.9%	-65.5%	248.0%	-51.9%	133.0%	-47.9%	109.5%	-42.7%
牙 分析											
自由现金流现值		60,470							税率		12.0%
终值		188,265							负债率		40.0%
终值的现值		112,384							β		0.60
企业价值		172,854							T 无风脸利率		2.7%
净现金/(负债), 少数股东权益		16,823							风险溢价		7.0%
权益价值		189,677							权益成本		6.9%
每股股价 (rmb)		28.33							债务成本		5.0%
											4.4%
tigaxaxiii (IIIIb)											
spacescor (IIIIo)									债务成本(税后)		
SUBSECUTION (IIII)									饭劳成本(代后) WACC 永续增长率		5.9% 1.0%
	2股价对永续增长率								WACC 永续增长率		5.9%
	永续增长率	-1.0%	-0.5%	0.0%	0.5%	1.0%	1.5%	2.0%	WACC 永续增长率 2.5%		5.9%
	永续增长率 4.4%	-1.0% 29.24	-0.5% 31.07	33.31	36.13	39.77	44.67	51.62	WACC 永续增长率 2.5% 62.22		5.9%
	永续增长率 4.4% 4.9%	-1.0% 29.24 26.90	-0.5% 31.07 28.36	33.31 30.12	36.13 32.28	39.77 34.99	44.67 38.50	51.62 43.21	WACC 永续增长率 2.5% 62.22 49.90		5.9%
6 2	永续增长率 4.4% 4.9% 5.4%	-1.0% 29.24 26.90 24.92	-0.5% 31.07 28.36 26.11	33.31 30.12 27.51	36.13 32.28 29.21	39.77 34.99 31.28	44.67 38.50 33.89	51.62 43.21 37.27	WACC 永续增长率 2.5% 62.22 49.90 41.81		5.9%
6 2	永续增长率 4.4% 4.9% 5.4% ACC 5.9%	-1.0% 29.24 26.90 24.92 23.23	-0.5% 31.07 28.36 26.11 24.21	33.31 30.12 27.51 25.35	36.13 32.28 29.21 26.70	39.77 34.99 31.28 28.33	44.67 38.50 33.89 30.33	51.62 43.21 37.27 32.84	WACC 永续增长率 2.5% 62.22 49.90 41.81 36.10		5.9%
6 2	永续增长率 4.4% 4.9% 5.4% 5.9% 6.4%	-1.0% 29.24 26.90 24.92 23.23 21.76	-0.5% 31.07 28.36 26.11 24.21 22.58	33.31 30.12 27.51 25.35 23.52	36.13 32.28 29.21 26.70 24.62	39.77 34.99 31.28 28.33 25.92	44.67 38.50 33.89 30.33 27.49	51.62 43.21 37.27 32.84 29.42	WACC 永续增长率 2.5% 62.22 49.90 41.81 36.10 31.84		5.9%
6 2	永续增长率 4.4% 4.9% 5.4% 5.9% 6.4% 6.9%	-1.0% 29.24 26.90 24.92 23.23 21.76 20.48	-0.5% 31.07 28.36 26.11 24.21 22.58 21.17	33.31 30.12 27.51 25.35 23.52 21.95	36.13 32.28 29.21 26.70 24.62 22.86	39.77 34.99 31.28 28.33 25.92 23.92	44.67 38.50 33.89 30.33 27.49 25.17	51.62 43.21 37.27 32.84 29.42 26.68	WACC 永续增长率 2.5% 62.22 49.90 41.81 36.10 31.84 28.54		5.9%
6 2	永续增长率 4.4% 4.9% 5.4% 5.9% 6.4%	-1.0% 29.24 26.90 24.92 23.23 21.76	-0.5% 31.07 28.36 26.11 24.21 22.58	33.31 30.12 27.51 25.35 23.52	36.13 32.28 29.21 26.70 24.62	39.77 34.99 31.28 28.33 25.92	44.67 38.50 33.89 30.33 27.49	51.62 43.21 37.27 32.84 29.42	WACC 永续增长率 2.5% 62.22 49.90 41.81 36.10 31.84		5.9%
₩.	外续增长率 4.4% 4.9% 5.4% 6.4% 6.9% 7.4%	-1.0% 29.24 26.90 24.92 23.23 21.76 20.48 19.35	-0.5% 31.07 28.36 26.11 24.21 22.58 21.17 19.93	33.31 30.12 27.51 25.35 23.52 21.95	36.13 32.28 29.21 26.70 24.62 22.86	39.77 34.99 31.28 28.33 25.92 23.92	44.67 38.50 33.89 30.33 27.49 25.17	51.62 43.21 37.27 32.84 29.42 26.68	WACC 永续增长率 2.5% 62.22 49.90 41.81 36.10 31.84 28.54		5.9%
W	永续增长率 4.4% 4.9% 5.4% 5.9% 6.4% 6.9%	-1.0% 29.24 26.90 24.92 23.23 21.76 20.48 19.35	-0.5% 31.07 28.36 26.11 24.21 22.58 21.17 19.93	33.31 30.12 27.51 25.35 23.52 21.95	36.13 32.28 29.21 26.70 24.62 22.86	39.77 34.99 31.28 28.33 25.92 23.92	44.67 38.50 33.89 30.33 27.49 25.17	51.62 43.21 37.27 32.84 29.42 26.68	WACC 永续增长率 2.5% 62.22 49.90 41.81 36.10 31.84 28.54		5.9%
W	永续增长率 4.4% 4.9% 5.4% 5.9% 6.4% 6.9% 7.4%	-1.0% 29.24 26.90 24.92 23.23 21.76 20.48 19.35	-0.5% 31.07 28.36 26.11 24.21 22.58 21.17 19.93	33.31 30.12 27.51 25.35 23.52 21.95 20.59	36.13 32.28 29.21 26.70 24.62 22.86 21.35	39.77 34.99 31.28 28.33 25.92 23.92 22.22	44.67 38.50 33.89 30.33 27.49 25.17 23.24	51.62 43.21 37.27 32.84 29.42 26.68 24.45	WACC 永续增长率 2.5% 62.22 49.90 41.81 36.10 31.84 28.54 25.91		5.9%
W	永续增长率	-1.0% 29.24 26.90 24.92 23.23 21.76 20.48 19.35	-0.5% 31.07 28.36 26.11 24.21 22.58 21.17 19.93	33.31 30.12 27.51 25.35 23.52 21.95 20.59	36.13 32.28 29.21 26.70 24.62 22.86 21.35	39.77 34.99 31.28 28.33 25.92 23.92 22.22	44.67 38.50 33.89 30.33 27.49 25.17 23.24	51.62 43.21 37.27 32.84 29.42 26.68 24.45	WACC 永续增长率 2.5% 62.22 49.90 41.81 36.10 31.84 28.54 25.91		5.9%
W	永续增长率	-1.0% 29.24 26.90 24.92 23.23 21.76 20.48 19.35	-0.5% 31.07 28.36 26.11 24.21 22.58 21.17 19.93	33.31 30.12 27.51 25.35 23.52 21.95 20.59	36. 13 32. 28 29. 21 26. 70 24. 62 22. 86 21. 35	39.77 34.99 31.28 28.33 25.92 23.92 22.22	44.67 38.50 33.89 30.33 27.49 25.17 23.24	51.62 43.21 37.27 32.84 29.42 26.68 24.45	WACC 永续增长率 2.5% 62.22 49.90 41.81 36.10 31.84 28.54 25.91		5.9%
W/	永续增长率	-1.0% 29.24 26.90 24.92 23.23 21.76 20.48 19.35	-0.5% 31.07 28.36 26.11 24.21 22.58 21.17 19.93	33.31 30.12 27.51 25.35 23.52 21.95 20.59 0.0% 17.6% 6.3%	36. 13 32. 28 29. 21 26. 70 24. 62 22. 86 21. 35 0. 5% 27. 5% 13. 9%	39.77 34.99 31.28 28.33 25.92 23.92 22.22 1.0% 40.4% 23.5%	44.67 38.50 33.89 30.33 27.49 25.17 23.24 1.5% 57.7% 35.9%	51.62 43.21 37.27 32.84 29.42 26.68 24.45 2.0% 82.2% 52.5%	WACC 永续增长率 2.5% 62.22 49.90 41.81 36.10 31.84 28.54 25.91		5.9%
W/	永续增长率	-1.0% 29.24 26.90 24.92 23.23 21.76 20.48 19.35	-0.5% 31.07 28.36 26.11 24.21 22.58 21.17 19.93 **性 -0.5% 9.7% 0.1% -7.8%	33.31 30.12 27.51 25.35 23.52 21.95 20.59 0.0% 17.6% 6.3% -2.9%	36. 13 32. 28 29. 21 26. 70 24. 62 22. 86 21. 35 0. 5% 27. 5% 13. 9% 3. 1%	39.77 34.99 31.28 28.33 25.92 23.92 22.22 1.0% 40.4% 23.5% 10.4%	44.67 38.50 33.89 30.33 27.49 25.17 23.24 1.5% 57.7% 35.9% 19.6%	51.62 43.21 37.27 32.84 29.42 26.68 24.45 2.0% 82.2% 52.5% 31.6%	WACC 永续增长率 2.5% 62.22 49.90 41.81 36.10 31.84 28.54 25.91 2.5% 119.6% 76.1% 47.6%		5.9%
W/	永续增长率	-1.0% 29.24 26.90 24.92 23.23 21.76 20.48 19.35	-0.5% 31.07 28.36 26.11 24.21 22.58 21.17 19.93	33.31 30.12 27.51 25.35 23.52 21.95 20.59 0.0% 17.6% 6.3% -2.9% -10.5%	36. 13 32. 28 29. 21 26. 70 24. 62 22. 86 21. 35 0. 5% 27. 5% 13. 9% 3. 1% -5. 8%	39.77 34.99 31.28 28.33 25.92 23.92 22.22 1.0% 40.4% 23.5% 10.4% 0.0%	44.67 38.50 33.89 30.33 27.49 25.17 23.24 1.5% 57.7% 35.9% 19.6% 7.1%	51.62 43.21 37.27 32.84 29.42 26.68 24.45 2.0% 82.2% 52.5% 31.6% 15.9%	WACC 永续增长率 2.5% 62.22 49.90 41.81 36.10 31.84 28.54 25.91 2.5% 119.6% 76.1% 47.6% 27.4%		5.9%

资料来源: Wind, HTI

图 18: 财务数据汇总

	2021A	2022A	2023E	2024E	202
利润表					
销售收入	42,411	46,829	53,550	61,509	71,2
销售成本	31,012	34,165	39,078	44,955	52,2
其他收入	-	-	-	-	_
销售费用	1,684	1,758	2,035	2,337	2.7
管理费用	934	1,144	1,285	1,476	1,7
财务费用	125	466	300	355	4
税前利润	6,866	7,885	9,092	10,686	12,4
所得税	-824	-980	-1,091	-1,282	-1,4
净利润	5,642	6,446	7,441	8,745	10,1
现金流量表					
经营性现金流	4,671	8,760	13,069	6,268	16,0
投资现金流	-1856	-3803	-3723	-4170	-47
融资现金流	-2,246	-2,816	-2,561	-2,963	-3,4
净现金变动	569	2,141	6,785	-865	7,7
期初现金总额	12,129	12,660	14,913	21,641	20,8
期末现金总额	12,660	14,913	21,641	20,889	28,78
资产负债表					
流动资产					
现金	12,509	14,744	21,641	20,889	28,7
定期存款/结构性存款	.2,500			-	
应收款	20,436	22,841	25,574	30,036	34.4
存货	7,868	8,294	8,565	9,853	11,4
其他应收款	189	189	216	248	2
可供出售金融资产			1,800		1,9
	1,339	1,747		1,850	
其他流动资产	9,373	8,373	9,000	9,100	9,2
	51,713	56,188	66,796	71,976	86,0
非流动资产					
长期结构性存款和预付款项	0	0	0	0	
固定资产	9,681	9,122	11,051	13,270	15,74
无形资产及其他	1,106	1,355	1,690	2,088	2,54
其他长期投资	174	199	200	220	24
递延项目和其他非流动资产	10,059	9,801	10,000	10,100	10,20
	21,020	20,478	22,941	25,678	28,73
总资产	72,733	76,666	89,737	97,654	114,74
流动负债					
短期借款	87	196	246	296	34
应付款	23,002	22,891	30,640	30,942	40,57
其他应付款	441	1,158	671	1,433	1,01
欠关联方及股东款项	0	0	0	0	1,0
应交税费	0	0	0	0	
其他流动负债	6,885	5,331	5,500	5,700	5,90
	30,481	30,696	38,176	39,491	48,9
非流动负债					
递延项目	1,354	471	500	600	70
其他非流动负债	355	140	200	200	20
	1,710	611	700	800	9(
总负债	32,191	31,307	38,876	40,291	49,85
股东权益	40,542	45,358	50,861	57,364	64,89
财务比率					
毛利率	26.9%	27.0%	27.0%	26.9%	26.
营业利润率	15.8%	15.8%	16.3%	16.7%	16.
净利率	13.3%	13.8%	13.9%	14.2%	14.
ROAE	15.6%	16.0%	16.6%	17.4%	18.

营收账款周转率 有化图结束	169.7	168.7	165.0	165.0	165
存货周转率	92.3	86.3	80.0	80.0	80
总资产总负债	44.3%	40.8%	43.3%	41.3%	43.
毎股数据(元)					
EPS	1.02	0.96	1.11	1.31	1.5
BPS	6.85	6.34	7.08	7.95	8.9
DPS	0.41	0.39	0.45	0.53	0.6
每股经营利润	1.21	1.10	1.31	1.54	1.7

资料来源: Wind, HTI

5. 风险提示

- 1、政策落实、电网投资不及预期;
- 2、市场竞争激烈导致毛利率大幅下滑;
- 3、原材料价格大幅上涨;
- 4、汇率风险。



APPENDIX 1

Summary

Leading provider of intelligent power and overall energy internet solutions. The company is a comprehensive energy internet solution provider with energy and electricity intelligence as its core business. It is an outstanding IT enterprise and a leading enterprise in the field of energy, electricity, and industrial control in China. After decades of independent innovation and industrial development, it has formed four major business segments: power grid automation and industrial control, relay protection and flexible transmission, power automation information communication, power generation, and water conservancy environmental protection. In 2022, the revenue growth rate was 10.4%, and the net profit attributable to the parent company increased by 14.2%, maintaining a stable growth trend in profitability.

Driven by research and development, the technology level is internationally leading. The CAGR of the company's research and development expenses from 2020 to 2022 was 13.2%, slightly higher than 13.0% of revenue and 11.2% of net profit attributable to the parent company. The research and development intensity continues to increase, with the cost rate increasing from 4.82% to 5.08%. The research and development focus on grid intelligence, energy digitization, and off-grid and emerging industries. In 2022, the company obtained 434 patent authorizations, including 403 invention patents; Apply for 20 PCT patents; 242 registered software copyrights; Published 247 core journal papers; 22 scientific and technological achievements have passed the technical appraisal organized by the Chinese Society for Electrical Engineering, and a number of core technologies are at the international leading level.

The market space for power grid investment is vast, with a potential of \$636 billion by 2050, and China has the largest market in the world. According to the Bloomberg New Energy Finance report, in 2020, the global investment in the power grid was approximately 235 billion US dollars, and by 2050, the investment in the power grid needs to increase to 636 billion US dollars. From 2020 to 2050, China was the world's largest single power grid market, with one-fifth (2.9 trillion US dollars) of global power grid investment coming from China during the 30-year outlook period. According to data disclosed by State Grid and South Grid, the total planned investment in State Grid South Grid during the 14th Five-Year Plan period exceeded 3 trillion yuan, A year-on-year increase of 10.5% during the 13th Five-Year Plan period, with China Grid planning to invest 350 billion US dollars, mainly in the construction of ultra-high voltage transmission lines, to promote the consumption of new energy in the three northern regions. Southern Power Grid plans to invest 670 billion yuan, mainly in the construction of digital and modern power grids.

The company has the highest market share of converter valves and is expected to fully benefit from the acceleration of DC ultra-high voltage construction. China expects to start construction of "5 direct and 2 AC" ultra-high voltage AC/DC lines nationwide in 2023, an increase of 3 lines compared to 2022, a year-on-year increase of 75%, including 5 DC lines. The company has the highest market share in the DC ultra-high voltage converter valve market and is in an absolute leading position. In the future, it will continue to benefit from the construction of DC ultra-high voltage lines and the application of DC transmission in far-reaching offshore wind power projects.

Profit Forecast and Investment rating: According to the order volume and growth of power grid investment, we estimate that the company's revenue from 2023 to 2025 will be 53.55/61.51/71.27 billion yuan, and the net profit attributable to the parent company will be 7.4/8.8/10.2 billion yuan. Our target price of RMB28.33 is derived from the DCF model, and we initiate with an OUTPERFORM rating.

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Risks:

- 1. The implementation of policies and power grid investment is less than expected.
- 2. Fierce market competition leads to a sharp decline in gross profit margin.
- 3. The price of raw materials has risen sharply.
- 4. Exchange rate risks.

附录 APPENDIX

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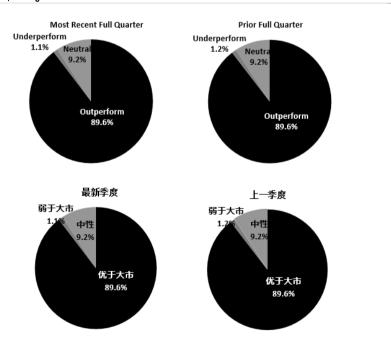
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^{*}在每个评级类别里投资银行客户所占的百分比。

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		(hold)	
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^{*}Percentage of investment banking clients in each rating category.

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