研究报告 Research Report

1 Sep 2022

东阳光 HEC INDUSTRY (600673 CH)

首次覆盖：电容器、电池铝箔、PVDF 齐头并进

Capacitors, Battery Foil, and PVDF Go Hand in Hand: Initiation

观点聚焦 Investment Focus

首次覆盖优于大市 Initiate with OUTPERFORM

评级	优于大市 OUTPERFORM
现价	Rmb10.19
目标价	Rmb12.88
市值	Rmb30.71bn / US$4.45bn
日交易额 (3 个月均值)	US$54.28mn
发行股票数目	3,014mn
自由流通股 (%)	40%
1 年股价最高最低值	Rmb13.10-Rmb5.56

注：现价 Rmb10.19 为 2022 年 8 月 31 日收盘价

资料来源：Factset

	1mth	3mth	12mth
绝对值	-11.9%	42.1%	42.1%
绝对值（美元）	-13.9%	37.4%	33.3%
相对 MSCI China	-11.5%	47.3%	72.1%

(Rmb mn)	Dec-21A	Dec-22E	Dec-23E	Dec-24E
营业收入	12,798	12,801	15,618	19,522
(+/-)	23.4%	0.0%	22.0%	25.0%
净利润	874	1,388	2,228	2,994
(+/-)	110.3%	58.8%	60.5%	34.4%
全面摊薄 EPS (Rmb)	0.29	0.46	0.74	0.99
毛利率	21.5%	21.5%	24.0%	24.9%
净资产收益率	10.1%	13.8%	18.1%	19.6%
市盈率	38.17	24.03	14.97	11.14

资料来源：公司信息, HTI

(Please see APPENDIX 1 for English summary)

- **东阳光：剥离医药业务再出发，2022 年上半年实现归母净利同增 646%。**东阳光集团成立于 1997 年，现有员工 2 万余人；主要从事生物医药、电子材料和健康养生三大产业，现有广东东莞、广东韶关、湖北宜昌、西藏林芝、贵州遵义、内蒙古乌兰察布六大基地，已拥有中国东阳光科、香港东阳光药两家上市公司，其中 A 股上市公司东阳光科为电子材料业务主要载体。

  公司 2022 年上半年业绩表现强劲，实现营收 59.26 亿元，同比增长 0.61%；实现归母净利 6.24 亿元，同比增长 646%。业绩强劲增长主要得益于电极箔、电池铝箔等需求高景气，以及 PVDF 价格同比增长。
- **围绕电子元器件、新能源材料、氟氯化工三大产业积极布局。**东阳光依托完整的产业链及技术创新优势，顺应新能源行业发展趋势，响应国家“双碳”政策，聚焦发展优势产业，力争 2026 年销售额突破 500 亿元。
- **电子元器件：电子光箔-电极箔-电容器-磁性材料全产业链布局。**东阳光建成了以广东韶关为主，湖北宜昌、内蒙古乌兰察布、贵州遵义为辅的大规模产业化基地，从高纯铝、电子铝箔、腐蚀化成箔到铝电解电容器完整的产业链；其中，电子铝箔、中高压化成箔产销全球第一，占有 50%的市场。截至 2022 年上半年电容器公司在乌兰察布市布局的中高压化成箔扩建项目已共计完成 96 条生产线的安装及调试，年产量达 2800 万m²。另外 2022 年 2 月 21 日，东阳光铝电解电容器项目开工仪式在东阳基地举行。东阳光集团东阳基地铝电解电容器项目计划总投资 20 亿元，占地 166.3 亩。项目一期投资 10 亿元，于 2022 年 2 月开工建设，计划 2023 年 3 月投产。项目全部建成后，公司预计可实现年销售额 25 亿元，年利税超 5 亿元。
- **新能源材料—电池铝箔：受益新能源车+储能+钠电池发展，公司规划建设 20 万吨产能。**公司电池铝箔一直与日本 UACJ 合作，技术全球领先，现有年产能 2 万吨；正在规划建设年产能 20 万吨，一期先建设年产能 5 万吨。公司在年初 1 月份公告，计划以自筹资金总投资不超过 27.1 亿元在湖北宜都建设 10 万吨低碳高端电池铝箔项目，项目建设期 36 个月，一期、二期均为 5 万吨；分别计划于 2023 年和 2025 年投产。
- **氟氯化工产业链：与璞泰来强强联合，新建 2 万吨/年 PVDF 与 4.5 万吨/年 R142b 项目。**东阳光拥有完善的化工产业链，包括烧碱、双氧水、甲烷氯化物等传统化工产品，重点发展氟化工制冷剂、氟树脂 PVDF 等产业。公司与璞泰来达成战略合作意向，分别以 40%和 60%的股权比例成立氟树脂公司，计划由氟树脂公司投资新建 2 万吨/年 PVDF 与 4.5 万吨/年 R142b 项目，其中一期项目 1 万吨/年 PVDF 与 1.8 万吨/年 R142b 已顺利通过节能审批。
- **盈利预测和投资建议。**各板块业务盈利假设如下：

  1、电容器及电子元器件：目前公司具备中高压化成箔产能 4000 万平米，我们预计未来 2 年将增加到 6800 万平米；此外公司预计将投资 20 亿元建设电容器基地，将增加收入 25 亿元；

  2、电池铝箔：公司计划投资 27.1 亿元建设 10 万吨电池铝箔，我们预计将增加收入 40 亿元；

3、PVDF：公司与璞泰来合资公司计划新建 2 万吨/年 PVDF 与 4.5 万吨/年 R142b 项目，公司持有股权 40%。我们预计公司 2022-2024 年 EPS 分别为 0.46、0.74 和 0.99 元/股，参考可比公司估值，给予公司 2022 年 28 倍 PE，对应合理价值 12.88 元，首次覆盖给予“优于大市”评级。

- **风险提示。**1、募投项目释放进度不及预期

Yijie Wu
lisa.yj.wu@htisec.com

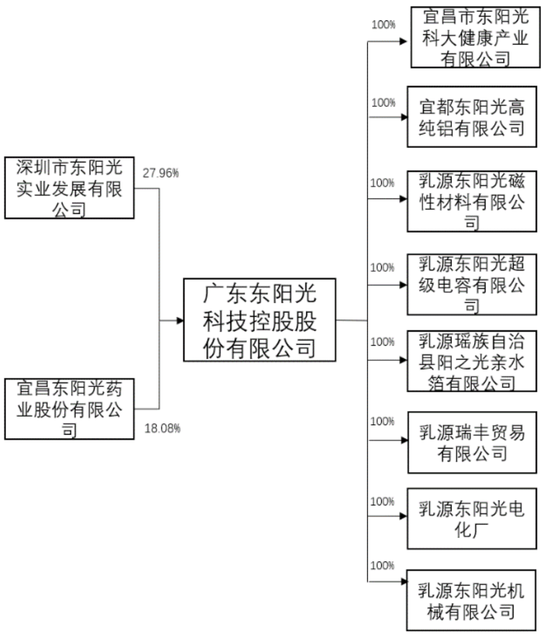
金云涛 Yuntao Jin
yt.jin@htisec.com

观点聚焦 Investment Focus

1. 东阳光：剥离医药业务再出发，2022 年上半年实现归母净利同增 646%

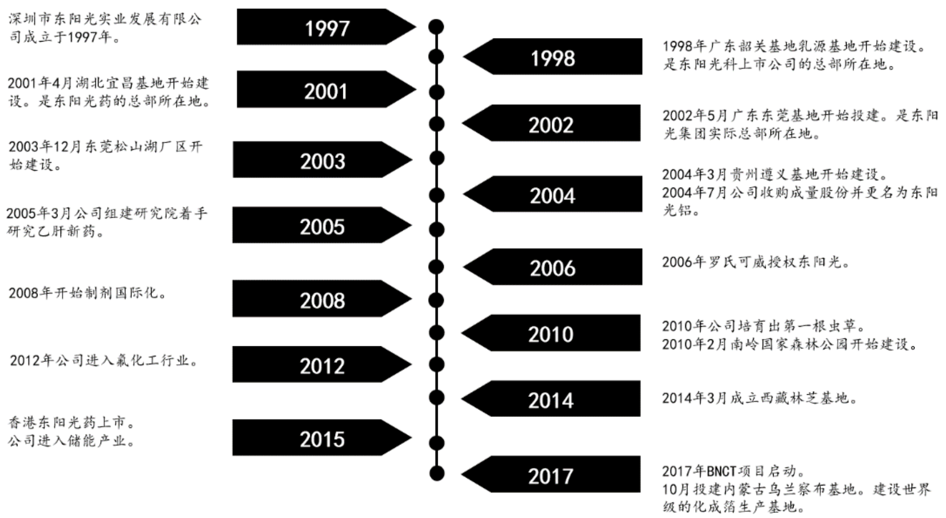
东阳光集团成立于 1997 年，现有员工 2 万余人；主要从事生物医药、电子材料和健康养生三大产业，现有广东东莞、广东韶关、湖北宜昌、西藏林芝、贵州遵义、内蒙古乌兰察布六大基地，已拥有中国东阳光科、香港东阳光药两家上市公司，其中 A 股上市公司东阳光科为电子材料业务主要载体。

图1 东阳光股权结构图



资料来源：公司公告，海通国际

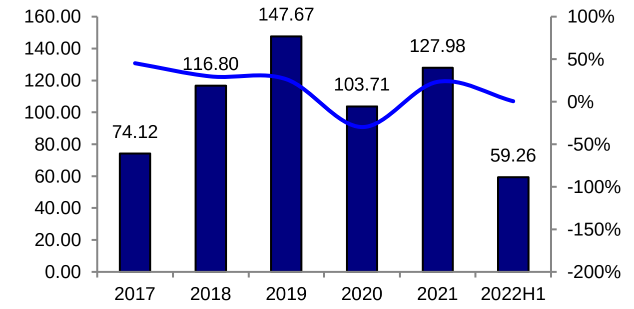
图2 东阳光发展历程



资料来源：公司官网，海通国际

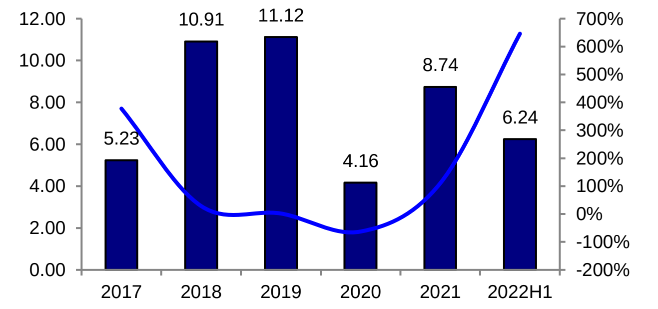
剥离医药业务再出发，公司 2022 年上半年归母净利同增 646%。公司 2022 年上半年业绩表现强劲，实现营收 59.26 亿元，同比增长 0.61%；实现归母净利 6.24 亿元，同比增长 646%。业绩强劲增长主要得益于电极箔、电池铝箔等需求高景气，以及 PVDF 价格同比增长。

图3 2017-2022H1 营业总收入（亿元）



资料来源：wind，海通国际

图4 2017-2022H1 归母净利润（亿元）



资料来源：wind，海通国际

2. 围绕电子元器件、新能源材料、氟氯化工三大产业积极布局

东阳光依托完整的产业链及技术创新优势，顺应新能源行业发展趋势，响应国家"双碳"政策，聚焦发展优势产业，**力争 2026 年销售额突破 500 亿元。**

1) 电子元器件：电子光箔-电极箔-电容器-磁性材料全产业链布局

东阳光建成了以广东韶关为主，湖北宜昌、内蒙古乌兰察布、贵州遵义为辅的大规模产业化基地，从高纯铝、电子铝箔、腐蚀化成箔到铝电解电容器完整的产业链；其中，电子铝箔、中高压化成箔产销全球第一，占有 50%的市场。

截至 2022 年上半年电容器公司在乌兰察布市布局的中高压化成箔扩建项目已共计完成 96 条生产线的安装及调试，年产量达 2800 万㎡。

另外 2022 年 2 月 21 日，东阳光铝电解电容器项目开工仪式在东阳基地举行。东阳光集团东阳基地铝电解电容器项目计划总投资 20 亿元，占地 166.3 亩。项目一期投资 10 亿元，于 2022 年 2 月开工建设，计划 2023 年 3 月投产。项目全部建成后，预计可实现年销售额 25 亿元，年利税超 5 亿元。

图表1 东阳基地布局图

资料来源：公司官网，海通国际

图表2 东阳基地开工现场

资料来源：公司官网，海通国际

2) 新能源材料—电池铝箔：受益新能源车+储能+钠电池发展，公司规划建设 20 万吨产能

公司电池铝箔一直与日本 UACJ 合作，技术全球领先，现有年产能 2 万吨；正在规划建设年产能 20 万吨，一期先建设年产能 5 万吨。

公司在年初 1 月份公告，计划以自筹资金总投资不超过 27.1 亿元在湖北宜都建设 10 万吨低碳高端电池铝箔项目，项目建设期 36 个月，一期、二期均为 5 万吨。分别于 2023 年和 2025 年投产。

电池铝箔作为新能源车特有组件，本身增长弹性大。叠加储能又一万亿赛道和钠电池会用到更多的铝箔，我们测算全球电池铝箔市场将达到 236 亿元，2021-2025 年复合增速为 43%。

表 1 全球电池铝箔市场空间测算

	2021 年销量（万辆）	2021 年单车价值量（元）	2021 年市场空间（亿元）	2025 年销量（万辆）	2025 年单车价值量（元）	2025 年市场空间（亿元）
全球电动车合计	770		48.4	2500		159.9
纯电动	460	788	36.2	1494	788	117.6
插混	310	420	13.0	1006	420	42.3
	2021 年新增（GWH）	2021 年单 GWH 价值量（万元）	2021 年市场空间（亿元）	2021 年新增（GWH）	2021 年单 GWH 价值量（万元）	2025 年市场空间（亿元）
全球电化学储能合计	45		7.1	320		75.6
锂电池	45	1575	7.1	160	1575	25.2
钠电池	0	0	0	160	3150	50.4
全球电动车+储能合计			**56.3**			**235.5**
年复合增速						**43%**

资料来源：海通国际

3) 氟氯化工产业链：与璞泰来强强联合，新建 2 万吨/年 PVDF 与 4.5 万吨/年 R142b 项目

东阳光拥有完善的化工产业链，包括烧碱、双氧水、甲烷氯化物等传统化工产品，重点发展氟化工制冷剂、氟树脂 PVDF 等产业。

公司与璞泰来达成战略合作意向，分别以 40%和 60%的股权比例成立氟树脂公司，计划由氟树脂公司投资新建 2 万吨/年 PVDF 与 4.5 万吨/年 R142b 项目，其中一期项目 1 万吨/年 PVDF 与 1.8 万吨/年 R142b 已顺利通过节能审批。

投资亮点与盈利预测与评级。——添加盈利预测假设

各板块业务盈利假设如下：

1、电容器及电子元器件：目前公司具备中高压化成箔产能 4000 万平米，我们预计未来 2 年将增加到 6800 万平米；此外公司预计将投资 20 亿元建设电容器基地，将增加收入 25 亿元；

2、电池铝箔：公司计划投资 27.1 亿元建设 10 万吨电池铝箔，我们预计将增加

收入 40 亿元;

3、PVDF：公司与璞泰来合资公司计划新建 2 万吨/年 PVDF 与 4.5 万吨/年 R142b 项目，公司持有股权 40%。

我们预计公司 2022-2024 年 EPS 分别为 0.46、0.74 和 0.99 元/股，参考可比公司估值，给予公司 2022 年 28 倍 PE，对应合理价值 12.88 元，首次覆盖给予"优于大市"评级。

图表 12 可比公司估值表（截至 2022 年 8 月 31 日）

	代码	归母净利润 2022E	市值（亿元）	市盈率 2022E
江海股份	002484	3.31	206	33.1
鼎胜新材	603876	11.58	276	23.9
永和股份	605020	7.86	82	21.7
平均值				26.2

资料来源：Wind，海通国际

风险提示

1、募投项目释放进度不及预期。

财务报表分析和预测

主要财务指标	2021	2022E	2023E	2024E
每股指标（元）				
每股收益	0.29	0.46	0.74	0.99
每股净资产	2.88	3.34	4.08	5.07
每股经营现金流	0.62	0.73	0.45	0.80
每股股利	0.00	0.00	0.00	0.00
价值评估（倍）				
P/E	38.17	24.03	14.97	11.14
P/B	3.85	3.32	2.72	2.18
P/S	2.61	2.61	2.14	1.71
EV/EBITDA	17.64	23.04	14.67	9.31
股息率%	0.0%	0.0%	0.0%	0.0%
盈利能力指标（%）				
毛利率	21.5%	21.5%	24.0%	24.9%
净利润率	6.8%	10.8%	14.3%	15.3%
净资产收益率	10.1%	13.8%	18.1%	19.6%
资产回报率	3.9%	5.4%	7.7%	8.9%
投资回报率	2.9%	6.5%	8.2%	9.6%
盈利增长（%）				
营业收入增长率	23.4%	0.0%	22.0%	25.0%
EBIT 增长率	6.9%	75.3%	47.8%	35.8%
净利润增长率	110.3%	58.8%	60.5%	34.4%
偿债能力指标				
资产负债率	59.1%	58.9%	55.6%	52.5%
流动比率	1.13	1.18	1.46	1.67
速动比率	0.99	1.04	1.32	1.51
现金比率	0.40	0.57	0.82	1.00
经营效率指标				
应收帐款周转天数	52.88	61.22	58.44	59.37
存货周转天数	48.20	59.39	55.66	56.90
总资产周转率	0.58	0.50	0.54	0.58
固定资产周转率	2.34	2.51	3.73	5.49

现金流量表（百万元）	2021	2022E	2023E	2024E
净利润	874	1,388	2,228	2,994
少数股东损益	-323	73	117	158
非现金支出	1,171	65	-24	6
非经营收益	-223	-78	-378	-472
营运资金变动	364	753	-573	-268
经营活动现金流	**1,864**	**2,202**	**1,370**	**2,417**
资产	-1,112	-596	1,921	980
投资	366	150	0	10
其他	24	269	589	694
投资活动现金流	**-722**	**-178**	**2,510**	**1,684**
债权募资	5,050	1,200	500	300
股权募资	0	0	0	0
其他	-6,963	-181	-198	-206
融资活动现金流	**-1,912**	**1,019**	**302**	**94**
现金净流量	**-770**	**3,043**	**4,182**	**4,195**

利润表（百万元）	2021	2022E	2023E	2024E
营业总收入	12,798	12,801	15,618	19,522
营业成本	10,045	10,052	11,872	14,656
毛利率%	21.5%	21.5%	24.0%	24.9%
营业税金及附加	91	111	130	157
营业税金率%	0.7%	0.9%	0.8%	0.8%
营业费用	618	154	184	226
营业费用率%	4.8%	1.2%	1.2%	1.2%
管理费用	689	448	539	644
管理费用率%	5.4%	3.5%	3.5%	3.3%
EBIT	869	1,524	2,252	3,058
财务费用	585	178	159	111
财务费用率%	4.6%	1.4%	1.0%	0.6%
资产减值损失	-201	-40	-47	-45
投资收益	612	419	589	704
营业利润	**939**	**1,675**	**2,754**	**3,745**
营业外收支	-18	4	5	7
利润总额	**921**	**1,680**	**2,760**	**3,752**
EBITDA	1,754	1,550	2,182	3,019
所得税	371	218	414	600
有效所得税率%	40.2%	13.0%	15.0%	16.0%
少数股东损益	-323	73	117	158
归属母公司所有者净利润	**874**	**1,388**	**2,228**	**2,994**

资产负债表（百万元）	2021	2022E	2023E	2024E
货币资金	4,654	7,697	11,879	16,074
应收账款及应收票据	1,854	2,147	2,501	3,175
存货	1,326	1,636	1,810	2,285
其它流动资产	5,146	4,424	4,979	5,383
流动资产合计	12,981	15,903	21,169	26,917
长期股权投资	315	315	315	315
固定资产	5,470	5,093	4,188	3,557
在建工程	830	2,119	2,339	2,915
无形资产	1,908	1,129	40	-946
非流动资产合计	9,176	9,700	7,792	6,794
资产总计	**22,156**	**25,603**	**28,961**	**33,711**
短期借款	6,980	8,180	8,680	8,980
应付票据及应付账款	2,811	3,367	3,759	4,730
预收账款	0	0	0	0
其它流动负债	1,708	1,937	2,059	2,386
流动负债合计	11,499	13,484	14,497	16,095
长期借款	989	989	989	989
其它长期负债	613	613	613	613
非流动负债合计	1,602	1,602	1,602	1,602
负债总计	**13,101**	**15,086**	**16,099**	**17,697**
实收资本	3,014	3,014	3,014	3,014
归属于母公司所有者权益	8,670	10,058	12,286	15,280
少数股东权益	386	459	576	734
负债和所有者权益合计	**22,156**	**25,603**	**28,961**	**33,711**

备注：（1）表中计算估值指标的收盘价日期为 8 月 31 日；（2）以上各表均为简表
资料来源：公司年报（2021），HTI

APPENDIX 1

Summary

Dongguang: Divesting the pharmaceutical business and starting again, the net profit attributable to the mother increased by 646% in the first half of 2022. Founded in 1997, Dongguang Group has more than 20,000 employees; Mainly engaged in biomedicine, electronic materials and health care three major industries, the existing Guangdong Dongguan, Guangdong Shaoguan, Hubei Yichang, Tibet Nyingchi, Guizhou Zunyi, Inner Mongolia Wulanchabu six major bases, has china East Sunshine Branch, Hong Kong East Sunshine Pharmaceutical two listed companies, of which A-share listed company East Sunshine Branch as the main carrier of electronic materials business.

The company's performance in the first half of 2022 was strong, achieving revenue of 5.926 billion yuan, an increase of 0.61% year-on-year; Achieved a net profit attributable to the mother of 624 million yuan, an increase of 646% year-on-year. The strong growth was mainly due to the high demand for electrode foil and battery aluminum foil, as well as the year-on-year increase in PVDF prices.

Active layout around the three major industries of electronic components, new energy materials, and chlorochlorination.

Relying on the complete industrial chain and technological innovation advantages, East Sunshine conforms to the development trend of the new energy industry, responds to the national "double carbon" policy, focuses on the development of advantageous industries, and strives to exceed 50 billion yuan in sales in 2026.

Profit forecast and investment advice. We estimate that the EPS of the company in 2022-2024 will be 0.46, 0.74 and 0.99 yuan / share respectively. Referring to the valuation of comparable companies, we give the company 28 times PE in 2022, corresponding to a TP of RMB 12.88. We initial with an “Outperfrom” rating.

附录 APPENDIX

重要信息披露

本研究报告由海通国际分销，海通国际是由海通国际研究有限公司(HTIRL)，Haitong Securities India Private Limited (HSIPL)，Haitong International Japan K.K. (HTIJKK)和海通国际证券有限公司(HTISCL)的证券研究团队所组成的全球品牌，海通国际证券集团(HTISG)各成员分别在其许可的司法管辖区内从事证券活动。

IMPORTANT DISCLOSURES

This research report is distributed by Haitong International, a global brand name for the equity research teams of Haitong International Research Limited (“HTIRL”), Haitong Securities India Private Limited (“HSIPL”), Haitong International Japan K.K. (“HTIJKK”), Haitong International Securities Company Limited (“HTISCL”), and any other members within the Haitong International Securities Group of Companies (“HTISG”), each authorized to engage in securities activities in its respective jurisdiction.

HTIRL 分析师认证 Analyst Certification:

我， Yijie Wu，在此保证（i）本研究报告中的意见准确反映了我们对本研究中提及的任何或所有目标公司或上市公司的个人观点，并且（ii）我的报酬中没有任何部分与本研究报告中表达的具体建议或观点直接或间接相关；及就此报告中所讨论目标公司的证券，我们（包括我们的家属）在其中均不持有任何财务利益。I, Yijie Wu, certify that (i) the views expressed in this research report accurately reflect my personal views about any or all of the subject companies or issuers referred to in this research and (ii) no part of my compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this research report; and that I (including members of my household) have no financial interest in the security or securities of the subject companies discussed.

我， 金云涛，在此保证（i）本研究报告中的意见准确反映了我们对本研究中提及的任何或所有目标公司或上市公司的个人观点，并且（ii）我的报酬中没有任何部分与本研究报告中表达的具体建议或观点直接或间接相关；及就此报告中所讨论目标公司的证券，我们（包括我们的家属）在其中均不持有任何财务利益。I, Yuntao Jin, certify that (i) the views expressed in this research report accurately reflect my personal views about any or all of the subject companies or issuers referred to in this research and (ii) no part of my compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this research report; and that I (including members of my household) have no financial interest in the security or securities of the subject companies discussed.

利益冲突披露 Conflict of Interest Disclosures

海通国际及其某些关联公司可从事投资银行业务和/或对本研究中的特定股票或公司进行做市或持有自营头寸。就本研究报告而言，以下是有关该等关系的披露事项（以下披露不能保证及时无遗漏，如需了解及时全面信息，请发邮件至 ERD-Disclosure@htisec.com）

HTI and some of its affiliates may engage in investment banking and / or serve as a market maker or hold proprietary trading positions of certain stocks or companies in this research report. As far as this research report is concerned, the following are the disclosure matters related to such relationship (As the following disclosure does not ensure timeliness and completeness, please send an email to ERD-Disclosure@htisec.com if timely and comprehensive information is needed).

海通证券股份有限公司和/或其子公司（统称“海通”）在过去 12 个月内参与了 603799.CH 的投资银行项目。投资银行项目包括：1、海通担任上市前辅导机构、保荐人或主承销商的首次公开发行项目；2、海通作为保荐人、主承销商或财务顾问的股权或债务再融资项目；3、海通作为主经纪商的新三板上市、目标配售和并购项目。

Haitong Securities Co., Ltd. and/or its subsidiaries (collectively, the "Haitong") have a role in investment banking projects of 603799.CH within the past 12 months. The investment banking projects include 1. IPO projects in which Haitong acted as pre-listing tutor, sponsor, or lead-underwriter; 2. equity or debt refinancing projects of 603799.CH for which Haitong acted as sponsor, lead-underwriter or financial advisor; 3. listing by introduction in the new three board, target placement, M&A projects in which Haitong acted as lead-brokerage firm.

作为回报，海通拥有 002340.CH 及 002738.CH 一类普通股证券的 1%或以上。

The Haitong beneficially owns 1% or more of a class of common equity securities of 002340.CH and 002738.CH.

603993.CH 及 603799.CH 目前或过去 12 个月内是海通的投资银行业务客户。

603993.CH and 603799.CH are/were an investment bank clients of Haitong currently or within the past 12 months.

603993.CH, 600547.CH, 600988.CH, 600711.CH 及 300428.CH 目前或过去 12 个月内是海通的客户。海通向客户提供非投资银行业务的证券相关业务服务。

603993.CH, 600547.CH, 600988.CH, 600711.CH and 300428.CH are/were a client of Haitong currently or within the past 12 months. The client has been provided for non-investment-banking securities-related services.

福建马坑矿业股份有限公司, 四川四环锌锗科技有限公司 及 包头盛泰汽车零部件制造有限公司目前或过去 12 个月内是海通的客户。海通向客户提供非证券业务服务。

福建马坑矿业股份有限公司, 四川四环锌锗科技有限公司 and 包头盛泰汽车零部件制造有限公司 are/were a client of Haitong currently or within the past 12 months. The client has been provided for non-securities services.

海通预计将（或者有意向）在未来三个月内从 603799.CH 及 002738.CH 获得投资银行服务报酬。

Haitong expects to receive, or intends to seek, compensation for investment banking services in the next three months from 603799.CH and 002738.CH.

海通在过去的 12 个月中从福建马坑矿业股份有限公司, 四川四环锌锗科技有限公司 及 包头盛泰汽车零部件制造有限公司获得除投资银行服务以外之产品或服务的报酬。

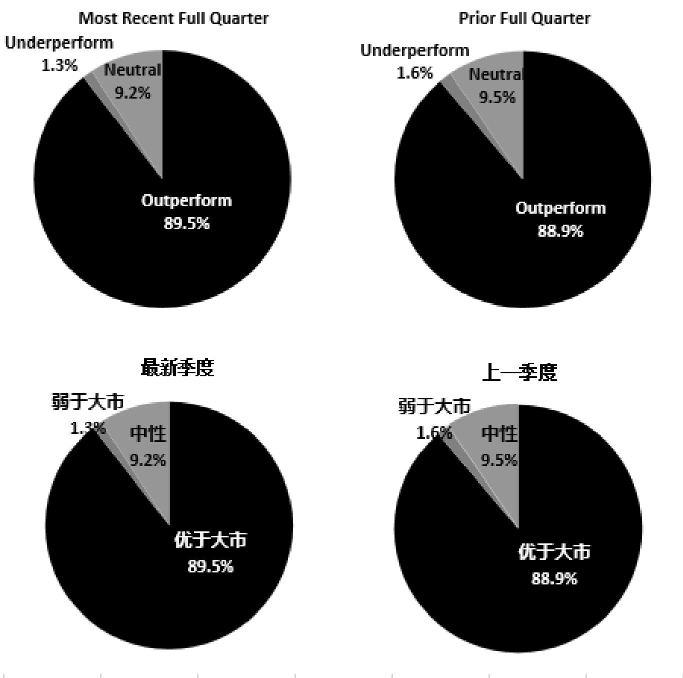
Haitong has received compensation in the past 12 months for products or services other than investment banking from 福建马坑矿业股份有限公司, 四川四环锌锗科技有限公司 and 包头盛泰汽车零部件制造有限公司.

海通担任 601899.CH, 002460.CH, 603993.CH 及 600547.CH 有关证券的做市商或流通量提供者。
Haitong acts as a market maker or liquidity provider in the securities of 601899.CH, 002460.CH, 603993.CH and 600547.CH.

评级定义（从 2020 年 7 月 1 日开始执行）：
海通国际（以下简称"HTI"）采用相对评级系统来为投资者推荐我们覆盖的公司：优于大市、中性或弱于大市。投资者应仔细阅读 HTI 的评级定义。并且 HTI 发布分析师观点的完整信息，投资者应仔细阅读全文而非仅看评级。在任何情况下，分析师的评级和研究都不能作为投资建议。投资者的买卖股票的决策应基于各自情况（比如投资者的现有持仓）以及其他因素。
分析师股票评级
优于大市，未来 12-18 个月内预期相对基准指数涨幅在 10%以上，基准定义如下
中性，未来 12-18 个月内预期相对基准指数变化不大，基准定义如下。根据 FINRA/NYSE 的评级分布规则，我们会将中性评级划入持有这一类别。
弱于大市，未来 12-18 个月内预期相对基准指数跌幅在 10%以上，基准定义如下
各地股票基准指数：日本 – TOPIX, 韩国 – KOSPI, 台湾 – TAIEX, 印度 – Nifty100, 美国 – SP500; 其他所有中国概念股 – MSCI China.

Ratings Definitions (from 1 Jul 2020):
Haitong International uses a relative rating system using Outperform, Neutral, or Underperform for recommending the stocks we cover to investors. Investors should carefully read the definitions of all ratings used in Haitong International Research. In addition, since Haitong International Research contains more complete information concerning the analyst's views, investors should carefully read Haitong International Research, in its entirety, and not infer the contents from the rating alone. In any case, ratings (or research) should not be used or relied upon as investment advice. An investor's decision to buy or sell a stock should depend on individual circumstances (such as the investor's existing holdings) and other considerations.
Analyst Stock Ratings
Outperform: The stock's total return over the next 12-18 months is expected to exceed the return of its relevant broad market benchmark, as indicated below.
Neutral: The stock's total return over the next 12-18 months is expected to be in line with the return of its relevant broad market benchmark, as indicated below. For purposes only of FINRA/NYSE ratings distribution rules, our Neutral rating falls into a hold rating category.
Underperform: The stock's total return over the next 12-18 months is expected to be below the return of its relevant broad market benchmark, as indicated below.
Benchmarks for each stock's listed region are as follows: Japan – TOPIX, Korea – KOSPI, Taiwan – TAIEX, India – Nifty100, US – SP500; for all other China-concept stocks – MSCI China.

评级分布 Rating Distribution



截至 2022 年 6 月 30 日海通国际股票研究评级分布

	优于大市	中性 (持有)	弱于大市
海通国际股票研究覆盖率	89.5%	9.2%	1.3%
投资银行客户*	5.9%	5.6%	5.0%

*在每个评级类别里投资银行客户所占的百分比。
上述分布中的买入，中性和卖出分别对应我们当前优于大市，中性和落后大市评级。
只有根据 FINRA/NYSE 的评级分布规则，我们才将中性评级划入持有这一类别。请注意在上表中不包含非评级的股票。
此前的评级系统定义（直至 2020 年 6 月 30 日）：
买入，未来 12-18 个月内预期相对基准指数涨幅在 10%以上，基准定义如下

中性，未来 12-18 个月内预期相对基准指数变化不大，基准定义如下。根据 FINRA/NYSE 的评级分布规则，我们会将中性评级划入持有这一类别。
卖出，未来 12-18 个月内预期相对基准指数跌幅在 10%以上，基准定义如下
各地股票基准指数：日本 – TOPIX, 韩国 – KOSPI, 台湾 – TAIEX, 印度 – Nifty100; 其他所有中国概念股 – MSCI China.

Haitong International Equity Research Ratings Distribution, as of Jun 30, 2022

	Outperform	Neutral (hold)	Underperform
HTI Equity Research Coverage	89.5%	9.2%	1.3%
IB clients*	5.9%	5.6%	5.0%

*Percentage of investment banking clients in each rating category.

BUY, Neutral, and SELL in the above distribution correspond to our current ratings of Outperform, Neutral, and Underperform.

For purposes only of FINRA/NYSE ratings distribution rules, our Neutral rating falls into a hold rating category. Please note that stocks with an NR designation are not included in the table above.

Previous rating system definitions (until 30 Jun 2020):

BUY: The stock's total return over the next 12-18 months is expected to exceed the return of its relevant broad market benchmark, as indicated below.

NEUTRAL: The stock's total return over the next 12-18 months is expected to be in line with the return of its relevant broad market benchmark, as indicated below. For purposes only of FINRA/NYSE ratings distribution rules, our Neutral rating falls into a hold rating category.

SELL: The stock's total return over the next 12-18 months is expected to be below the return of its relevant broad market benchmark, as indicated below.

Benchmarks for each stock's listed region are as follows: Japan – TOPIX, Korea – KOSPI, Taiwan – TAIEX, India – Nifty100; for all other China-concept stocks – MSCI China.

海通国际非评级研究：海通国际发布计量、筛选或短篇报告，并在报告中根据估值和其他指标对股票进行排名，或者基于可能的估值倍数提出建议价格。这种排名或建议价格并非为了进行股票评级、提出目标价格或进行基本面估值，而仅供参考使用。

Haitong International Non-Rated Research: Haitong International publishes quantitative, screening or short reports which may rank stocks according to valuation and other metrics or may suggest prices based on possible valuation multiples. Such rankings or suggested prices do not purport to be stock ratings or target prices or fundamental values and are for information only.

海通国际 A 股覆盖：海通国际可能会就沪港通及深港通的中国 A 股进行覆盖及评级。海通证券（600837.CH），海通国际于上海的母公司，也会于中国发布中国 A 股的研究报告。但是，海通国际使用与海通证券不同的评级系统，所以海通国际与海通证券的中国 A 股评级可能有所不同。

Haitong International Coverage of A-Shares: Haitong International may cover and rate A-Shares that are subject to the Hong Kong Stock Connect scheme with Shanghai and Shenzhen. Haitong Securities (HS; 600837 CH), the ultimate parent company of HTISG based in Shanghai, covers and publishes research on these same A-Shares for distribution in mainland China. However, the rating system employed by HS differs from that used by HTI and as a result there may be a difference in the HTI and HS ratings for the same A-share stocks.

海通国际优质 100 A 股（Q100）指数：海通国际 Q100 指数是一个包括 100 支由海通证券覆盖的优质中国 A 股的计量产品。这些股票是通过基于质量的筛选过程，并结合对海通证券 A 股团队自下而上的研究。海通国际每季对 Q100 指数成分作出复审。

Haitong International Quality 100 A-share (Q100) Index: HTI's Q100 Index is a quant product that consists of 100 of the highest-quality A-shares under coverage at HS in Shanghai. These stocks are carefully selected through a quality-based screening process in combination with a review of the HS A-share team's bottom-up research. The Q100 constituent companies are reviewed quarterly.

MSCI ESG 评级免责声明条款：尽管海通国际的信息供货商（包括但不限于 MSCI ESG Research LLC 及其联属公司（「ESG 方」）从其认为可靠的来源获取信息（「信息」），ESG 方均不担保或保证此处任何数据的原创性，准确性和/或完整性，并明确表示不作出任何明示或默示的担保，包括可商售性和针对特定目的的适用性。该信息只能供阁下内部使用，不得以任何形式复制或重新传播，并不得用作任何金融工具、产品或指数的基础或组成部分。此外，信息本质上不能用于判断购买或出售何种证券，或何时购买或出售该证券。即使已被告知可能造成的损害，ESG 方均不承担与此处任何资料有关的任何错误或遗漏所引起的任何责任，也不对任何直接、间接、特殊、惩罚性、附带性或任何其他损害赔偿（包括利润损失）承担任何责任。

MSCI ESG Disclaimer: Although Haitong International's information providers, including without limitation, MSCI ESG Research LLC and its affiliates (the "ESG Parties"), obtain information (the "Information") from sources they consider reliable, none of the ESG Parties warrants or guarantees the originality, accuracy and/or completeness, of any data herein and expressly disclaim all express or implied warranties, including those of merchantability and fitness for a particular purpose. The Information may only be used for your internal use, may not be reproduced or redisseminated in any form and may not be used as a basis for, or a component of, any financial instruments or products or indices. Further, none of the Information can in and of itself be used to determine which securities to buy or sell or when to buy or sell them. None of the ESG Parties shall have any liability for any errors or omissions in connection with any data herein, or any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.

盟浪义利（FIN-ESG）数据通免责声明条款：在使用盟浪义利（FIN-ESG）数据之前，请务必仔细阅读本条款并同意本声明：

第一条 义利（FIN-ESG）数据系由盟浪可持续数字科技有限责任公司（以下简称"本公司"）基于合法取得的公开信息评估而成，本公司对信息的准确性及完整性不作任何保证。对公司的评估结果仅供参考，并不构成对任何个人或机构投资建议，也不能作为任何个人或机构购买、出售或持有相关金融产品的依据。本公司不对任何个人或机构投资者因使用本数据表述的评估结果造成的任何直接或间接损失负责。

第二条 盟浪并不因收到此评估数据而将收件人视为客户，收件人使用此数据时应根据自身实际情况作出自我独立判断。本数据所载内容反映的是盟浪在最初发布本数据日期当日的判断，盟浪有权在不发出通知的情况下更新、修订与发出其他与本数据所载内容不一致或有不同结论的数据。除非另行说明，本数据（如财务业绩数据等）仅代表过往表现，过往的业绩表现不作为日后回报的预测。

第三条

改、复制、编译、汇编、再次编辑、改编、删减、缩写、节选、发行、出租、展览、表演、放映、广播、信息网络传播、摄制、增加图标及说明等，否则因此给盟浪或其他第三方造成损失的，由用户承担相应的赔偿责任，盟浪不承担责任。

第四条 如本免责声明未约定，而盟浪网站平台载明的其他协议内容（如《盟浪网站用户注册协议》《盟浪网用户服务（含认证）协议》《盟浪网隐私政策》等）有约定的，则按其他协议的约定执行；若本免责声明与其他协议约定存在冲突或不一致的，则以本免责声明约定为准。

SusallWave FIN-ESG Data Service Disclaimer: Please read these terms and conditions below carefully and confirm your agreement and acceptance with these terms before using SusallWave FIN-ESG Data Service.

1. FIN-ESG Data is produced by SusallWave Digital Technology Co., Ltd. (In short, SusallWave)'s assessment based on legal publicly accessible information. SusallWave shall not be responsible for any accuracy and completeness of the information. The assessment result is for reference only. It is not for any investment advice for any individual or institution and not for basis of purchasing, selling or holding any relative financial products. We will not be liable for any direct or indirect loss of any individual or institution as a result of using SusallWave FIN-ESG Data.

2. SusallWave do not consider recipients as customers for receiving these data. When using the data, recipients shall make your own independent judgment according to your practical individual status. The contents of the data reflect the judgment of us only on the release day. We have right to update and amend the data and release other data that contains inconsistent contents or different conclusions without notification. Unless expressly stated, the data (e.g., financial performance data) represents past performance only and the past performance cannot be viewed as the prediction of future return.

3. The copyright of this data belongs to SusallWave, and we reserve all rights in accordance with the law. Without the prior written permission of our company, none of individual or institution can use these data for any profitable purpose. Besides, none of individual or institution can take actions such as amendment, replication, translation, compilation, re-editing, adaption, deletion, abbreviation, excerpts, issuance, rent, exhibition, performance, projection, broadcast, information network transmission, shooting, adding icons and instructions. If any loss of SusallWave or any third-party is caused by those actions, users shall bear the corresponding compensation liability. SusallWave shall not be responsible for any loss.

4. If any term is not contained in this disclaimer but written in other agreements on our website (e.g. *User Registration Protocol of SusallWave Website, User Service (including authentication) Agreement of SusallWave Website, Privacy Policy of Susallwave Website*), it should be executed according to other agreements. If there is any difference between this disclaim and other agreements, this disclaimer shall be applied.

重要免责声明：

非印度证券的研究报告：本报告由海通国际证券集团有限公司（"HTISGL"）的全资附属公司海通国际研究有限公司（"HTIRL"）发行，该公司是根据香港证券及期货条例（第 571 章）持有第 4 类受规管活动（就证券提供意见）的持牌法团。该研究报告在 HTISGL 的全资附属公司 Haitong International (Japan) K.K.（"HTIJKK"）的协助下发行，HTIJKK 是由日本关东财务局监管为投资顾问。

印度证券的研究报告：本报告由从事证券交易、投资银行及证券分析及受 Securities and Exchange Board of India（"SEBI"）监管的 Haitong Securities India Private Limited（"HTSIPL"）所发行，包括制作及发布涵盖 BSE Limited（"BSE"）和 National Stock Exchange of India Limited（"NSE"）上市公司（统称为「印度交易所」）的研究报告。HTSIPL 于 2016 年 12 月 22 日被收购并成为海通国际证券集团有限公司（"HTISG"）的一部分。

所有研究报告均以海通国际为名作为全球品牌，经许可由海通国际证券股份有限公司及/或海通国际证券集团的其他成员在其司法管辖区发布。

本文件所载信息和观点已被编译或源自可靠来源，但 HTIRL、HTISCL 或任何其他属于海通国际证券集团有限公司（"HTISG"）的成员对其准确性、完整性和正确性不做任何明示或暗示的声明或保证。本文件中所有观点均截至本报告日期，如有更改，恕不另行通知。本文件仅供参考使用。文件中提及的任何公司或其股票的说明并非意图展示完整的内容，本文件并非/不应被解释为对证券买卖的明示或暗示地出价或征价。在某些司法管辖区，本文件中提及的证券可能无法进行买卖。如果投资产品以投资者本国货币以外的币种进行计价，则汇率变化可能会对投资产生不利影响。过去的表现并不一定代表将来的结果。某些特定交易，包括设计金融衍生工具的，有产生重大风险的可能性，因此并不适合所有的投资者。您还应认识到本文件中的建议并非为您量身定制。分析师并未考虑到您自身的财务情况，如您的财务状况和风险偏好。因此您必须自行分析并在适用的情况下咨询自己的法律、税收、会计、金融和其他方面的专业顾问，以期在投资之前评估该项建议是否适合于您。若由于使用本文件所载的材料而产生任何直接或间接的损失，HTISG 及其董事、雇员或代理人对此均不承担任何责任。

除对本文内容承担责任的分析师除外，HTISG 及我们的关联公司、高级管理人员、董事和雇员，均可不时作为主事人就本文件所述的任何证券或衍生品持有长仓或短仓以及进行买卖。HTISG 的销售员、交易员和其他专业人士均可向 HTISG 的相关客户和公司提供与本文件所述意见相反的口头或书面市场评论意见或交易策略。HTISG 可做出与本文件所述建议或意见不一致的投资决策。但 HTIRL 没有义务来确保本文件的收件人了解到该等交易决定、思路或建议。

请访问海通国际网站 www.equities.htisec.com，查阅更多有关海通国际为预防和避免利益冲突设立的组织和行政安排的内容信息。

非美国分析师披露信息：本项研究首页上列明的海通国际分析师并未在 FINRA 进行注册或者取得相应的资格，并且不受美国 FINRA 有关与本项研究目标公司进行沟通、公开露面和自营证券交易的第 2241 条规则之限制。

IMPORTANT DISCLAIMER

For research reports on non-Indian securities: The research report is issued by Haitong International Research Limited ("HTIRL"), a wholly owned subsidiary of Haitong International Securities Group Limited ("HTISGL") and a licensed corporation to carry on Type 4 regulated activity (advising on securities) for the purpose of the Securities and Futures Ordinance (Cap. 571) of Hong Kong, with the assistance of Haitong International (Japan) K.K. ("HTIJKK"), a wholly owned subsidiary of HTISGL and which is regulated as an Investment Adviser by the Kanto Finance Bureau of Japan.

For research reports on Indian securities: The research report is issued by Haitong Securities India Private Limited ("HSIPL"), an Indian company and a Securities and Exchange Board of India ("SEBI") registered Stock Broker, Merchant Banker and Research Analyst that, inter alia, produces and distributes research reports covering listed entities on the BSE Limited ("BSE") and the National Stock Exchange of India Limited ("NSE") (collectively referred to as "Indian Exchanges"). HSIPL was acquired and became part of the Haitong International Securities Group of Companies ("HTISG") on 22 December 2016.

All the research reports are globally branded under the name Haitong International and approved for distribution by Haitong International Securities Company Limited ("HTISCL") and/or any other members within HTISG in their respective jurisdictions.

The information and opinions contained in this research report have been compiled or arrived at from sources believed to be reliable and in good faith but no representation or warranty, express or implied, is made by HTIRL, HTISCL, HSIPL, HTIJKK or any other members within HTISG from which this research report may be received, as to their accuracy, completeness or correctness. All opinions expressed herein are as of the date of this research report and are subject to change without notice. This research report is for information purpose only. Descriptions of any companies or their securities mentioned herein are not intended to be complete and this research report is not, and should not be construed expressly or impliedly as, an offer to buy or sell securities. The securities referred to in this research report may not be eligible for purchase or sale in some jurisdictions. If an investment product is denominated in a currency other than an investor's home currency, a change in exchange rates may adversely affect the investment. Past performance is not necessarily indicative of future results. Certain transactions, including those involving derivatives, give rise to substantial risk and are not suitable for all investors. You should also bear in mind that recommendations in this research report are not tailor-made for you. The analyst has not taken into account your unique financial circumstances, such as your financial situation and risk appetite. You must, therefore, analyze and should, where applicable, consult your own legal, tax, accounting, financial and other professional advisers to evaluate whether the recommendations suits you before investment. Neither HTISG nor any of its directors, employees or agents accepts any liability whatsoever for any direct or consequential loss arising from any use of the materials contained in this research report.

HTISG and our affiliates, officers, directors, and employees, excluding the analysts responsible for the content of this document, will from time to time have long or short positions in, act as principal in, and buy or sell, the securities or derivatives, if any, referred to in this research report. Sales, traders, and other professionals of HTISG may provide oral or written market commentary or trading strategies to the relevant clients and the companies within HTISG that reflect opinions that are contrary to the opinions expressed in this research report. HTISG may make investment decisions that are inconsistent with the recommendations or views expressed in this research report. HTI is under no obligation to ensure that such other trading decisions, ideas or recommendations are brought to the attention of any recipient of this research report.

Please refer to HTI's website www.equities.htisec.com for further information on HTI's organizational and administrative arrangements set up for the prevention and avoidance of conflicts of interest with respect to Research.

Non U.S. Analyst Disclosure: The HTI analyst(s) listed on the cover of this Research is (are) not registered or qualified as a research analyst with FINRA and are not subject to U.S. FINRA Rule 2241 restrictions on communications with companies that are the subject of the Research; public appearances; and trading securities by a research analyst.

分发和地区通知：

除非下文另有规定，否则任何希望讨论本报告或者就本项研究中讨论的任何证券进行任何交易的收件人均应联系其所在国家或地区的海通国际销售人员。

香港投资者的通知事项：海通国际证券股份有限公司("HTISCL")负责分发该研究报告，HTISCL 是在香港有权实施第 1 类受规管活动（从事证券交易）的持牌公司。该研究报告并不构成《证券及期货条例》（香港法例第 571 章）（以下简称"SFO"）所界定的要约邀请，证券要约或公众要约。本研究报告仅提供给 SFO 所界定的"专业投资者"。本研究报告未经过证券及期货事务监察委员会的审查。您不应仅根据本研究报告中所载的信息做出投资决定。本研究报告的收件人就研究报告中产生或与之相关的任何事宜请联系 HTISCL 销售人员。

美国投资者的通知事项：本研究报告由 HTIRL，HSIPL 或 HTIJKK 编写。 HTIRL，HSIPL，HTIJKK 以及任何非 HTISG 美国联营公司，均未在美国注册，因此不受美国关于研究报告编制和研究分析人员独立性规定的约束。本研究报告提供给依照 1934 年"美国证券交易法"第 15a-6 条规定的豁免注册的「美国主要机构投资者」（"Major U.S. Institutional Investor"）和「机构投资者」（"U.S. Institutional Investors"）。在向美国机构投资者分发研究报告时，Haitong International Securities (USA) Inc.（"HTI USA"）将对报告的内容负责。任何收到本研究报告的美国投资者，希望根据本研究报告提供的信息进行任何证券或相关金融工具买卖的交易，只能通过 HTI USA。HTI USA 位于 340 Madison Avenue, 12th Floor, New York, NY 10173，电话（212）351-6050。 HTI USA 是在美国于 U.S. Securities and Exchange Commission（"SEC"）注册的经纪商，也是 Financial Industry Regulatory Authority, Inc.（"FINRA"）的成员。 HTIUSA 不负责编写本研究报告，也不负责其中包含的分析。在任何情况下，收到本研究报告的任何美国投资者，不得直接与分析师直接联系，也不得通过 HSIPL，HTIRL 或 HTIJKK 直接进行买卖证券或相关金融工具的交易。本研究报告中出现的 HSIPL，HTIRL 或 HTIJKK 分析师没有注册或具备 FINRA 的研究分析师资格，因此可能不受 FINRA 第 2241 条规定的与目标公司的交流，公开露面和分析师账户持有的交易证券等限制。投资本研究报告中讨论的任何非美国证券或相关金融工具（包括 ADR）可能存在一定风险。非美国发行的证券可能没有注册，或不受美国法规的约束。有关非美国证券或相关金融工具的信息可能有限制。外国公司可能不受审计和汇报的标准以及与美国境内生效相符的监管要求。本研究报告中以美元以外的其他货币计价的任何证券或相关金融工具的投资或收益的价值受汇率波动的影响，可能对该等证券或相关金融工具的价值或收入产生正面或负面影响。美国收件人的所有问询请联系：

Haitong International Securities (USA) Inc.
340 Madison Avenue, 12th Floor
New York, NY 10173
联系人电话：(212) 351 6050

DISTRIBUTION AND REGIONAL NOTICES

Except as otherwise indicated below, any Recipient wishing to discuss this research report or effect any transaction in any security discussed in HTI's research should contact the Haitong International salesperson in their own country or region.

Notice to Hong Kong investors: The research report is distributed by Haitong International Securities Company Limited ("HTISCL"), which is a licensed corporation to carry on Type 1 regulated activity (dealing in securities) in Hong Kong. This research report does not constitute a solicitation or an offer of securities or an invitation to the public within the meaning of the SFO. This research report is only to be circulated to "Professional Investors" as defined in the SFO. This research report has not been reviewed by the Securities and Futures Commission. You should not make investment decisions solely on the basis of the information contained in this research report. Recipients of this research report are to contact HTISCL salespersons in respect of any matters arising from, or in connection with, the research report.

Notice to U.S. investors: As described above, this research report was prepared by HTIRL, HSIPL or HTIJKK. Neither HTIRL, HSIPL, HTIJKK, nor any of the non U.S. HTISG affiliates is registered in the United States and, therefore, is not subject to U.S. rules regarding the preparation of research reports and the independence of research analysts. This research report is provided for distribution to "major U.S. institutional investors" and "U.S. institutional investors" in reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended. When distributing research reports to "U.S. institutional investors," HTI USA will accept the responsibilities for the content of the reports. Any U.S. recipient of this research report wishing to effect any transaction to buy or sell securities or related financial instruments based on the information provided in this research report should do so only through Haitong International Securities (USA) Inc. ("HTI USA"), located at 340 Madison Avenue, 12th Floor, New York, NY 10173, USA; telephone (212) 351 6050. HTI USA is a broker-dealer registered in the U.S. with the U.S.

Securities and Exchange Commission (the "SEC") and a member of the Financial Industry Regulatory Authority, Inc. ("FINRA"). HTI USA is not responsible for the preparation of this research report nor for the analysis contained therein. Under no circumstances should any U.S. recipient of this research report contact the analyst directly or effect any transaction to buy or sell securities or related financial instruments directly through HSIPL, HTIRL or HTIJKK. The HSIPL, HTIRL or HTIJKK analyst(s) whose name appears in this research report is not registered or qualified as a research analyst with FINRA and, therefore, may not be subject to FINRA Rule 2241 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account. Investing in any non-U.S. securities or related financial instruments (including ADRs) discussed in this research report may present certain risks. The securities of non-U.S. issuers may not be registered with, or be subject to U.S. regulations. Information on such non-U.S. securities or related financial instruments may be limited. Foreign companies may not be subject to audit and reporting standards and regulatory requirements comparable to those in effect within the U.S. The value of any investment or income from any securities or related financial instruments discussed in this research report denominated in a currency other than U.S. dollars is subject to exchange rate fluctuations that may have a positive or adverse effect on the value of or income from such securities or related financial instruments. All inquiries by U.S. recipients should be directed to:

Haitong International Securities (USA) Inc.
340 Madison Avenue, 12th Floor
New York, NY 10173
Attn: Sales Desk at (212) 351 6050

中华人民共和国的通知事项： 在中华人民共和国（下称"中国"，就本报告目的而言，不包括香港特别行政区、澳门特别行政区和台湾）只有根据适用的中国法律法规而收到该材料的人员方可使用该材料。并且根据相关法律法规，该材料中的信息并不构成"在中国从事生产、经营活动"。本文件在中国并不构成相关证券的公共发售或认购。无论根据法律规定或其他任何规定，在取得中国政府所有的批准或许可之前，任何法人或自然人均不得直接或间接地购买本材料中的任何证券或任何实益权益。接收本文件的人员须遵守上述限制性规定。

加拿大投资者的通知事项： 在任何情况下该等材料均不得被解释为在任何加拿大的司法管辖区内出售证券的要约或认购证券的要约邀请。本材料中所述证券在加拿大的任何要约或出售行为均只能在豁免向有关加拿大证券监管机构提交招股说明书的前提下由 Haitong International Securities (USA) Inc.（"HTI USA"）予以实施，该公司是一家根据 National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations（"NI 31-103"）的规定得到「国际交易商豁免」（"International Dealer Exemption"）的交易商，位于艾伯塔省、不列颠哥伦比亚省、安大略省和魁北克省。在加拿大，该等材料在任何情况下均不得被解释为任何证券的招股说明书、发行备忘录、广告或公开发行。加拿大的任何证券委员会或类似的监管机构均未审查或以任何方式批准该等材料、其中所载的信息或所述证券的优点，任何与此相反的声明即属违法。在收到该等材料时，每个加拿大的收件人均将被视为属于 National Instrument 45-106 Prospectus Exemptions 第 1.1 节或者 Securities Act (Ontario)第 73.3(1)节所规定的「认可投资者」（"Accredited Investor"），或者在适用情况下 National Instrument 31-103 第 1.1 节所规定的「许可投资者」（"Permitted Investor"）。

新加坡投资者的通知事项： 本研究报告由 Haitong International Securities (Singapore) Pte Ltd（"HTISSPL"）[公司注册编号 201311400G] 于新加坡提供。HTISSPL 是符合《财务顾问法》（第 110 章）（"FAA"）定义的豁免财务顾问，可（a）提供关于证券，集体投资计划的部分，交易所衍生品合约和场外衍生品合约的建议（b）发行或公布有关证券、交易所衍生品合约和场外衍生品合约的研究分析或研究报告。本研究报告仅提供给符合《证券及期货法》（第 289 章）第 4A 条项下规定的机构投资者。对于因本研究报告而产生的或与之相关的任何问题，本研究报告的收件人应通过以下信息与 HTISSPL 联系：

Haitong International Securities (Singapore) Pte. Ltd

50 Raffles Place, #33-03 Singapore Land Tower, Singapore 048623

电话: (65) 6536 1920

日本投资者的通知事项： 本研究报告由海通国际证券有限公司所发布，旨在分发给从事投资管理的金融服务提供商或注册金融机构（根据日本金融机构和交易法（"FIEL"））第 61（1）条，第 17-11（1）条的执行及相关条款）。

英国及欧盟投资者的通知事项： 本报告由从事投资顾问的 Haitong International Securities Company Limited 所发布，本报告只面向有投资相关经验的专业客户发布。任何投资或与本报告相关的投资行为只面对此类专业客户。没有投资经验或相关投资经验的客户不得依赖本报告。Haitong International Securities Company Limited 的分支机构的净长期或短期金融权益可能超过本研究报告中提及的实体已发行股本总额的 0.5%。特别提醒有些英文报告有可能此前已经通过中文或其它语言完成发布。

澳大利亚投资者的通知事项： Haitong International Securities (Singapore) Pte Ltd, Haitong International Securities Company Limited 和 Haitong International Securities (UK) Limited 分别根据澳大利亚证券和投资委员会（以下简称"ASIC"）公司（废除及过度性）文书第 2016/396 号规章在澳大利亚分发本项研究，该等规章免除了根据 2001 年《公司法》在澳大利亚为批发客户提供金融服务时海通国际需持有澳大利亚金融服务许可的要求。ASIC 的规章副本可在以下网站获取：www.legislation.gov.au。海通国际提供的金融服务受外国法律法规规定的管制，该等法律与在澳大利亚所适用的法律存在差异。

印度投资者的通知事项： 本报告由从事证券交易、投资银行及证券分析及受 Securities and Exchange Board of India（"SEBI"）监管的 Haitong Securities India Private Limited（"HTSIPL"）所发布，包括制作及发布涵盖 BSE Limited（"BSE"）和 National Stock Exchange of India Limited（"NSE"）（统称为「印度交易所」）研究报告。

本项研究仅供收件人使用，未经海通国际的书面同意不得予以复制和再次分发。

People's Republic of China (PRC): In the PRC, the research report is directed for the sole use of those who receive the research report in accordance with the applicable PRC laws and regulations. Further, the information on the research report does not constitute "production and business activities in the PRC" under relevant PRC laws. This research report does not constitute a public offer of the security, whether by sale or subscription, in the PRC. Further, no legal or natural persons of the PRC may directly or indirectly purchase any of the security or any beneficial interest therein without obtaining all prior PRC government approvals or licenses that are required, whether statutorily or otherwise. Persons who come into possession of this research are required to observe these restrictions.

Notice to Canadian Investors: Under no circumstances is this research report to be construed as an offer to sell securities or as a solicitation of an offer to buy securities in any jurisdiction of Canada. Any offer or sale of the securities described herein in Canada will be made only under an exemption from the requirements to file a prospectus with the relevant Canadian securities regulators and only by Haitong International Securities (USA) Inc., a dealer relying on the "international dealer exemption" under National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations ("NI 31-103") in Alberta, British Columbia, Ontario and Quebec. This research report is not, and under no circumstances should be construed as, a prospectus, an offering memorandum, an advertisement or a public offering of any securities in Canada. No securities commission or similar regulatory authority in Canada has reviewed or in any way passed upon this research report, the information contained herein or the merits of the securities described herein and any representation to the contrary is an offence. Upon receipt of this research report, each Canadian recipient will be deemed to have represented that the investor is an "accredited investor" as such term is defined in section 1.1 of National Instrument 45-106 Prospectus Exemptions or, in Ontario, in section 73.3(1) of the Securities Act (Ontario), as applicable, and a "permitted client" as such term is defined in section 1.1 of NI 31-103, respectively.

Notice to Singapore investors: This research report is provided in Singapore by or through Haitong International Securities (Singapore) Pte Ltd ("HTISSPL") [Co Reg No 201311400G. HTISSPL is an Exempt Financial Adviser under the Financial Advisers Act (Cap. 110) ("FAA") to (a) advise on securities, units in a collective investment scheme, exchange-traded derivatives contracts and over-the-counter derivatives contracts and (b) issue or promulgate research analyses or research reports on securities, exchange-traded derivatives contracts and over-the-counter derivatives contracts. This research report is only provided to institutional investors, within the meaning of Section 4A of the Securities and Futures Act (Cap. 289). Recipients of this research report are to contact HTISSPL via the details below in respect of any matters arising from, or in connection with, the research report:

Haitong International Securities (Singapore) Pte. Ltd.

10 Collyer Quay, #19-01 - #19-05 Ocean Financial Centre, Singapore 049315

Telephone: (65) 6536 1920

Notice to Japanese investors: This research report is distributed by Haitong International Securities Company Limited and intended to be distributed to Financial Services Providers or Registered Financial Institutions engaged in investment management (as defined in the Japan Financial Instruments and Exchange Act ("FIEL") Art. 61(1), Order for Enforcement of FIEL Art. 17-11(1), and related articles).

Notice to UK and European Union investors: This research report is distributed by Haitong International Securities Company Limited. This research is directed at persons having professional experience in matters relating to investments. Any investment or investment activity to which this research relates is available only to such persons or will be engaged in only with such persons. Persons who do not have professional experience in matters relating to investments should not rely on this research. Haitong International Securities Company Limited's affiliates may have a net long or short financial interest in excess of 0.5% of the total issued share capital of the entities mentioned in this research report. Please be aware that any report in English may have been published previously in Chinese or another language.

Notice to Australian investors: The research report is distributed in Australia by Haitong International Securities (Singapore) Pte Ltd, Haitong International Securities Company Limited, and Haitong International Securities (UK) Limited in reliance on ASIC Corporations (Repeal and Transitional) Instrument 2016/396, which exempts those HTISG entities from the requirement to hold an Australian financial services license under the Corporations Act 2001 in respect of the financial services it provides to wholesale clients in Australia. A copy of the ASIC Class Orders may be obtained at the following website, www.legislation.gov.au. Financial services provided by Haitong International Securities (Singapore) Pte Ltd, Haitong International Securities Company Limited, and Haitong International Securities (UK) Limited are regulated under foreign laws and regulatory requirements, which are different from the laws applying in Australia.

Notice to Indian investors: The research report is distributed by Haitong Securities India Private Limited ("HSIPL"), an Indian company and a Securities and Exchange Board of India ("SEBI") registered Stock Broker, Merchant Banker and Research Analyst that, inter alia, produces and distributes research reports covering listed entities on the BSE Limited ("BSE") and the National Stock Exchange of India Limited ("NSE") (collectively referred to as "Indian Exchanges").

http://equities.htisec.com/x/legal.html