

2023年度环境、社会和公司治理（ESG）报告

TAISHENG

2023 Environmental, Social and Governance (ESG) Report

TSP 泰胜风能
证券代码 STOCK CODE:300129



上海泰胜风能装备股份有限公司
Shanghai Taisheng Wind Power Equipment Co., Ltd.



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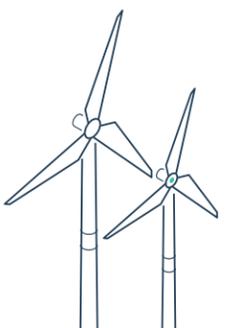
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报告编制说明

本报告是上海泰胜风能装备股份有限公司第一份《环境、社会和公司治理（ESG）报告》，向投资者等利益相关方披露公司在经营中对于 ESG 议题所秉持的理念、建立的管理方法、推行的工作与达到的成效。

报告范围

本报告范围涵盖上海泰胜风能装备股份有限公司（简称“泰胜风能”、“公司”或“集团”）及其附属公司。除非特别说明，与泰胜风能（股票代码：300129.SZ）同期合并财务报表范围一致。

■ 本报告中出现的附属公司名称与简称对照表

公司全称	本报告中简称
泰胜风能技术（上海）有限公司	上海泰胜
南通泰胜蓝岛海洋工程有限公司	泰胜蓝岛
扬州泰胜风能装备有限公司	扬州泰胜
上海泰胜（东台）电力工程机械有限公司	东台泰胜
包头泰胜风能装备有限公司	包头泰胜
新疆泰胜风能装备有限公司	新疆泰胜
木垒泰胜风能装备有限公司	木垒泰胜
阿勒泰泰胜新能源装备有限公司	阿勒泰泰胜
若羌泰胜风能装备有限公司	若羌泰胜
大庆泰胜风能装备有限公司	大庆泰胜
广东泰胜风能设备有限公司	广东泰胜
钦州泰胜新能源科技有限公司	钦州泰胜
泰胜风能(嵩县)新能源开发有限公司	嵩县泰胜
泰胜华南(珠海)风能设备有限公司	华南泰胜

报告期间

本报告期间为 2023 年 1 月 1 日至 2023 年 12 月 31 日。本报告中的数据如无特别说明，均为在此期间内数据。

编制依据

本报告依据《深圳证券交易所上市公司自律监管指引第2号—创业板上市公司规范运作（2023年12月修订）》，并参考了全球报告倡议组织（GRI）可持续发展报告标准编制。

报告编制原则



准确性

本报告尽可能确保信息准确。其中，定量信息的测算已说明数据口径、计算依据与假定条件，以保证计算误差范围不会对信息使用者造成误导性影响。定量信息及附注信息详见本报告章节。

董事会对报告的内容进行保证，不存在虚假记载、误导性陈述或重大遗漏。



平衡性

本报告内容反映客观事实，对涉及集团正面、负面的信息均予以不偏不倚的披露。



清晰性

本报告以简体中文和英文发布。报告如有歧义，以简体中文版报告为主。

本报告中包含表格、模型图以及专业名词表等信息，作为本报告中文字内容的辅助，便于利益相关方更好地理解报告中文字内容。为便于利益相关方更快获取信息，本报告提供目录及ESG标准的对标索引表。



可比性

本报告披露关键定量绩效指标，并尽可能披露历史数据。本报告对同一指标在不同报告期内的统计及披露方式保持一致；若统计及披露方式有更改，在报告附注中予以充分说明，以便利益相关方进行有意义的分析，评估集团ESG绩效水平发展趋势。



可持续发展背景

集团识别出投资者等利益相关方关注的可持续发展相关议题，作为本报告汇报重点。本报告中对实质性议题的汇报同时关注集团运营涉及的行业特征以及所在地区特征。实质性议题的分析过程及结果详见本报告“2. ESG管理”章节。同时，本报告对环境、社会和公司治理方面可能对投资人及其他相关方产生重要影响的事项进行重点汇报。



完整性

本报告披露对象范围涵盖与公司合并财务报表范围保持一致。



时效性

本报告为年度报告。集团尽力在报告年度结束后尽快发布报告，为利益相关方决策提供及时的信息参考。



可验证性

本报告中案例和数据来自集团实际运行的原始记录或财务报告。集团积极管理自身ESG数据，所披露数据来源及计算过程均可追溯，可用于支持外部鉴证工作检查。



数据说明

报告中数据和案例来自集团实际运行的正式记录。

报告中的财务数据均以人民币为单位。财务数据与公司年度财务报告不符的，以年度财务报告为准。

报告获取方式

本报告通过电子版形式发布，发布平台包括证券交易所指定的信息披露平台，亦可于公司官方网站（<http://shtsp.com/>）在线浏览或下载。

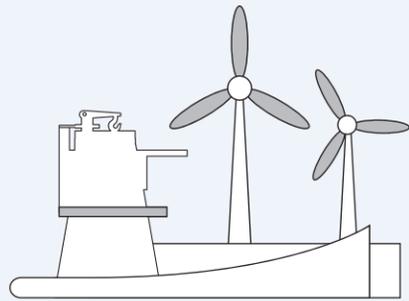
联系我们

如对报告有建议，可通过以下方式与我们联系：
联系地址：上海市徐汇区龙耀路175号星扬西岸中心40楼
联系邮箱：ir@shtsp.com



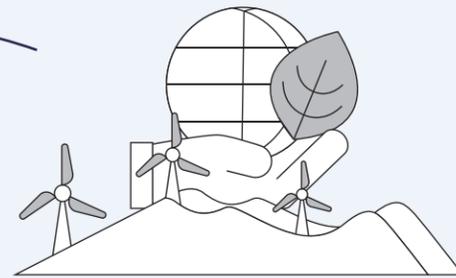
关于 泰胜风能

公司主要业务

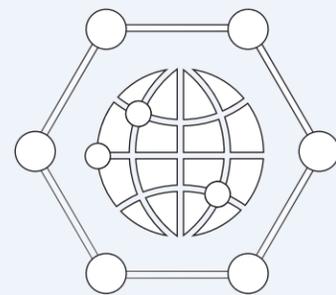


风电及海工装备制造业务

陆上风电装备 (含混凝土塔筒)
海上风电及海洋工程装备



零碳业务



创新及其他业务

集团是国家级高新技术企业，牵头和参与本行业中多项国家标准的制定，多次填补国内塔架行业空白，是国内资质优良、技术优势明显的行业引领者。集团始终秉承“以市场为导向，以技术为根本，以客户为基石”的经营理念，致力于开发国内国际两个市场，在全国布局了华东、华北、西北、东北、华南五个战略区域，业务及服务客户遍及亚洲、欧洲、美洲、非洲、澳洲。

2010年，集团成功上市，登陆深交所创业板。经过多年深耕，集团已发展成为生产规模化、产品系列化、服务一体化，具有全球影响力的陆上、海上风电装备及高端海洋工程装备专业制造商，连续多年蝉联全球新能源企业500强。此外，集团获得了工业和信息化部2023年度绿色工厂、国家知识产权优势企业、2023上海新兴产业企业100强、2023上海制造业企业100强、高新技术企业、AAA合同信用等级、守合同重信用企业、金信披奖、投关菁英奖等多项荣誉与奖励。

公司荣誉与奖励



● 工业和信息化部2023年度绿色工厂



● 国家知识产权优势企业



● 2023上海新兴产业企业100强



● 2023上海制造业企业100强



● 高新技术企业



● AAA合同信用等级



● 守合同重信用企业



● 2022年度金信披奖

未来，集团将从横向拓宽业务范围，对具有潜力的优质产业链横向公司进行孵化、培育，以拓展集团经营范围及产品种类，提高集团整体收入规模；从纵向提高抗风险能力，将风电场建设运营作为主业的合理补充，并逐步形成符合集团特点的风电场开发模式及合作模式。同时，集团将以实力拓展全球伙伴，不断挖掘优质客户资源，树立良好口碑形象，推动集团业务再创新高。

1.2 2023年度关键绩效





ESG 管理

2.1 ESG管理策略

泰胜风能积极建立自上而下的ESG治理架构，集团董事会统筹监督和管理ESG相关事宜，并由企业管理部牵头成立ESG工作小组，从公司治理、创新驱动、合作共赢、员工发展、绿色管理、社会公益等六个维度推动ESG工作的开展。

ESG 管理策略

公司治理

完善公司治理体系，加强信息披露以及投资者沟通，提升风险防范能力

员工发展

规范员工雇佣，加强员工关怀，注重人才培养，保障职业健康与生产安全

创新驱动

推动科研创新，持续提升产品质量，保持与客户的良好关系

绿色管理

建立环境管理体系，加强对各类资源管理，控制污染物排放，积极应对气候变化

合作共赢

加强供应链管理与协调，积极参与行业标准制定与行业活动，实现合作共赢

社会公益

积极参与各类社会公益活动与乡村振兴，组织志愿服务，为需要帮助的群体带来温暖

2.2 利益相关方沟通

泰胜风能重视股东投资者、政府及监管机构、客户、供应商、员工、行业等利益相关方的意见，建立常态化沟通机制，主动了解利益相关方的诉求，纳入集团ESG管理考量因素之内。



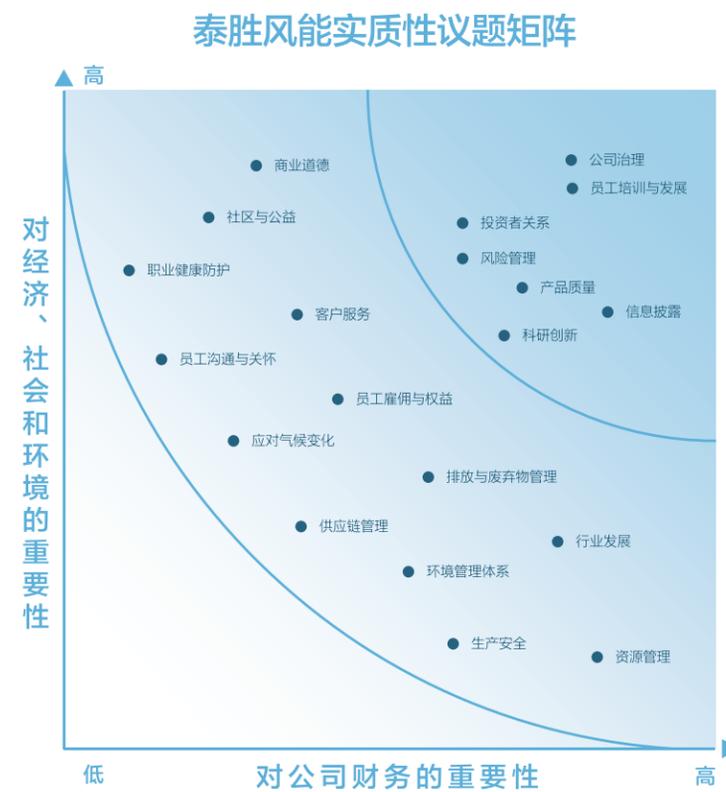
主要利益相关方及沟通渠道

主要利益相关方	关注议题	沟通渠道
股东/投资者	公司治理 信息披露 投资者关系 科研创新	股东大会 信息披露 业绩说明会、业绩交流会 现场调研
政府及监管机构	风险管理 商业道德 应对气候变化 生产安全	项目合作 会议交流 监督检查
客户	产品质量 客户服务	售前走访 项目合作 客户满意度调查
供应商	供应链管理	供应商评估 供应商培训
员工	员工雇佣 员工福利与沟通 人才发展 职业健康与安全	员工代表大会 员工培训 员工活动 员工投诉与反馈
行业	研发创新 行业发展	重要行业会议与活动

2.3 实质性议题分析

实质性议题是环境、社会和公司治理（ESG）管理及信息披露的基础。报告期内，集团基于与各利益相关方的沟通，根据所属行业特点和业务经营实际，结合国内外新能源领域政策趋势、深圳证券交易所信息披露要求，总结出20个议题进行重点管理。

同时，集团通过内外部专家意见征询、管理层反馈，从“对公司财务的重要性”和“对经济、社会和环境的重要性”两个方面，对20个实质性议题的重要性进行排序，形成实质性议题矩阵。



根据分析，集团识别出公司治理、科研创新、员工培训与发展等7项同时具有财务重要性和经济、社会和环境重要性的高实质性议题，另有生产安全、供应链管理等6项具有财务重要性的中实质性议题，以及商业道德、客户服务、员工雇佣与权益、应对气候变化等7项具有经济、社会和环境重要性的中实质性议题。以上议题将作为集团今后开展ESG管理、与利益相关方沟通的基础，也将作为本次报告披露的重点。





3

规范治理
实现科学发展

3.1 公司治理

2023年



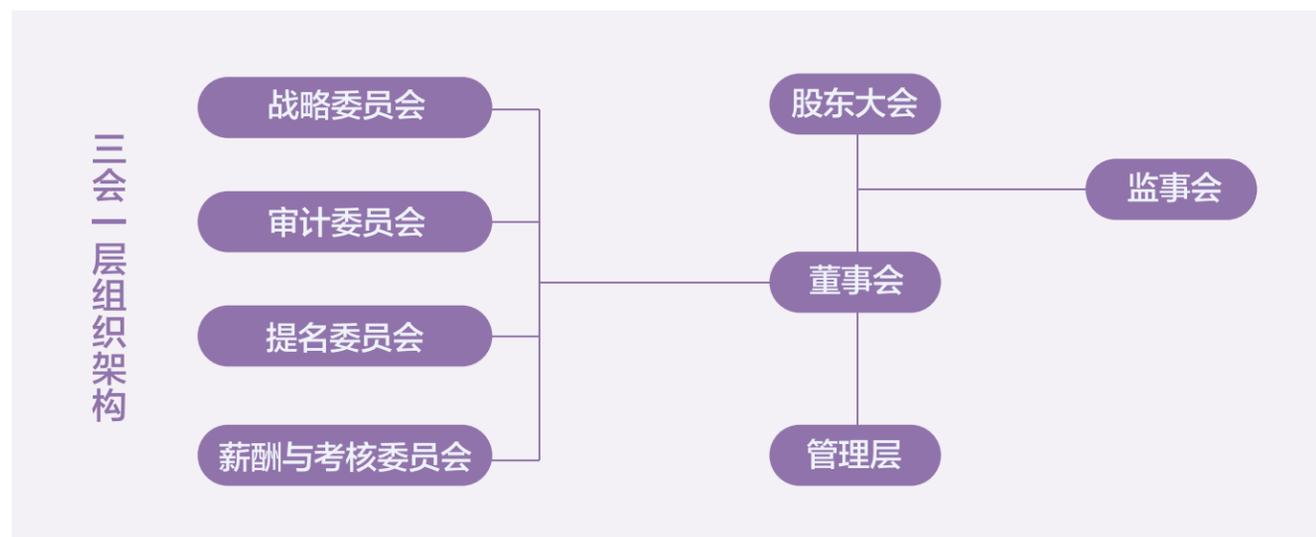
4次
董事会

4次
监事会

3次
股东大会

泰胜风能严格遵守《中华人民共和国公司法》《中华人民共和国证券法》《上市公司治理准则》《深圳证券交易所创业板股票上市规则》《深圳证券交易所上市公司自律监管指引第2号——创业板上市公司规范运作》等相关法律法规，制定《公司章程》《公司股东大会议事规则》《公司董事会议事规则》《独立董事制度》等管理文件，规定对股东、股东大会、董事会的管理细则，并确保公司治理架构在重大决策以及日常经营管理中充分发挥作用。报告期内，集团对《公司章程》《独立董事制度》等核心文件进行修订，新增《独立董事专门会议工作细则》，为公司规范、透明、高效运行提供指导。

集团搭建有效的“三会一层”治理架构，按照《公司章程》相关规定选聘和任免董事与监事。董事会下设战略委员会、审计委员会、提名委员会以及薪酬与考核委员会。报告期内，董事会共有董事13名，其中独立董事5名，各董事专业背景包括机械工程、能源管理、财务管理、金融、经济、会计及法律等多个领域。报告期内，集团召开了4次董事会、4次监事会、3次股东大会，审议通过36项重大事项决议，保持了科学高效决策水平。



报告期内，集团未收到证监会和深交所任何处罚、监管函、问询函，在公司治理方面未发生任何负面事件。

3.2 信息披露

泰胜风能严格遵守《上市公司信息披露管理办法》《深圳证券交易所上市公司自律监管指引第4号——创业板行业信息披露》等法律法规，制定《信息披露制度》《投资者关系管理制度》《机构调研接待管理办法》等管理文件，健全信息披露机制。

集团使用巨潮资讯网为公司信息披露的指定网站，并以《中国证券报》《上海证券报》《证券日报》《证券时报》作为公司定期报告披露的报刊，充分维护投资者各项权益，确保公司所有股东能够以平等的机会获得信息。

集团在信息披露方面亦获得外部的认可。报告期内，集团获得深交所信息披露评级“A”级以及第二十五届上市公司“金信披奖”等荣誉。

3.3 投资者关系

集团由董事会秘书负责投资者来访调研接待工作，并建立公司网站、投资者关系管理电话、电子信箱、互动平台等多种投资者沟通渠道。报告期内，集团组织了2次业绩说明会与2次业绩交流会，及时向投资者介绍公司生产经营情况。



泰胜扬州塔架项目

投资者参观调研“扬州泰胜年产25万吨塔架项目”

为回应投资者对“扬州泰胜年产25万吨塔架项目”的关注，2023年9月，集团组织80名机构投资者参观调研扬州生产基地，并就扬州生产基地选址目的、战略定位、供应商认证进度、设备自动化、码头水深等重点事项与各机构投资者进行充分沟通交流。

基于良好的投资者互动机制以及相关工作实践，集团于报告期内取得了“第十四届中国上市公司投资者关系天马奖”

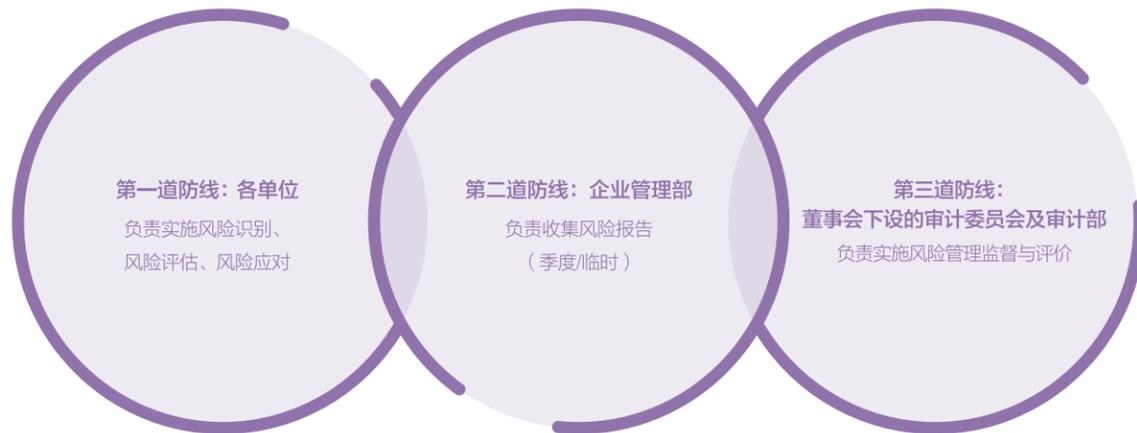
“2023年同花顺上市公司A股投关菁英奖”等荣誉和奖项。

3.4 风险管理

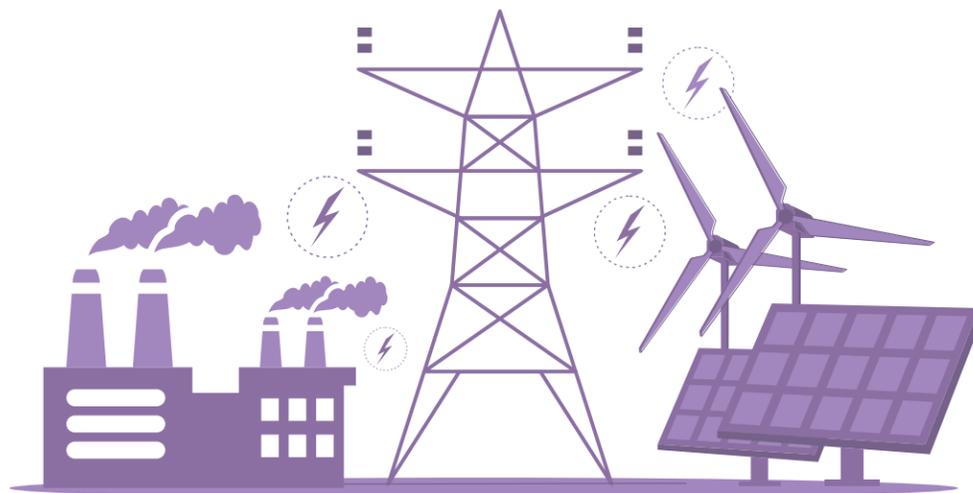
为提升风险预防与管控能力，泰胜风能制定《风险管理细则》，对风险类型、风险管理环节、风险监督评价以及对应考核问责进行明确规定。此外，集团制定《规章管理制度》《合同管理办法》等相关文件，提升内部合规性以降低可能面临的各类风险。

集团建立“各单位——企业管理部——审计委员会及审计部”的三层风险控制体系。

风险防控体系



为了增强员工对法律风险的认知和防范能力，集团采取多层次、多形式的培训与教育措施。针对合同管理这一关键领域，集团举办“合同模板使用注意事项”的专题培训课程，旨在让总部和各子公司合同管理相关部门的员工充分理解标准化合同模板在实际应用中的各项要求，规避因不当使用或理解不准确带来的潜在法律纠纷。



此外，集团充分利用数字化工具和平台，在公司内部建立了《法律知识小课堂》学习渠道，每周定时推送法律法规解读、案例分析等内容，促进全员持续学习和了解最新的法律法规动态。

在审计层面，集团积极推进各项审计工作的开展，以全面检测和评估公司在内部控制、经济责任履行、特定项目执行等方面的合规性和风险状况。报告期内，集团总计完成了16个审计项目，涵盖专项审计项目8个、内控审计项目4个、经济责任审计项目2个、基建审计项目2个。对于所有审计过程中发现的问题，被审计单位均迅速响应，及时采取纠正措施和改进方案，从而有效降低集团整体运营风险，保障集团稳健高效运作。

3.5 商业道德

泰胜风能严格遵守《中华人民共和国反不正当竞争法》《关于禁止商业贿赂行为的暂行规定》等相关法律法规，并于报告期内新修订《内部审计奖惩管理细则》，明确界定违纪违规、舞弊、腐败等行为的性质、范围及处罚等内容，完善管理标准与依据。

为了切实防止任何违背商业道德的行为发生，集团从内部员工管理到外部供应链合作，都制定并实施了一系列严谨规范的措施。

反腐败防范措施

员工	• 与员工签订劳动合同时签订《员工廉洁协议书》
上游供应商	• 与供应商签订合同时签订《廉洁合规承诺书》或在合同中加入廉洁相关的条款
下游客户	• 与客户签订销售合同时，在合同中加入廉洁相关的条款

为进一步强化企业内部的廉政建设和反腐败力度，集团构建健全的举报途径与处理机制。举报人可灵活运用多种方式进行举报，包括但不限于拨打专用举报电话、发送短信至指定号码、通过官方微信公众号提交举报信息、发送电子邮件、呈交书面报告或是直接面对面举报。所有举报信息都将被集团审计部悉数接收，并严格按照既定的工作流程进行记录、核实、调查与处理。

集团高度重视举报人的权益保护，承诺对所有举报人的身份信息、举报内容以及其他相关信息严格保密。对于任何泄露举报人信息或对举报人进行打击报复的行为，集团将零容忍，依据事件的严重程度，采取包括但不限于罚款、解除劳动合同、依法移送司法机关追责等严厉措施，确保举报人的合法权益得到有效保障。



报告期内，集团针对总部及各基地、子公司员工开展以“克己奉公、行稳致远”主题的反腐败培训，介绍相关概念、案例、纠错机制以及如何提升拒腐防变能力，提升全体员工廉洁从业意识。

报告期内，集团未发生贪污、贿赂、勒索、欺诈以及洗钱等违反商业道德的事件，也未发生因腐败行为引起的诉讼案件。



创新驱动
提升服务品质

4

4.1 坚持科研创新

科研创新是企业发展的持续动力。泰胜风能坚持通过科研创新提升自身产品服务品质与市场竞争力。

● 科研创新管理体系

为规范和鼓励科研创新，集团研究制定《研发部管理制度》《技术部管理制度》《职务科技创新奖励办法》《政府资金项目申报管理办法》《专利工作管理制度》《标准申报管理制度》《体系认证管理制度》等各类管理文件，建立科研创新项目的管理体系，打造科研创新队伍。

研发项目管理与实施流程



研发投入与研发人员占比

研发投入	21,256.13万元	研发人员占比	17.98%
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为实现科研活动更广泛的参与度，集团建立科研创新激励机制，依据《职务科技创新奖励办法》等制度文件，对员工发明、申报外部荣誉与项目、参与标准制定以及发布论文等行为设立奖励，形成对员工创新的正向激励。

员工科技创新奖励措施

科技创新行为	进行职务发明	根据发明专利、实用新型专利、软件著作权、商标权等不同成果，发放一定奖金
	申报企业资质（荣誉）、政府项目、科技成果专项	根据项目类型的不同，发放一定奖金
	参与制定国家标准、行业标准、地方标准	有政府及社会组织配套奖励资金的，按照资金比例发放奖金 没有政府及社会组织配套奖励资金的，按照规定发放一定奖金
	参与制定企业标准	按一事一议原则，具体制定奖励方案并经总经理审批后实行
	获得个人成就	按照人力资源部规定进行奖励
	发表论文	根据发文期刊级别，发放一定奖金

● 技术创新与应用

报告期内，集团积极推动创新战略，聚焦新兴技术的研发与应用，成功启动并实质性地推进了六项新技术的研究计划。截至报告期末，集团已顺利完成其中三项技术的深度研发，实现了在具体业务场景中的应用。

2023年度技术创新项目情况	
● 塔架门框智能切割工艺开发	
● Q500MD风电用钢板施工适用性焊接评价试验	
● 打底深熔焊工艺研发	
● 塔架门框智能焊接技术开发（开发中）	
● 塔筒外壁机器人清洗装备（开发中）	
● 塔筒自动喷涂设备（开发中）	

机械工业科学技术奖科技进步二等奖

同时，集团下属泰胜蓝岛的“高承载远海超大风电基础装备高效可控建造关键技术研发及应用”项目，获得了中国机械工业联合会颁发的机械工业科学技术奖科技进步二等奖。



报告期内，基于以上科研创新管理体系与措施，集团取得多项科研创新相关荣誉和奖励。

报告期内科研创新荣誉



2023年度零碳城市创新典范奖——全球零碳

海上风电超大基础装备高效可控建造关键技术研发及产业化——江苏省科学技术一等奖

产学研交流与合作

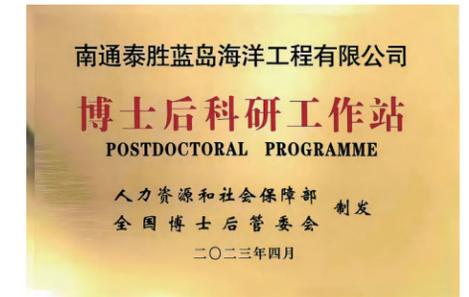
集团深谙产学研深度融合的重要性，积极搭建与多家高等院校的战略合作桥梁，紧密围绕科学研究和技术创新展开深度合作。集团发挥自身在生产制造领域的丰富经验和实力，对接高校的科研资源和人才智力优势，共同推进技术研发和项目攻关，加速行业人才培养。

产学研合作项目

合作高校	项目名称	起止时间	成果或预期成果
同济大学	《海上风电超大管桩变形监测技术研究》	2022.5.1 - 2025.12.31	<ul style="list-style-type: none"> 授权发明专利1件 正在起草国家标准《海上风电基础健康监测》
浙江大学	《大承载管-管桁架结构焊接温度场与应力计算》	2023.6.1 - 2023.12.31	<ul style="list-style-type: none"> 申请发明专利1件 发表论文一篇
安徽工业大学	《海上风电导管架建造过程工艺优化关键技术研究》	2023.1.1 - 2024.12.31	<ul style="list-style-type: none"> 申请发明专利3件 其中授权发明专利1件

泰胜蓝岛博士后科研工作站

报告期内，集团下属泰胜蓝岛建立了博士后科研工作站，为高端学术人才提供研究平台与实践场地，进一步推动产学研合作交流。



4.2 提升产品质量

产品质量管理体系

秉承“精工制造、诚者致远”的核心价值理念，泰胜风能始终将产品质量放在企业发展的重要位置。

集团遵守《中华人民共和国产品质量法》等质量安全方面的法律法规，在总部层面制定《质量绩效考核管理制度》《无损检测飞检与抽检管理办法》等管理办法，以及《产品的监视和测量控制程序》《产品标识和可追溯性控制程序》《不合格输出控制程序》《纠正和纠正措施控制程序》等4个控制程序，构成产品质量管理的基本制度框架，提升产品质量管理规范性。在总部文件引领下，各分公司结合自身产品的实际情况，制定相关产品质量控制文件。报告期内，公司未发生与质量安全相关的处罚事件，也未有上述事项引起的诉讼案件发生。

集团积极完善质量管理架构，在总部设立质量部、在各分公司设立质量管理部，专门负责产品生产质量的监测、检验、控制与改善工作。报告期内，集团下属多家子公司取得ISO9001质量管理体系标准认证。

通过ISO9001认证的子公司

子公司名称	最近一次通过时间
上海泰胜	2021年6月8日
东台泰胜	2021年2月5日
泰胜蓝岛	2021年8月2日
包头泰胜	2022年9月23日
扬州泰胜	2023年6月20日
新疆泰胜	2021年11月7日
木垒泰胜	2022年11月13日

质量绩效考核

为提升产品质量，集团建立了产品质量考核机制，建立了“质量绩效考核领导小组——质量绩效考核常设工作小组——职能部门与子公司”的三级质量绩效考核管理框架。

集团“质量绩效考核领导小组”作为整个考核体系的决策核心，“质量绩效考核常设工作小组”具体落实和执行质量考核任务。质量绩效考核机制深入到每一个职能部门和子公司，形成基层的质量管理网络，确保集团上下对产品质量的追求贯穿于生产、销售、服务等各个环节，从而稳步提升集团的整体产品质量水平。

质量绩效考核管理框架

管理层级	负责部门	主要职责
质量绩效考核领导小组	总经理办公会成员	<ul style="list-style-type: none"> · 审议质量绩效考核管理办法及相关制度制定和修订； · 决策质量绩效考核管理体系运行中重大问题； · 审议并确定质量部和子公司质量绩效考核最终结果； · 受理质量绩效考核申诉； · 其他与质量绩效考核管理相关的、应由公司质量绩效考核领导小组履行的职责。
质量绩效考核常设工作小组	质量部 企业管理部 市场部	<ul style="list-style-type: none"> · 拟定质量绩效考核管理相关制度与流程，不断完善质量绩效考核管理体系； · 根据公司年度战略目标和经营计划，组织制定部门、子公司质量考核指标； · 组织开展质量绩效考核工作，并及时解决绩效考核过程中出现的问题； · 审查绩效考核过程中职能部门、子公司负责人的申诉材料，并提出初步意见，提交质量绩效考核领导小组决策处理。
职能部门与子公司	质量部、市场部负责人 子公司负责人	<ul style="list-style-type: none"> · 参与年度质量绩效考核指标的确定与调整工作； · 配合分管领导参与质量绩效考核的管理流程； · 配合质量绩效考核工作小组的工作，及时提供质量绩效考核相关数据并负责解释； · 对质量绩效考核中相关问题提出申诉，并提供相应资料信息。

在质量绩效考核管理框架下，集团针对产品质量进行年度考核，并于每年3月末前完成上一年度考核任务，并制定本年度考核目标，考核指标分为生产过程质量损失类、国内项目质量投诉类、国外项目质量投诉类等三类。

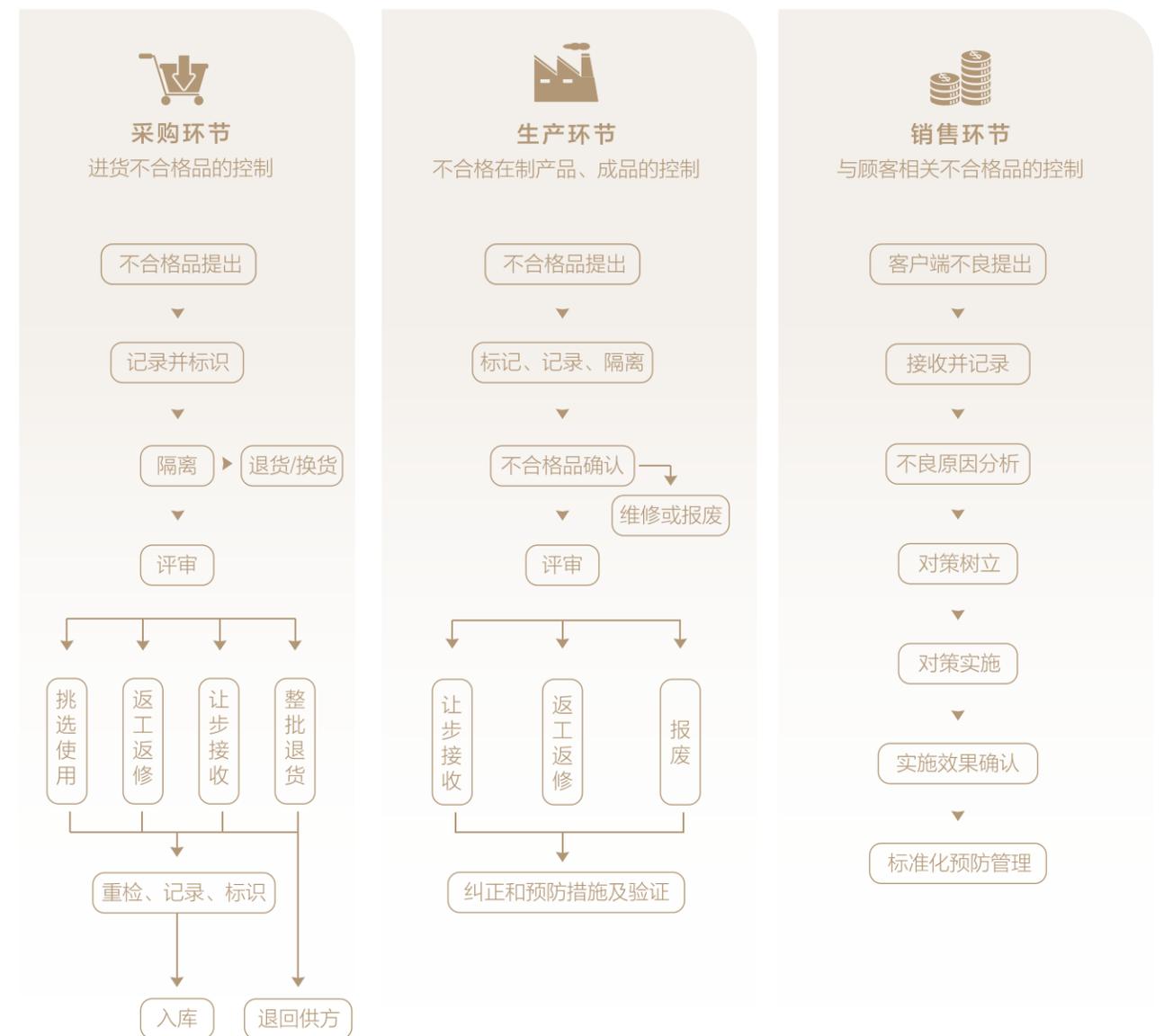
集团对质量绩效考核管理全过程进行持续跟踪分析，定期向责任部门及相关工作人员征询质量绩效考核管理意见，通过设定观察性指标推动责任部门积极参与质量绩效考核管理，不断对质量绩效考核管理体系进行改进和优化。

制造检验与不合格产品控制

集团围绕产品制造的全过程建立了检验流程，对原材料（主材、焊材等）、半成品（焊接、尺寸等）、成品（内件安装、膜厚、外观等）进行检验。在检验中发现问题后，集团将根据相关程序文件要求进行处理，以纠正质量问题。

针对不合格产品的管理控制，集团在采购、制造、销售环节中建立完整的质量监督、检验与不合格产品处理机制。

质量控制处理机制



• 出场产品检测

鉴于焊接质量对于风力发电基础设施安全运行的重要影响，集团针对检测合格的产品进行不定期的飞检和抽检，以确保焊接满足使用时的技术规范要求，降低质量风险。报告期内，集团对子公司开展质量飞检，并提出整改意见，跟踪整改结果。

飞检抽检发现产品超标缺陷的处理流程



• 质量文化建设

集团重视产品质量文化建设。报告期内，集团建立每月质量例会制度，对出现的质量问题以及处理方式进行讨论，提升各子公司关于产品质量管理的交流，减少相同质量问题发生的概率。报告期内，各子公司共组织召开产品质量主题培训共计106次，覆盖员工964人次。

主题培训 **106**次
覆盖员工 **964**人次

4.3 优化客户服务

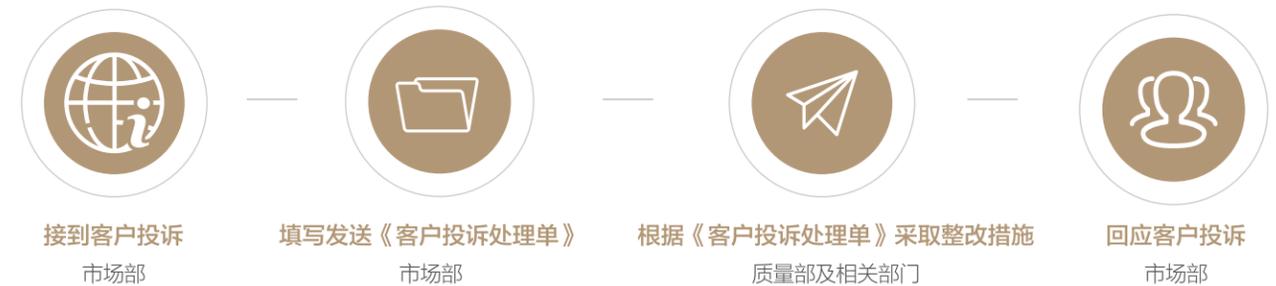
• 客户投诉处理机制

泰胜风能坚持“以市场为导向、以技术为根本、以客户为基石”的经营理念，持续提升客户服务水平。为规范客户服务流程，集团在总部层面制定《与客户有关的过程管理程序》，各子公司在总部文件基础上结合自身情况制定相应的制度文件，指导相关部门及员工的客户服务工作。

集团设立客户投诉渠道与客诉处理机制，客户可通过邮件、电话及发函等方式反馈意见与建议。集团明确客户投诉处理的时限，确保及时解决客户关切的问题。面对客户投诉，集团将在2个工作日内以书面形式反馈顾客，3个工作日回复立即整改措施，在2周内回复纠正措施实施情况。报告期内，集团收到的所有客户投诉均已全部解决反馈，投诉处理率100%。

3日
回复整改措施
100%
投诉处理率

客户投诉处理流程



• 客户满意度调查

为更好地了解客户服务情况，本集团制定《客户满意度监视程序》，建立完整的客户满意度调查流程，以市场部为客户满意度监控职能部门，定期开展客户满意度调查工作。



项目完工后，集团会围绕产品质量、交货期限、服务情况、价格情况等四个维度对顾客开展书面满意度调查工作。报告期内，本集团针对25个重点项目邀请客户进行满意度打分，项目平均得分8.97分（满分10分）。

祸在 一时

防在 平时

TSP 泰胜风能

千忙 万忙

安全 莫忘

责 130t/45m NO. 22

130t

130t

合作共赢
助力行业发展



5.1 加强供应链管理

● 供应商日常管理

为建立和维护一个安全且有竞争力的供应链，集团在总部层面制定《外部提供的过程、产品和服务控制程序》，并指导各子公司根据自身供应商管理情况制定《供应商管理控制程序》《采购管理控制程序》《采购管理办法》等管理文件，以规范各类物资服务采购以及供应商管理。

根据采购物料的差别，集团在总部与各子公司层面分别建立供应商分类管理体系，并针对供应商开展定期的考核评价工作，以确保采购物料与服务的质量符合生产制造要求。

供应商分类管理与考核措施

层级	供应商分类标准	考核评价方式
集团总部	· A类供应商 ：供应原材料和关键生产设备等重要物资；	A类供应商 ：每半年进行一次考核评价，由技术质量部组织实地考查与打分，基于质量、价格、交货周期等因素，评估其生产能力和质量保证能力；
	· B类供应商 ：供应除重要物资外的一般物资；	B类供应商 ：一般不进行评定，除非出现质量明显异常；
	· C类供应商 ：供应低值易耗品等相关物资。	C类供应商 ：不进行评定，以满足性价比合理，服务到位为原则进行选择。
子公司	· I类供应商 ：物料清单 (Bill of Material, BOM) 中，与产品质量有直接关系的重要物料；	对所有供应商进行月度、季度和年度考核； 考核内容主要包括：报价及时率、日常事务执行满意度、及时交付、来料质量、不合格品处理报告表 (Non-Conformance Report, NCR) 数量、质量信息框架 (Quality Information Framework, QIF) 反馈、EHS情况等；
	· II类供应商 ：其他BOM物料及较重要物料；	考核结果分为ABCD四级，对获得C级的供应商进行约谈预警，对获得D级的供应商除了约谈预警外，需根据实际扣分情况与问题严重程度，通过供应链内部会议制定处置方案。
	· III类供应商 ：在市场可以采购非项目BOM物料。	结合供应商考核评估，编制年度汇总报告。

截至报告期末，集团总部及各子公司的供应商数量总计1203家，所有供应商均以合同条款约定等方式签署了供应商行为准则。

● 供应商ESG管理措施

集团重视供应商在ESG领域表现，制定《负责任与社会责任采购政策》《绿色供应链管理》等文件规范对供应商ESG管理，将可持续且负责任原则融入集团采购，禁止向严重环境污染或有使用童工、强迫劳动等严重不符合社会责任行为的供应商采购任何物资服务，优先采购在环境气候方面表现较好的产品。

供应链ESG管理措施

合格供应商须进行社会责任自评，采购部根据供应商提供自评资料进行审核评分，得分3级以上方能继续成为本公司合格供应商。

获得GB/T19001要求的质量管理体系、GB/T45001要求的职业健康安全管理体系和GB/T24001要求的环境管理体系认证证书的供应商数量超过供应商总数的80%。

获得GB/T23331或ISO50001要求的能源管理体系认证证书的供应商数量超过供应商总数的10%。

鼓励供应商使用节能环保工艺/设备，使用属于《产业结构调整指导目录》推荐类工艺/设备。

建立供应商的年度绿色供应链培训机制，每年对供应商开展至少1次绿色供应链培训。

报告期内，集团总部及下属子公司对多家供应商进行ESG审核，未发现涉及严重环境污染或童工、强迫劳动等重大问题。

5.2 赋能行业发展

经由长时间的行业积淀与专业发展，泰胜风能已成长为拥有全球性影响力、生产规模庞大、产品系列丰富的海陆风电装备专业制造商。集团积极投身于各类行业交流活动，通过参与国家和国际标准的制定过程，把握行业发展方向，影响和引导行业规范的建立和完善。

报告期内，集团共计参与15项国家标准、行业推荐标准、团体标准的制定工作，其中8项已于报告期内发布，2项正在审批中，5项正在起草中。

2023年度参与并发布的国家、行业、团体标准情况

《船舶与海洋技术船用起重机制造要求》（GB/T 42689-2023）

《风能发电系统风力发电机组塔架和基础设计要求》（GB/T 42600-2023 IEC 61400-6:2020）

《船舶与海洋技术航行及浅水工程船起锚绞车》（GB/T 42799-2023）

《船舶与海洋技术海上环境保护5ppm油水离用储罐和管路系统》（GB/T 43124-2023）

《海上风力发电机组基础附属构件设计要求》（NB/T 10988-2022）

《海上风力发电机组外平台起重设备规范》（NB/T 10994-2022）

《船体阻力数值模拟设计指南》（T/SAS 0023-2023）

《风力发电塔筒用耐候钢板》（T/SSEA 0260-2023）

另一方面，集团主动参加业内重要的研讨会、论坛及峰会等活动，实时跟踪并深入探讨行业最新趋势、前沿技术和热点问题，保持对行业动态的高度敏感和精确把握。

报告期内，集团参与多场具有重要影响力的活动，并在部分活动中作为行业代表受邀分享相关知识与经验，与行业同仁携手推进行业发展。

2023年度参与的重要行业活动情况

- 2023 第二十七次全国焊接学术会议，代表塔筒制造商就塔筒制造焊接技术研究演讲
- 2023 高性能风电用钢国际研讨会，代表塔筒制造商就高性能风电用钢焊接质量控制演讲
- 2023 第六届亚洲海洋风能大会
- 塔筒轻量化设计评审和项目开展会议
- 金山区科学技术协会第六次代表大会
- 风电塔筒新型钢技术研讨会暨宝武新产品发布会

泰胜风能参与2023 第六届亚洲海洋风能大会

2023年11月，泰胜风能在由上海市工业合作协会、WFO、CDMC决策者智库联合主办的2023第六届亚洲海洋风能大会上，以“精工制造 海陆共生”为主题参展。会上，泰胜风能详细展示了企业在经营规模、产能布局、产品质量、技术优势以及研发能力等方面的行业地位，并与来自全球各地的产业同仁友好交流公司海风产品及服务，共同探讨亚洲海上风电行业的未来发展。





以人为本
营造和谐职场

6

6.1 员工雇佣与权益

集团严格遵守《中华人民共和国劳动法》《中华人民共和国劳动合同法》《中华人民共和国未成年人保护法》《中华人民共和国就业促进法》《中华人民共和国女职工劳动保护特别规定》等法律法规。为规范员工雇佣与员工权益保障，集团在员工招聘、考勤与休假、薪酬与绩效、员工解聘等方面建立完整的制度体系。集团所有与员工切身利益相关的制度文件，均在与员工进行充分沟通交流基础上拟定，并提交公司职工代表大会审议，通过后方可实施执行。

在员工招聘方面，集团总部制定《员工手册》《人力资源管理制度》等管理文件，并指导各子公司制定《人力资源管理控制程序》《招聘录用管理规定》《入职管理规定》《试用期管理规定》《人员任免管理规定》《实习生管理规定》等相关规范，建立系统的员工招聘、入职、试用期以及人员任免、实习的流程与规范。

集团坚持合法用工，杜绝雇佣童工与强制劳工的情况发生。在招聘过程中，对候选人年龄进行严格把关，杜绝未成年人进入公司候选人名册；在员工入职时，对其身份信息进行二次核查，并且建立全体员工花名册，定期进行身份盘查。同时，各子公司制定《童工拯救计划》等制度文件，在事前加强人事把关，避免招聘童工；对已经入厂或事后发现的童工将立即停止其工作，上报当地人力资源和社会保障局，并提供必要的健康检查与生活资助。

报告期内，集团总部的员工类型为劳动合同工，各子公司的员工类型为劳动合同工、劳务派遣和实习生，集团及下属各子公司未出现因用工问题违反国家劳动法律法规被行政部门处罚的情况。

在考勤与休假方面，集团注重维护员工的合法权益，在总部层面制定《考勤与休假管理办法》等与员工切身利益密切相关的管理制度，并指导各子公司结合自身情况制定《休假考勤管理规定》《加班管理规定》等规范文件，原则上不鼓励加班，对因特殊原因进行员工加班行为进行调休或发放加班工资，切实保障员工的权益。

在员工薪酬与绩效管理方面，集团实施合理的薪酬与绩效管理政策。报告期内，集团总部新增《年度绩效考核方案》，通过实行多维度、360测评等方式，实现员工绩效考核公平、公正。在绩效考核方案中，集团要求各部门负责人进行绩效面谈，对绩效考核结果进行反馈，同时提出绩效改进计划。同时，集团下属各子公司参考总部要求建立相关管理制度，分别开展月度绩效考核工作。

在员工解聘方面，集团严格按照劳动合同法相关规定，与员工开展平等协商，尊重员工意见，进行岗位调整或经济补偿。报告期内，集团下属的东台工厂由于公司产能规划调整，经公司研究决定停产，涉及小规模员工优化。公司在员工优化前，与员工进行充分沟通交流，鼓励员工到公司其他生产基地继续工作。经公司努力，30余名员工内部调动到其他岗位继续工作；其他员工因工作地域问题，选择与公司解除劳动合同，公司严格按照劳动合同法及内部管理文件的相关规定，对员工进行经济补偿。

6.2 员工沟通与关怀

● 员工关怀

集团积极营造幸福和谐的工作氛围，在员工法定基本权益外，为全体员工提供补充保险、各类补贴、假日礼品等福利待遇，努力创建和谐温暖的工作环境与企业员工文化，持续提升员工对集团的归属感以及价值认同。

此外，集团注重女性员工的关怀，在落实好育儿假等法定权益外，为女性员工提供节日休假、健康关怀、育儿设施等福利，努力保障女性员工权益。

员工关怀与福利措施

员工基本福利			女性员工关爱
• 定期组织员工体检	• 提供意外保险等商业补充保险	• 提供一线员工高温补贴	• 妇女节活动及半天休假
• 提供免费员工宿舍	• 提供工作餐补或免费工作餐	• 冬令时与夏令时工作制	• 提供女性健康相关的体检选项
• 节假日发放礼品	• 进行员工婚丧嫁娶或大病慰问	• 组织各类业余兴趣活动	• 设置母婴室等关爱设施



● 员工沟通

同时，集团关注员工心声与诉求，搭建线上与线下多渠道的员工沟通机制，鼓励员工表达自身利益诉求，结合自身工作情况为集团发展提出意见与建议，打造和谐开放的工作环境。

2023年促进员工沟通的实践

工会与职工代表大会	公司每年定期开展职工代表大会，对涉及员工切身利益的规章制度进行审议，每年度召开一次会议。同时，员工可通过工会向公司反应相关诉求。
设置举报邮箱	员工可通过举报邮箱对歧视、骚扰、违背商业道德等事件和涉事员工向集团反映。
开展员工满意度调查	公司组织员工开展职能部门服务满意度调查，对调查结果进行反馈，要求各部门按照员工意见优化服务职工。
建立职工之家	各子公司根据实际情况建立职工之家，开通“知心电话”热线倾听基层心声，发挥纽带作用促进企业和谐发展。

6.3 员工培训与发展

泰胜风能秉持德才兼备、选贤任能、聚天下英才的人才发展理念，制定健全的人才引入、员工培训、员工激励体系，推动员工与集团共同成长与发展。

在人才引入方面，集团开展“金蓝计划”，通过社会招聘、校园招聘、内部推荐和外部招聘相结合的方式实现高效高质量的外部人才引进，为企业长期发展打下坚实的基础。报告期内，集团新增待招聘岗位填充率超9成、试用期新员工通过率92%，硕士学历比率上升9%，同时完成管培生队伍“从0到1”的建立。

在员工培训方面，集团建立健全的员工培训管理体系，以提升员工能力以及对自身工作的了解。报告期内，集团总部修订《员工培训管理办法》，要求实现员工培训全面覆盖，各子公司根据集团要求制定《培训管理规定》等管理制度。

2023年总部及子公司（部分）员工培训情况

集团总部实行三级培训体系，即公司级、子公司级、班组级，报告期内组织特殊工种取证培训、员工生产技能培训等多项专业技术培训，培训参与人次达300余人次，覆盖公司中高层、基层一线员工。
泰胜蓝岛通过内训和外训相结合的方式，在报告期内组织了21场培训活动，涵盖生产部、质量部、技术研发部、安环部和人力资源部等基地核心部门，并通过现场问答等方式进行培训效果检验，确保培训质量。
新疆泰胜在报告期内组织了8场涵盖全体员工的培训，内容涵盖专业技能等重要主题，同时对个别员工群体，如新员工、VT检验员等，进行针对性技能培训，旨在为员工提供最合适其岗位职责的培训课程，促进员工能力发展。

在员工发展方面，集团总部制定了《员工岗级方案》等管理制度，并指导各子公司制定《绩效考核规定》《员工岗位能力测评管理办法》等员工考核晋升制度，建立了员工在管理岗位和专业技术岗位的双发展通道。报告期内，集团与各子公司开展2023年度先进集体和先进个人评选，通过表扬先进、树立典型的方式，鼓励在报告期内工作成绩突出的集体和个人，培养员工的集体荣誉感、责任感和使命感，激发员工工作和个人技术提升的热情。

6.4 职业健康防护

集团严格遵守《中华人民共和国职业病防治法》等相关法律法规，通过制度规范、职业病危害因素识别与管理、职业健康防护等方式，保障员工职业健康。

集团总部在《员工手册》中明确在员工职业健康与安全方面的管理制度，要求面临职业健康潜在风险的员工在工作期间佩戴防护措施。同时，各子公司制定《环境、职业健康安全手册》《职业危害管理》等细化的管理制度，将员工职业健康嵌入基地的日常运营。截至报告期末，上海泰胜、新疆泰胜和泰胜蓝岛等子公司均获得ISO45001职业健康管理体系认证。

同时，集团组织年度职业病健康体检，对受到职业病危害因素的员工进行实时监控，并通过开展多维度的行动措施从而为员工提供充分的职业健康保障。

职业健康与安全保护措施

工作环境防护	<ul style="list-style-type: none"> 在危险区域设立危险告示牌 配备焊接烟尘收集器、防尘器、通风机、VOC处理设施等安全防护设施
员工防护	<ul style="list-style-type: none"> 入职期间进行员工职业病岗位危害因素告知与培训，增强员工职业健康防护意识 为员工提供劳动保护工具，做好防护措施 进行年度岗前体检，对于发现职业禁忌症员工，及时安排调整岗位，脱离职业病危害环境

6.5 保障生产安全

● 安全管理制度

生产安全是企业持续稳定发展的关键因素。泰胜风能严格遵守《中华人民共和国安全生产法》《企业安全生产费用提取和使用管理办法》《工贸企业重大事故隐患判定标准》等相关法律法规，为进一步规范生产安全应急管理工作，集团指导各子公司结合自身实际生产情况制定了多项安全生产与应急管理方面的制度文件。

子公司生产安全管理文件（部分）

上海泰胜	<ul style="list-style-type: none"> 《EHS运行控制程序》《应急准备与响应管理程序》
泰胜蓝岛	<ul style="list-style-type: none"> 《生产安全事故应急预案》 《安全生产责任制》 《安全风险分级管控管理制度》《隐患排查治理管理制度》
新疆泰胜	<ul style="list-style-type: none"> 《环境、职业健康安全手册》《安全标准化制度》

● 安全风险评估

为加强安全生产管理，增强事故防控能力，有效遏制重特大生产安全事故，降低安全风险，集团指导各子公司建立了安全风险识别与评估体系，对可能发生的风险进行分类分级，并配套对应处理措施。各子公司以该标准为依据，成立评价组进行危害辨识与风险评估，并依据评价结果指导相关部门与员工贯彻执行。

集团指导下属子公司建立生产安全识别与评估机制，将风险分为五个等级，明确界定每个风险等级的评估标准，并依据风险的危害程度制定对应的控制措施与整改期限。

● 安全检查机制

集团下属各子公司针对各个生产环节进行系统全面的安全检查，以减少潜在安全隐患，检查类型包括综合检查、专业检查、季节性检查、节假日检查、日常检查。针对检查发现的一般问题，子公司将根据检查情况出具《隐患整改通知单》，并要求相关责任部门限期整改；针对检查发现的重大隐患，各子公司将组织制定隐患治理方案，立即采取应急防范措施，并以书面形式向属地安全监督管理部门报告。

安全检查措施

综合检查	检查内容主要包括：安全管理制度及消防安全管理制度的执行情况、现场环境状况、安全警示标志、安全设施和消防设施的完好情况、各岗位的工艺状况和工艺指标执行情况、电器设施和各岗位机械设备的完好情况、原料库、成品库房、配件库、防盗情况和现场隐患的整改落实情况等，以上检查每月进行一次。
专业检查	检查内容主要包括：电气设施、防火检查，其中电气设施的检查每月进行一次，防火检查每季度进行一次。
季节性检查	按照季节确定检查内容，其中春季检查以防火、防雷为重点，夏季检查以防雨、防洪、防暑降温为重点，秋季检查以防风、防火为重点，冬季检查以“冬季四防”为重点。
节假日检查	检查内容主要包括：各类设备的安全运行状况、电器设施的运行状况、各库房防火、防盗情况等，以上检查在法定节假日之前进行。
日常检查	检查内容主要包括：生产员工按照操作情况、消防安全、防护用品使用情况、不安全因素或隐患、安全生产违规行为、安全检查实施情况等。

● 安全生产培训

报告期内，集团总部及各子公司组织多次安全生产能力建设提升活动，包括新员工入职安全培训、安全生产专题培训、生产安全月、安全应急演练等，并在危险区域设置警示标志，有效增强员工安全生产意识，减少安全生产事故发生的可能性。报告期内，集团总部及各子公司未发生重大安全生产事故。



| 安全操作培训

2023年1月，集团下属上海泰胜开展岗位操作规程专题安全培训，协助员工进一步了解与掌握岗位操作规程的必要知识和技能，并正确理解和执行相关操作要求，避免因操作不当导致的安全事故和生产损失。



| 安全教育培训

2023年，集团下属泰胜蓝岛组织开展了系列员工安全教育培训，培训包括燃气安全教育、特种作业人员安全教育、危化品从业人员MSDS教育、生产现场有限空间安全教育、地操操作资格证培训、高架车操作资格证培训等多个环节，全面提升了员工生产安全意识。



| 消防培训

2023年11月，集团下属扬州泰胜联合当地消防大队和表面处理车间45名全体员工开展了消防应急灭火及疏散应急演练培训，学习应急逃生知识，全面的了解表面处理车间的火灾风险及应对措施，增强了应对突发事件的能力。





绿色发展 践行环保理念

7.1 环境管理体系

泰胜风能秉持绿色发展理念，积极推进环境管理体系建设，严格遵守《中华人民共和国环境保护法》等相关法律法规。

在集团总部指导下，各子公司结合自身生产制造过程中的环境管理需求，制定《EHS运行控制程序》《环境因素识别与管理程序》等环境管理相关制度文件，对各环节的环境相关事务进行规范化作业。

报告期内，为提升员工环境管理意识，集团总部与各子公司组织多次环境管理相关培训，协助参训人员更好地了解环保法律法规、政策制度、环保技术。

各子公司积极开展环境管理培训

2023年5月，集团下属上海泰胜开展《环保专题培训》，介绍公司当前的环保目标与现状，提升参训人员环保意识，加强环境管理能力。



环保主题培训

2023年9月，集团下属泰胜蓝岛组织《泰胜蓝岛涂装房VOCs治理设备项目培训》，通过培训帮助相关部门人员了解掌握设备使用方法，提升设备操作的熟悉度，减少VOCs污染，增强环境管理能力。



泰胜蓝岛治理设备项目培训

集团在环境管理制度建设、环境管理体系认证、环境管理培训等方面的努力取得显著成效。截至报告期末，集团下属的上海泰胜、泰胜蓝岛、东台泰胜、包头泰胜、新疆泰胜等子公司取得ISO14001环境管理体系认证。报告期内，上海泰胜风能装备股份有限公司入选工业和信息化部2023年度绿色工厂名单，彰显了集团在环境管理方面的突出表现。

7.2 资源管理

集团高度重视能源与水资源等方面的管理，将其视为企业可持续发展的重要组成部分，致力于提高能源利用效率，减少水资源消耗。

集团消耗的能源主要为天然气、丙烷、燃料油、电力等，同时直接或间接地产生一定温室气体排放。为提升能源利用效率，降低能源使用成本，集团指导各子公司结合自身生产制造过程中的环境管理需求制定《能源评审管理程序》《能源绩效管理程序》《能源基准管理程序》《能源数据管理程序》《能源设计管理程序》等管理制度，指导生产制造中能源管理工作。截至报告期末，集团下属的泰胜风能技术（上海）有限公司通过了ISO5001能源管理体系认证。

主要能源使用类型与消耗量

能源类型	能源消耗量
天然气	5,277,955.51立方米
丙烷	151,563.00立方米
燃料油	170.00吨
外购电力	37,059.10兆瓦时

报告期内，集团指导各子公司积极实施能源节约措施。上海泰胜、泰胜蓝岛等子公司将厂区使用的柴油叉车替换为电叉车，减少柴油的消耗量。

集团的水资源使用主要为生活用水，用水来源为市政用水。为减少水资源浪费，集团及下属各子公司在用水处均设置节约用水标识，并在日常管理中提醒员工注意水资源节约，提升员工节约用水意识。

7.3 排放与废弃物管理

● 废水管理

集团下属各子公司涉及的废水主要是生活污水，生活污水通过市政管网直接进行排放。在生产过程中不存在工业废水，生产基地对机械加工使用的冷却水进行循环使用。

集团严格遵守《中华人民共和国水污染防治法》，按照《污水综合排放标准》（GB 8978-1996）《地下水质量标准》（GBT14848-2017）等相关标准管理废水排放。

为规范废水管理，集团指导各子公司制定《污水管理规定》等管理文件，并委托专业第三方机构定期对排放废水中五日生化需氧量、化学需氧量、氨氮、pH值、悬浮物、总氮、总磷等指标进行监测和检验，出具监测报告。报告期内，集团总部及下属各子公司未发生因废水排放超标受到处罚的事件。

● 废气管理

集团下属各子公司的废气主要来源于喷砂、喷锌、喷漆、切割、打磨、电焊与装配等工序。其中，废气主要污染物包括：颗粒物、硫氧化物、氮氧化物以及挥发性有机化合物（VOCs）等。

集团及子公司严格遵守《中华人民共和国大气污染防治法》，按照《大气污染物综合排放标准》（DB324041-2021）《表面涂装（工程机械和钢结构行业）大气污染物排放标准》（DB 32/4147- 2021）《挥发性有机物无组织排放控制标准》（GB 37822-2019）等相关标准管理废气排放。为规范废气管理，集团指导各子公司制定《大气污染物管理规定》等管理文件，并根据废气类型采取不同的处理方式。

● 废气类型与处理方式	
废气类型	处理方式
颗粒物	旋风+布袋除尘（有组织排放） 焊烟除尘净化器（无组织排放）
挥发性有机物	活性炭吸附+脱附催化燃烧（有组织排放）

● 废弃物管理

集团严格遵守《固体废物污染环境防治法》，按照《一般工业固体废物贮存和填埋污染控制标准》（GB18599-2020）《危险废物贮存污染控制标准》（GB18597-2023）《危险废物识别标志设置技术规范》（HJ 1276—2022）等相关标准管理固体废物和危险废弃物的贮存与处理。

为有效控制废弃物的产生，避免废弃物带来的危害，集团指导各子公司制定《固体废物控制程序》《危险废物管理制度》等相关管理文件，建立废弃物分类管理与处置机制，降低废弃物对环境与人员健康造成的负面影响。

废弃物类别与处理方式

类别	废弃物类型	处理方法
一般固体废弃物 (可回收利用)	办公废纸、旧书、旧报纸、纸箱、包装纸、纸屑等	第三方公司回收
	木板、木条、木块、包装木箱、样品原料等 废元钉、铁、报废金属设备和附件报废工具、金属罐、废旧台车、废铁托盘、焊渣、割渣等	自身回收利用 第三方公司回收
一般固体废弃物 (不可回收利用)	卫生纸、厕纸、碎干粮、泡沫饭盒、废油膏等	第三方公司处理
	泡沫、废手套、布条、拖把等	
	胶带、砂轮、隔热手套、刀片、报废文具、废电脑零件	
危险废弃物	废机油、废柴油、废润滑油、废矿物油等	具备资质的 第三方公司处理
	胶水等空瓶（含油、溶剂）、墨盒、硒鼓、碳粉、稀释剂、油漆桶、废弃显定影液、涂料废物等	
	漆渣、废活性炭、废过滤棉等	
	含铅蓄电池、日光灯管等	

报告期内，集团总部及下属各子公司未发生因废弃物贮存与处理超标受到处罚的事件。

7.4 应对气候变化

为积极应对气候变化，集团实践持续低碳绿色发展的理念，并贯彻落实国家2030年碳达峰、2060年碳中和目标，通过能源管理与转型措施，降低碳排放量并更好地应对气候变化。

集团参考国际可持续准则理事会（ISSB）建议，识别自身运营过程中对气候和环境造成的影响，从治理、战略、风险管理以及指标与目标四个层面，构建气候变化管理体系，识别气候变化相关的风险和机遇，将气候变化减缓与适应纳入日常管理中。

气候变化管理体系

治理

- 将气候变化议题纳入公司关注的实质性议题中，由董事会对公司的气候变化议题开展监督与管理；
- 相关职能部门及业务部门将气候变化的管理纳入日常工作重点之中。

战略

- 积极识别温室气体排放的主要来源；
- 识别气候变化对公司运营产生的风险，计划将气候变化的风险与机遇纳入整体运营风险管理的一部分。

风险管理

- 结合自身风能装备制造优势，围绕风能产业链进行投资与业务拓展，推动新能源业务多元化；
- 推动对合适的生产环节进行电气化改造，探索能源转型，减少能源使用造成的温室气体排放；
- 鼓励员工绿色办公与低碳通勤，以减少温室气体排放。

指标与目标

- 定期统计与披露温室气体排放量与排放密度，评估公司应对气候变化管理的绩效水平；
- 基于连续年度的温室气体排放数据开展测算，为制定量化气候目标打下基础。

集团根据ISO14064标准，针对范围1直接排放与范围2外购能源产生的间接排放，开展内部碳核算工作。经核算，报告期内集团及下属子公司自身生产经营产生的碳排放（范围1与范围2）为34,567.44吨。

温室气体排放

指标	单位	2023年数据
温室气体排放总量	吨二氧化碳当量	34,567.44
范围1 温室气体排放	吨二氧化碳当量	13,363.24
范围2 温室气体排放	吨二氧化碳当量	21,204.21
温室气体排放强度	吨二氧化碳当量/百万元人民币	0.072

集团积极参与新能源开发与建设与运营。2023年度，由嵩县泰胜在洛阳投资建设运营的50MW分散式风电项目，上网电量72393.45MWh，相当于节约标准煤0.89万吨、减少二氧化碳排放量4.13万吨，对于推动绿色能源发展、助力国家实现“碳达峰，碳中和”目标具有积极意义。

2023年度全球零碳城市实践先锋奖-铂金级

报告期内，集团与合作方申报的“高性能绿色风电用钢解决方案及产业化”项目，获得全球零碳城市创新典范奖组委会颁发的“2023年度全球零碳城市实践先锋奖-铂金级”，为城市低碳转型贡献专业力量。

未来，集团基于自身排放情况，计划进一步识别气候变化对公司的各项风险及机遇，包括实体风险及过渡风险，以制定应对相关风险的措施，提升公司在气候变化影响下的适应能力。





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心系慈善
共建温暖社会

8.1 公益活动

作为具有高度责任感的企业，泰胜风能始终心系社会，关注所在地社区，从集团到各子公司开展公益捐款、困难帮扶、助残抚优、乡村振兴等主题丰富的慈善活动，为需要帮助的人群送去温暖。

报告期内，集团总部及下属各子公司在社会公益方面的捐款捐物超过54.67万元；集团成立至今，在社会公益方面已累计捐款捐物超过400万元。

● 2023年 社会公益活动

● 公益捐款

集团总部参与上海市慈善基金会金山区分会开展的“蓝天下的至爱”公益捐款项目。报告期内，集团向此项目共计捐赠20万元。

● 困难帮扶

贫困户慰问：

阿勒泰泰胜对阔克托干村的15户贫困户进行慰问，捐赠米、面、油等生活物资。



阔克托干村贫困户慰问

● 助残抚优

残障人士慰问：

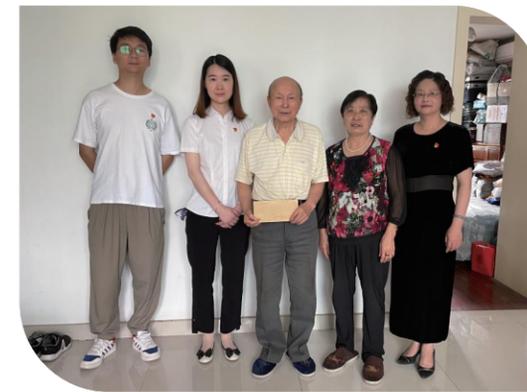
泰胜蓝岛积极为南通市苏筱麦食品有限公司提供服务，助力该公司残疾员工的收入保障。



苏筱麦食品有限公司残障人士慰问

老党员慰问：

集团总部在2023年建党节前夕，走访慰问新江村党总支80岁以上老党员，提供2万元节日慰问金及诚挚祝福，并对村老年活动室的老旧多媒体设备进行更换，丰富村域老年群体的文化生活；泰胜蓝岛党支部走进侯字村村委，慰问侯字村80岁以上老党员，并捐赠生活用品等物资。



新江村老党员慰问



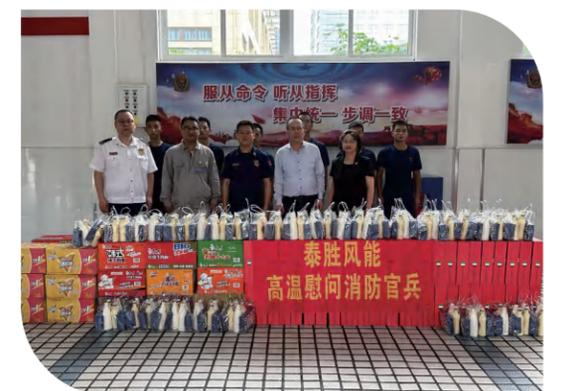
侯字村老党员慰问

军警慰问：

集团总部捐助山阳派出所1,000箱矿泉水和盐汽水，用于高温慰问一线民警和辅警；集团总部在八一建军节时开展消防一线官兵高温慰问活动，捐助清洁套装和清凉解暑饮料。



山阳派出所慰问



消防官兵慰问

学校建设:

泰胜蓝岛向西乡峡口镇中心学校捐赠10万元, 用于运动场改造维修升级; 木垒泰胜参与当地残疾人联合会举行的“守护安全·救在身边”少年儿童安全健康守护行动, 捐赠了50套安全防护包。



峡口镇中心学校运动场改造维修升级



“守护安全·救在身边”荣誉证书

● 乡村振兴

乡村建设:

新疆泰胜向茭茭台村捐赠5万元用于广场改造等基础设施建设; 木垒泰胜向东城口村赞助5万元以支持其“门口一米工程”建设。



茭茭台村基础设施改造捐款



东城口村“门口一米工程”捐款

8.2 投身志愿服务

同时, 集团以党员为主体, 打造了有活力的一支志愿者队伍, 积极参与植树造林、乡村建设、爱心助考等各类支援服务。

● 2023年 志愿者服务活动

● 植树造林

集团总部党员志愿者参与金韵居民区组织的党员志愿者植树节活动, 种植各类花木500余株, 美化小区环境, 助力提升居民爱绿护绿生态文明意识; 阿勒泰泰胜组成志愿者团队, 在县城周边进行为期2天的植树活动, 共计于防风沙绿化带种树100棵。



金韵居民区支援者植树活动



吉木乃县城周边植树活动

● 乡村建设

集团总部党员志愿者参加新江村“洁美乡村”人居环境优化活动, 提升自然宅基公共区域环境整治工作。



新江村“洁美乡村”人居环境优化活动

● 爱心助考

木垒泰胜高考当天派出志愿服务队, 在木垒县第一中学设立爱心助考点, 为考生及家长提供矿泉水等物资, 同时为考生们送上暖心的高考祝福。



木垒县第一中学爱心助考志愿服务

ESG绩效数据表

公司治理绩效

统计范围：公司治理绩效统计范围均与公司合并财务报表范围一致。

公司治理

指标名称	单位	2023年度
股东大会召开次数	次	3
董事会成员数	人	13
独立董事成员数	人	5
董事会会议召开次数	次	4
董事会审计委员会会议召开次数	次	4
董事会薪酬与考核委员会会议召开次数	次	1
董事会战略委员会会议召开次数	次	1
董事会提名委员会会议召开次数	次	2
监事人数	人	3
女性监事人数	人	1
监事会会议召开次数	次	4

反腐败

指标名称	单位	2023年度数据
报告期内对发行人或其员工提出并已审结的贪污诉讼案件数	次	0
员工人均接受反贪污培训时长	小时	1.20
董事人均接受反贪污培训时长	小时	4.00
反贪污培训覆盖的董事比例	%	100

社会绩效

统计范围：社会绩效统计范围均与公司合并财务报表范围一致。

研发创新

指标名称	单位	2023年度数据
研发费用投入	万元	21,256.13
研发费用占营业收入比例	%	4.42
在研项目个数	个	48
研发人员数量 ¹	人	176
研发人员占比	%	17.98

注1：研发人员数量指截至报告期末的研发人员数量

产品与服务

指标名称	单位	2023年度数据
因违反产品和服务有关法律法规而受到的罚款总额	万元	0
违反产品和服务有关法律法规的事件数	件	0

供应链

指标名称	单位	2023年度数据
供应商总数	家	1,203
中国内地地区的供应商数	家	1,203
新供应商总数	家	154
签署供应商行为准则的供应商百分比	%	100

员工

指标名称	单位	2023年度数据
员工招聘与雇佣 ¹		
员工总人数	人	979
全职劳动合同制员工人数	人	927
全职劳务派遣制员工人数	人	12
其他雇佣形式员工人数	人	40
男性员工人数	人	755
女性员工人数	人	224
30岁以下员工人数	人	336
30岁至50岁员工人数	人	507
50岁以上员工人数	人	136
最高学历为硕士研究生及以上学历的员工人数	人	47
最高学历为本科的员工人数	人	256
最高学历为大专及以下学历的员工人数	人	676
残疾人员工人数	人	5
少数民族员工人数	人	33
新进员工总人数	人	327
新进全职劳务派遣制员工人数	人	5
新进全职劳动合同制员工人数	人	303
新进其他雇佣形式员工人数	人	19
新进男性员工人数	人	253
新进女性员工人数	人	74
新进30岁以下员工人数	人	162
新进30岁至50岁员工人数	人	144
新进50岁以上员工人数	人	21
在员工雇佣与解雇、薪酬与福利、工作时间与假期平等机会、反歧视等方面发生的违法违规事件数	件	0

指标名称	单位	2023年度数据
员工权益		
职工体检经费	万元	21.76
员工体检覆盖率	%	100
社会保险覆盖率	%	100
员工培训与发展		
接受定期绩效和职业发展考评的员工覆盖率 ²	%	82.53
接受定期绩效和职业发展考评的男性员工覆盖率	%	82.91
接受定期绩效和职业发展考评的女性员工覆盖率	%	81.25
接受定期绩效和职业发展考评的30岁以下员工覆盖率	%	96.73
接受定期绩效和职业发展考评的30岁至50岁员工覆盖率	%	74.16
接受定期绩效和职业发展考评的50岁以上员工覆盖率	%	78.68
员工培训覆盖率 ³	%	84.07
男性员工培训覆盖率	%	82.78
女性员工培训覆盖率	%	88.39
30岁以下员工培训覆盖率	%	87.80
30岁至50岁员工培训覆盖率	%	87.77
50岁以上员工培训覆盖率	%	61.03
员工接受培训平均时长 ⁴	小时	16.21
女性员工接受培训平均时长	小时	7.29
男性员工接受培训平均时长	小时	18.85
30岁以下员工接受培训平均时长	小时	17.30
30岁至50岁员工接受培训平均时长	小时	17.77
50岁以上员工接受培训平均时长	小时	7.68

注1：相关人员数量指标均为截至报告期末的人员数量

注2：接受定期绩效和职业发展考评的员工覆盖率=接受定期绩效和职业发展考评的员工人数/员工总人数×100%

注3：员工培训覆盖率=接受培训的员工总人数/员工总人数×100%

注4：员工接受培训平均时长=员工接受培训总时长/员工总人数×100%

社区与公益

指标名称	单位	2023年度数据
公益慈善		
公益投入总金额	万元	54.67
公益捐赠金额	万元	40.97
乡村振兴投入金额	万元	11.50
社区投入金额	万元	2.20
志愿服务		
员工志愿服务人均时长 ¹	小时	0.52

注1：员工志愿服务人均时长=员工志愿服务总时长/员工总人数

环境绩效

统计范围：环境绩效统计范围包括上海泰胜、蓝岛泰胜、扬州泰胜、东台泰胜、包头泰胜、新疆泰胜、木垒泰胜、阿勒泰泰胜、若羌泰胜、大庆泰胜、广东泰胜、钦州泰胜、嵩县泰胜和海南泰胜，共计14家子公司。

环境管理

指标名称	单位	2023年度数据
年度环保投资支出	万元	1,775.66
因违反环境保护法律法规而受到处罚的事件数	件	0
因违反环境保护法律法规而受到的罚款总额	万元	0
因污染物超标或违规排放而受到处罚的事件数	件	0
因违反环境法律法规通过争端解决机制提起的事件数	件	0

资源管理

指标名称	单位	2023年度数据
能源管理		
天然气用量	立方米	5,277,955.51
丙烷用量	立方米	151,563.00
燃料油用量	吨	170.00
固定源柴油用量	吨	67.12
液化天然气用量	吨	12.65
液化石油气用量	吨	5.29
公务用车汽油用量	升	92,744.36
公务用车柴油用量	升	9,840.88
外购电力用量	兆瓦时	37,059.10
自产可再生能源用量	兆瓦时	4,324.84
外购电力用量：可再生能源	兆瓦时	1,813.44
外购蒸汽用量	吉焦	630.93
综合能源消耗总量	吨标准煤	13,321.17
单位营业收入综合能源消耗强度 ¹	吨标准煤/万元人民币	0.028
水资源管理		
总耗水量（按取水来源计）	立方米	149,036.31
按取水来源划分的耗水量：市政供水	立方米	147,836.31
按取水来源划分的耗水量：地表水	立方米	1,200.00

注1：单位营业收入综合能源消耗强度=综合能源消耗总量/营业总收入。

排放与废弃物管理

指标名称	单位	2023年度数据
废水管理 ¹		
废水排放总量	立方米	64,595.39
化学需氧量（COD）排放量	吨	7.69
生化需氧量（BOD）排放量	吨	2.46
氨氮（NH ₃ -N）排放量	吨	0.57
废气管理 ²		
废气排放总量	万立方米	694,64.08
颗粒物（PM）排放量	吨	2.54
挥发性有机化合物（VOCs）排放量 ³	吨	46.3
氮氧化物（NO _x ）排放量	千克	5.64
硫氧化物（SO _x ）排放量	千克	2.11
废弃物管理		
有害废弃物总量	吨	575.01
按处置方式划分的有害废弃物理量：填埋	吨	31.26
按处置方式划分的有害废弃物理量：焚烧且有进行能量回收	吨	116.81
按处置方式划分的有害废弃物理量：焚烧且无能量回收	吨	71.15
按处置方式划分的有害废弃物理量：其他	吨	355.79
无害废弃物总量	吨	14,534.86
按处置方式划分的无害废弃物理量：填埋	吨	134.00
按处置方式划分的无害废弃物理量：焚烧且有进行能量回收	吨	10.00
按处置方式划分的无害废弃物理量：焚烧且无能量回收	吨	104.20
按处置方式划分的无害废弃物理量：回收/再利用	吨	4,284.26
按处置方式划分的无害废弃物理量：其他	吨	10,002.40

注1：部分子公司化学需氧量、生化需氧量、氨氮等未受到环境监管部门对排放总量的监测要求，暂未统计。因此数据仅纳入泰胜蓝岛、扬州泰胜、东台泰胜、新疆泰胜、木垒泰胜。各子公司将加强废水管理并逐步扩大统计范围，特此说明。

注2：部分子公司氮氧化物、硫氧化物以及颗粒物为无组织排放且未受到环境监管部门对排放总量的监测要求，暂未统计。因此数据仅纳入上海泰胜、泰胜蓝岛、扬州泰胜、包头泰胜。各子公司将加强废气管理并逐步扩大统计范围，特此说明。

注3：部分子公司不属于重点排污单位，未受到环境监管部门对挥发性有机化合物（VOCs）排放总量的监测要求，暂未统计。因此数据仅纳入泰胜蓝岛。各子公司将加强挥发性有机化合物（VOCs）管理并逐步扩大统计范围，特此说明。

应对气候变化

指标名称	单位	2023年度数据
直接温室气体排放（范围1）	吨二氧化碳当量	13,363.24
间接温室气体排放（范围2）	吨二氧化碳当量	21,204.21
温室气体排放总量（范围1及范围2）	吨二氧化碳当量	34,567.44
单位营业收入温室气体排放强度 ¹	吨二氧化碳当量/万元人民币	0.072

注1：单位营业收入温室气体排放强度=温室气体排放总量（范围1及范围2）/营业收入。

对标索引

《深圳证券交易所上市公司自律监管指引第2号——创业板上市公司规范运作（2023年12月修订）》索引表

条款及披露内容	报告章节
9.1 综述	2.1 ESG管理策略
9.2 经营原则	3.1 公司治理
9.3 社会责任战略规划及工作机制	2.1 ESG管理策略
9.4（一）社会责任制度建设	2.1 ESG管理策略
9.4（二）履行社会责任存在的不足与问题	/
9.4（三）改进措施和具体时间安排	/
9.5 回报股东	3.3 投资者关系
9.6 财务稳健	/
9.7 职工权益保障	6.1 员工雇佣与权益 6.2 员工沟通与关怀
9.8（一）遵守环境保护法律法规与行业标准	7.1 环境管理体系
9.8（二）环境保护计划	7.1 环境管理体系
9.8（三）自然资源使用	7.2 资源管理
9.8（四）污染物处置	7.3 排放与废弃物管理
9.8（五）污染防治设施	7.3 排放与废弃物管理
9.8（六）环境保护相关税费缴纳	/
9.8（七）供应链环境安全	5.1 加强供应链管理
9.8（八）其他环境保护责任	7.4 应对气候变化
9.9（一）环境保护方针、目标及成效	/
9.9（二）年度资源消耗总量	ESG绩效数据表
9.9（三）环保投资和环境技术开发	ESG绩效数据表
9.9（四）排放污染物管理	7.3 排放与废弃物管理
9.9（五）环保设施建设和运行	7.3 排放与废弃物管理
9.9（六）废物处理、处置，废弃产品回收综合利用	7.3 排放与废弃物管理
9.9（七）与环保部门签订的自愿协议	/
9.9（八）受环保部门奖励情况	/
9.9（九）其他自愿披露信息	7.4 应对气候变化
9.10 环境保护政策实施情况	7.1 环境管理体系
9.11 环境信息披露情况	/
9.12（一）产品安全法律法规与行业标准	6.5 保障生产安全
9.12（二）生产环境与生产流程	6.5 保障生产安全
9.12（三）产品质量安全保障机制及事故应急预案	4.2 提升产品质量 6.5 保障生产安全
9.12（四）其他生产与产品安全责任	6.5 保障生产安全
9.13（一）员工管理制度及违规处理措施	6.1 员工雇佣与权益
9.13（二）防范职业性危害与配套安全措施	6.4 职业健康防护

条款及披露内容	报告章节
9.13 (三) 员工培训	6.3 员工培训与发展
9.13 (四) 其他员工权益保护责任	6.2 员工沟通与关怀
9.14 科学伦理	/
9.15 监督监察	/

《可持续发展报告标准》(GRI Standards) 索引表

使用声明	泰胜风能在2023年1月1日至2023年12月31日参照GRI标准报告了在此份GRI内容索引中引用的信息。
使用的GRI 1	GRI 1: 基础 2021

GRI标准	披露项	报告章节
GRI 2: 一般披露2021	2-1 组织详细情况	1. 关于泰胜风能
	2-2 纳入组织可持续发展报告的实体	报告编制说明
	2-3 报告期、报告频率和联系人	报告编制说明
	2-6 活动、价值链和其他业务关系	1. 关于泰胜风能
	2-7 员工	ESG绩效数据表
	2-8 员工之外的工作者	ESG绩效数据表
	2-9 管治架构和构成	2.1 ESG管理策略 3.1 公司治理
	2-10 最高治理机构的提名和遴选	3.1 公司治理
	2-12 在管理影响方面, 最高管治机构的监督作用	3.1 公司治理
	2-13 为管理影响的责任授权	3.1 公司治理
	2-14 最高治理机构在可持续发展报告中的作用	2.1 ESG管理策略
	2-16 关键问题的沟通	3.1 公司治理
	2-27 遵守法律法规	报告第三部分到第七部分 列举集团在各个ESG议题上遵守的法律法规
2-29 利益相关方参与的方法	2.3 实质性议题分析	
GRI 203: 间接经济影响 2016	203-1 基础设施投资和支持性服务	7.4 应对气候变化
GRI 3: 实质性议题 2021	3-1 确定实质性议题的过程	2.2 利益相关方沟通
	3-2 实质性议题列表	2.3 实质性议题分析
GRI 3: 实质性议题 2021	3-3 实质性议题的管理	2.3 实质性议题分析 商业道德
GRI 205: 反腐败 2016 ESG绩效数据表	205-1 已经进行腐败风险评估的运营点	3.5 商业道德
	205-2 反腐败政策和程序的传达及培训	
	205-3 经确认的腐败事件和采取的行动	
GRI 3: 实质性议题 2021	3-3 实质性议题的管理	2.3 实质性议题分析 资源管理 排放与废弃物管理 应对气候变化
GRI 302: 能源 2016	302-1 组织内部的能源消耗量	7.2 资源管理 ESG绩效数据表
	302-3 能源强度	
	302-4 减少能源消耗	

GRI标准	披露项	报告章节
GRI 303: 水资源和污水 2018	303-1 组织与水作为共有资源的相互影响	7.2 资源管理 7.3 排放与废弃物管理 ESG绩效数据表
	303-2 管理与排水相关的影响	
	303-3 取水	
	303-5 耗水	
	305-1 直接(范围1)温室气体排放	
GRI 305: 排放 2016	305-2 能源间接(范围2)温室气体排放	7.4 应对气候变化 ESG绩效数据表
	305-4 温室气体排放强度	
	305-7 氮氧化物(NO _x)、硫氧化物(SO _x)和其他重大气体排放	
	306-1 废弃物的产生及废弃物相关重大影响	
GRI 306: 废弃物 2020	306-2 废弃物相关重大影响的管理	7.3 排放与废弃物管理 ESG绩效数据表
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	3-3 实质性议题的管理	
GRI 3: 实质性议题 2021	3-3 实质性议题的管理	2.3 实质性议题分析 加强供应链管理
GRI 308: 供应商环境评估 2016	308-1 使用环境评价维度筛选的新供应商	5.1 加强供应链管理 ESG绩效数据表
	308-2 供应链中的负面环境影响以及采取的行动	
GRI 3: 实质性议题 2021	3-3 实质性议题的管理	2.3 实质性议题分析 员工雇佣与权益 员工沟通与关怀 员工培训与发展 职业健康防护 生产安全
GRI 401: 雇佣 2016	401-1 新进员工雇佣率和员工流动率	6.1 员工雇佣与权益 6.2 员工沟通与关怀 ESG绩效数据表
	401-2 提供给全职员工(不包括临时或兼职员工)的福利	
GRI 403: 职业健康与安全 2018	403-1 职业健康安全管理体系	6.4 职业健康防护 6.5 保障生产安全 ESG绩效数据表
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	403-7 预防和减缓与业务关系直接相关的职业健康安全影响	
	404-1 每名员工每年接受培训的平均小时数	
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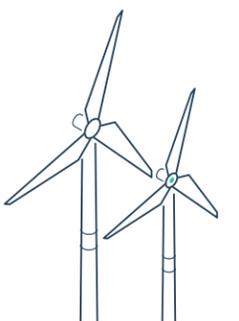
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About the Report

This is the first *Environmental, Social and Governance (ESG) Report* released by Shanghai Taisheng Wind Power Equipment Co., Ltd. It aims to disclose the principles, management methods, efforts, and achievements of the Company in environmental, social and governance to stakeholders.

Report Scope

The Report is applicable to Shanghai Taisheng Wind Power Equipment Co., Ltd. ("TSP" "Company" or "Group") and its affiliates. Unless otherwise specified, the scope hereof remains consistent with that in the consolidated financial statements of TSP (stock code: 300129.SZ) over the same period.

Full and Abbreviation of Affiliates in the Report

Full Name	Abbreviation
Taisheng Wind Power Technology (Shanghai) Co., Ltd.	TSP Shanghai
Nantong Taisheng Blue Island Offshore Co., Ltd.	TSP Blue Island
Yangzhou Taisheng Wind Power Equipment Co., Ltd.	TSP Yangzhou
Shanghai Taisheng (Dongtai) Power Engineering Machinery Co., Ltd.	TSP Dongtai
Baotou Taisheng Wind Power Equipment Co., Ltd.	TSP Baotou
Xinjiang Taisheng Wind Power Equipment Co., Ltd.	TSP Xinjiang
Mulei Taisheng Wind Power Equipment Co., Ltd.	TSP Mulei
Altay Taisheng New Energy Equipment Co., Ltd.	TSP Altay
Ruoqiang Taisheng Wind Power Equipment Co., Ltd.	TSP Ruoqiang
Daqing Taisheng Wind Power Equipment Co., Ltd.	TSP Daqing
Guangdong Taisheng Wind Power Equipment Co., Ltd.	TSP Guangdong
Qinzhou Taisheng New Energy Technology Co., Ltd.	TSP Qinzhou
Taisheng Wind Power (Songxian) New Energy Development Co., Ltd.	TSP Songxian
Taisheng South China (Zhuhai) Wind Energy Equipment Co., Ltd.	TSP South China

Reporting Period

The reporting period is from January 1, 2023 to December 31, 2023. Unless otherwise stated, the data in the Report are those within this period.

Basis for Preparation

The Report is prepared in accordance with the *Shenzhen Stock Exchange Guideline No. 2 on Self-Regulation of Listed Companies - Standardized Operation of Companies Listed on the Growth Enterprise Market (Revised in December 2023)* and with reference to the Global Reporting Initiative (GRI) Sustainability Reporting Standards.

Preparation Principles



Accuracy

This report endeavors to ensure the accuracy of the information to the greatest extent possible. The data standard, calculation basis, and assumption conditions have been explained in the quantitative information to guarantee that the calculation error range will not mislead the users. Quantitative information and notes are detailed in the chapters of the Report.

The Board of Directors warrants that there are no false records, misleading statements, or material omissions in the Report.



Balance

The Report reflects objective facts and impartially discloses positive and negative information related to the Group.



Clarity

This report is published in both Simplified Chinese and English.

In case of any discrepancies, the Simplified Chinese version of the report shall prevail. The Report contains information such as tables, diagrammatic figures, and a glossary of terms as a supplement to facilitate a better understanding by stakeholders. To facilitate faster access to information for stakeholders, the Report provides a table of contents and the index of ESG standards.



Comparability

The Report discloses key quantitative performance indicators and endeavors to disclose historical data wherever possible. The statistics and disclosure of the same indicator in the Report are consistent from one reporting period to another; any change shall be fully explained in the notes to the Report, so that stakeholders can conduct meaningful analyses and assess the trend of the Group's ESG performance level.



Sustainable Development Background

The Group identified topics on sustainable development of concern to investors and other stakeholders as the highlights of the Report. The presentation of material topics in the Report focused on the industry characteristics in the Group's operations and the characteristics of the region where it is located. Please see the "2. ESG Management" in the Report for analysis and results of material topics. Also, this report focuses on key aspects of environmental, social, and corporate governance that may have significant implications for investors and other stakeholders.



Integrity

The scope of the disclosure object shall be in line with that of the Company's consolidated financial statements.



Timeliness

This is an annual report. The Group endeavors to publish the Report as soon as possible after the end of the reporting year to provide stakeholders with timely information for decision-making.



Verifiability

The cases and data in the Report come from the original records or financial reports of the Group's actual operations. The Group actively manages its ESG data with traceability of disclosed data sources and calculations and support for external authentication.



Notes on Data

The data and cases in the Report derived from official records of actual operations in the Group. The financial figures in the Report are denominated in RMB. In case of any discrepancy with the Company's annual financial report, the annual financial report shall prevail.

Access to the Report

The Report's digital version is published on the information disclosure platform designated by the ShenZhen Stock Exchange, and it is available to be browsed or downloaded at the Company's official website (<http://shtsp.com/>).

Contact Us

If you have any suggestions on the Report, please contact us:
Address: 40th Floor, Lumina, 175 Longyao Road, Xuhui District, Shanghai
Email: ir@shtsp.com





About TSP

1.1 Company Profile

Founded in 2001, Shanghai Taisheng Wind Power Equipment Co., Ltd., headquartered in Shanghai, is one of the most time-honored companies in China's wind power equipment manufacturing industry. It takes the leading position in national wind turbine tower manufacturing.

The Group is mainly engaged in the manufacturing, sales, and other services of onshore and offshore wind power equipment and marine engineering equipment, and actively explores business development plans for wind farm development and other industrial chains.

Shanghai Taisheng Wind Power Equipment Co., Ltd.

COMPANY NAME

TSP

STOCK NAME

300129

STOCK CODE

Shenzhen Stock Exchange

STOCK EXCHANGE

1988 East Weiqing Road, Jinshan District, Shanghai

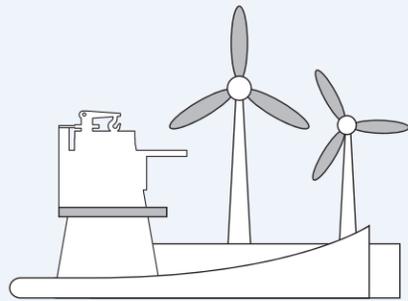
REGISTERED ADDRESS

40/F, Lumina, No. 175 Longyao Road, Xuhui District, Shanghai, China

OFFICE ADDRESS

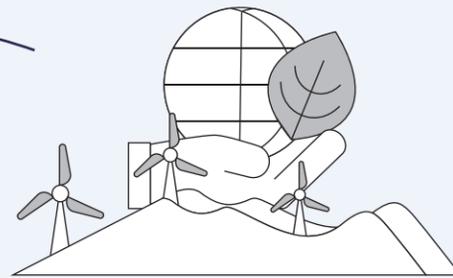
Main Business

The Group is mainly engaged in the manufacturing, sales, and other services of onshore and offshore wind power equipment and marine engineering equipment, and actively explores business development plans for wind farm development and other industrial chains.

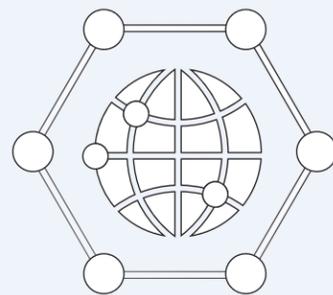


Wind Power and Offshore Engineering Equipment Manufacturing

Onshore Wind Power Equipment (Including Concrete Towers)
Offshore Wind Power Equipment and Marine Engineering Equipment



Zero Carbon Business



Innovative and Other Business

As a national high-tech company, the Group has led and participated in formulating many national standards in the industry and filled the gaps in the domestic wind tower industry more than once. It is an industry leader with excellent qualifications and obvious technical advantages in China. The Group, insisting on the "Market-oriented, Technology-led, Customer-based" business philosophy, is committed to developing domestic and international markets. With five strategic regions in East China, North China, Northwest China, Northeast China, and South China, the Group boasts services and customers throughout Asia, Europe, America, Africa, and Australia.

In 2010, the Group was listed on the Growth Enterprise Market of Shenzhen Stock Exchange. After years of painstaking efforts, the Group has developed into a professional manufacturer of onshore and offshore wind power equipment and high-end marine engineering equipment with global influence and large-scale production, product serialization, and service integration. It has been ranked among the top 500 global new energy enterprises for many years in a row. The Group won numerous honors and awards including 2023 Green Factory by the Ministry of Industry and Information Technology, National Intellectual Property Advantageous Enterprise, 2023 Shanghai Top 100 Emerging Industry Enterprises, 2023 Shanghai Top 100 Manufacturing Enterprises, High and New Technology Enterprises, AAA Contract Credit Rating, Contract-abiding and Trustworthy Enterprise, Golden Information Disclosure Prize and Investor Relations Elite Award.

Honors and Awards



2023 Green Factory by The Ministry of Industry and Information Technology



National Intellectual Property Advantageous Enterprise



2023 Shanghai Top 100 Emerging Industry Enterprises



2023 Shanghai Top 100 Manufacturing Enterprises



High and New Technology Enterprises



Aaa Contract Credit Rating



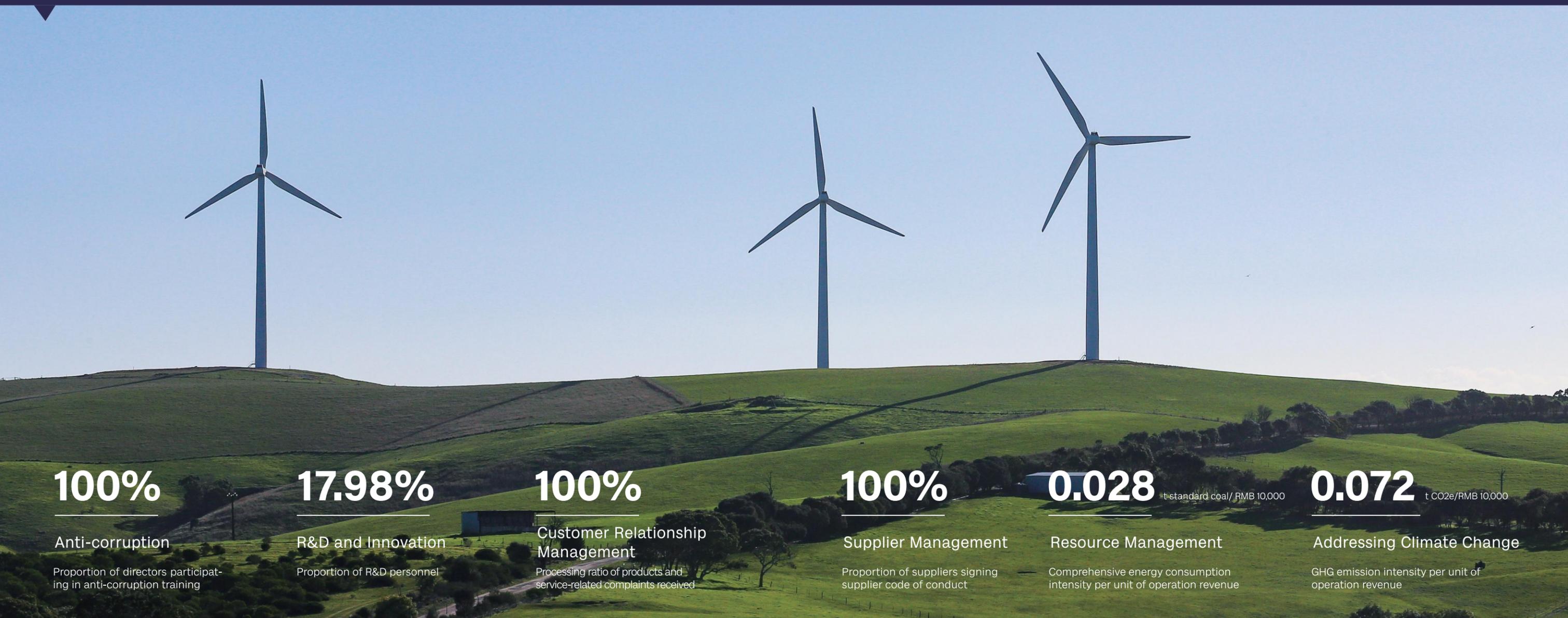
Contract-abiding and Trustworthy Enterprise



2022 Golden Information Disclosure Prize

The Group will expand its business scope, and incubate and cultivate potential high-quality companies in the industrial chain to develop the business scope and product categories and to increase the Group's overall revenue. The Group will increase vigilance against risks to support the main business with wind farm construction and operation, gradually forming a wind farm development and cooperation model in line with the company characteristics. The Group will expand global partners for high-quality customer resources, and establish a good reputation image to drive the Group's business to new heights.

1.2 Key Performance in 2023





ESG

Management

2.1 ESG Management Strategy

TSP established a top-down ESG governance structure: The Group's Board of Directors oversee and manage ESG related matters, and the Enterprise Management Department led to set up an ESG working group to promote ESG management from corporate governance, innovation motivation, mutual success partnership, employee development, green management, and social welfare.

ESG Management Strategy



Corporate Governance

Improve the corporate governance system, strengthen information disclosure and investor communication, and enhance risk prevention capabilities



Employee Development

Standardize the engagement of employees, strengthen employee care, focus on personnel training, and ensure occupational health and work safety



Innovation Motivation

Promote scientific research and innovation, continuously improve product quality, and maintain a good relationship with customers



Green Management

Establish an environmental management system, strengthen the management of various resources, control pollution emissions, and actively respond to climate change



Win-win Cooperation

Strengthen supply chain management and coordination, actively participate in developing industry standards and industry activities, and seek win-win results



Social Welfare

Actively participate in social welfare activities and rural revitalization, organize volunteering services, and help those in need

2.2 Communication with Stakeholders

TSP values the opinions of stakeholders including shareholders, investors, government and regulators, customers, suppliers, employees, and the industry, and establishes a regular communication mechanism to proactively understand the demands of stakeholders, and incorporates them into the Group's ESG management considerations.



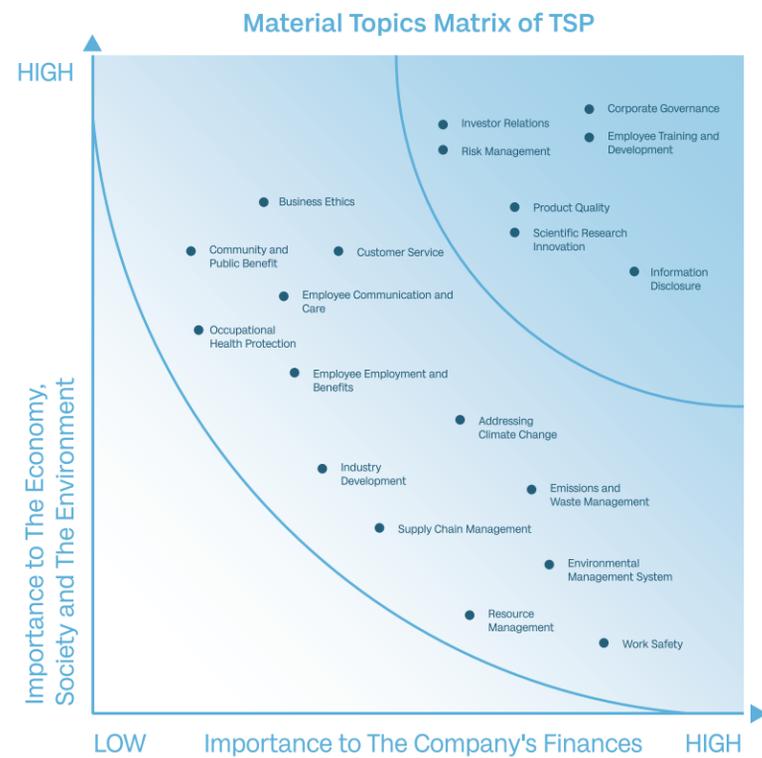
Key Stakeholders and Communication Channels

Key Stakeholders	Topics of Concern	Communication Channels
Shareholders/ Investors	Corporate Governance Information Disclosure Investor Relations Scientific Research Innovation	General Meeting of Shareholders Information Disclosure Performance Presentation, Performance Exchange Meeting Field Research
Government and Regulators	Risk Management Business Ethics Addressing Climate Change Work Safety	Project Cooperation Conference Communication Supervision and Inspection
Customers	Product Quality Customer Service	Pre-sales Visit Project Cooperation Customer Satisfaction Survey
Suppliers	Supply Chain Management	Supplier Assessment Supplier Training
Employees	Employee Recruitment Employee Welfare and Communication Talent Development Occupational Health and Safety	Employee Congress Employee Training Employee Activities Employee Complaints and Feedback
Industry	R&D and Innovation Industry Development	Key Industry Conferences and Events

2.3 Analysis on Material Topics

Material topics are fundamental to ESG management and information disclosure. During the reporting period, the Group summarized 20 topics for focused management based on the communication with stakeholders, the industry characteristics, and the actual business operation, plus the new energy policy trends at domestic and international and the Shenzhen Stock Exchange information disclosure requirements.

The Group prioritized 20 material topics through internal and external expert consultation and management feedback, and from the "importance to the Company's finance" and "importance to the economy, society and the environment" to obtain a matrix of material topics.



Based on analysis, the Group has identified seven highly material topics of both financial and economic, social and environmental significance, including corporate governance, research and innovation, and employee training and development, six moderately material topics of financial importance, including production safety and supply chain management, and seven moderately material topics of economic, social and environmental importance, including business ethics, customer service, employee employment and rights and benefits, and climate change response.

The above topics are the basis for the Group's future ESG management, communication with stakeholders, and the focus of disclosure in the report.





3

**Standardized
Governance**
to Achieve Scientific
Development

3.1 Corporate Governance

2023

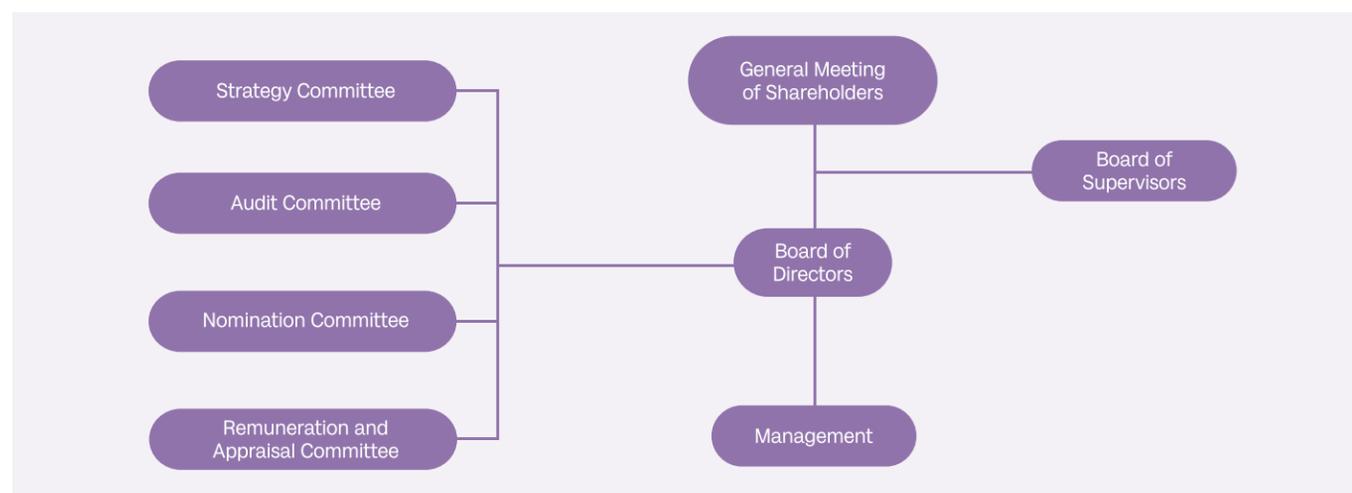


4Times Board of directors meetings
4Times Board of supervisors meetings
3Times General meetings of shareholders

In strict accordance with the *Company Law of the People's Republic of China*, the *Securities Law of the People's Republic of China*, the *Code of Corporate Governance for Listed Companies*, the *Shenzhen Stock Exchange Rules for Listed Stocks on the Growth Enterprise Market*, and the *Shenzhen Stock Exchange Guideline No. 2 on Self-Regulation of Listed Companies - Standardized Operation of Companies Listed on the Growth Enterprise Market*.

TSP prepared the *Articles of Association*, the *Rules of Procedure for the General Meeting of Shareholders of the Company*, the *Rules of Procedure for the Board of Directors of the Company*, the *System of Independent Directors* and other governing documents, which stipulate the rules for managing shareholders, the General Meeting of Shareholders and the Board of Directors, and ensure that the corporate governance structure gives full play to its roles in major decision-making as well as day-to-day operation and management. During the reporting period, the Group amended core documents such as the *Articles of Association* and the *System of Independent Directors* and added the *Rules of Procedure for Specialized Meetings of Independent Directors* to guide the standardized, transparent, and efficient operation of the Company.

The Group has an effective governance structure of "General Meeting of Shareholders, Board of Directors, Board of Supervisors, and Senior Management" to select, appoint, and dismiss directors and supervisors per the *Articles of Association*. The Board of Directors consists of a Strategy Committee, an Audit Committee, a Nomination Committee, and a Remuneration and Appraisal Committee. During the reporting period, the Board of Directors consisted of 13 members, including 5 independent directors. They specialize in mechanical engineering, energy management, financial management, finance, economics, accounting and law, etc. During the reporting period, the Group held 4 Board of Directors meetings, 4 Board of Supervisors meetings, and 3 General Meetings of Shareholders, and deliberated & passed 36 major resolutions, maintaining scientific and efficient decision-making.



Organizational Structure of General Meeting of Shareholders, Board of Directors, Board of Supervisors, and Senior Management

During the reporting period, the Group received neither any penalties, supervisory letters, or inquiry letters from China Securities Regulatory Commission and the Shenzhen Stock Exchange, nor any negative incidents in corporate governance.

3.2 Information Disclosure

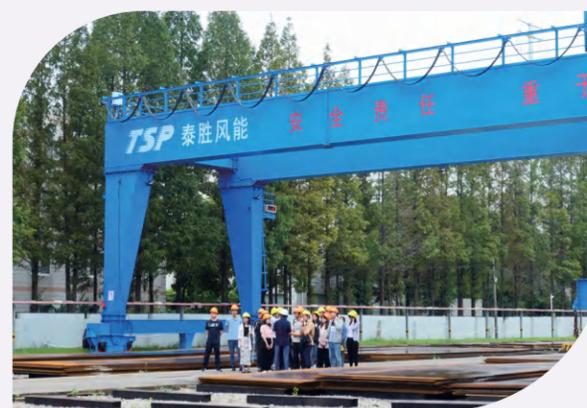
TSP strictly abides by the *Measures for the Administration of Information Disclosure by Listed Companies*, the *Shenzhen Stock Exchange Guideline No. 4 on Self-Regulation of Listed Companies - Industry Information Disclosure on the Growth Enterprise Market* and other laws and regulations, and formulates the *Information Disclosure System*, the *Investor Relations Management System*, the *Measures for the Management of Research and Reception by Institutions* and other documents to improve the information disclosure mechanism.

The Group designates www.cninfo.com.cn as the information disclosure website and the *China Securities Journal*, the *Shanghai Securities News*, the *Securities Daily*, and the *Securities Times* as periodic reports disclosure newspapers to fully safeguard the rights and interests of investors and to ensure that all shareholders of the Company have equal access to information.

The Group is also externally accredited for information disclosure. During the reporting period, the Group was awarded the Grade-A Information Disclosure by the Shenzhen Stock Exchange and the 25th "Golden Information Disclosure Award" for Listed Companies.

3.3 Investor Relations

The Secretary of the Board of Directors is responsible for hosting investors' visits and surveys. The Group enjoys various investor communication channels including the corporate website, investor relations management call, e-mail address, and interactive platform. During the reporting period, the Group organized 2 Performance Briefing Sessions and 2 Performance Exchange Sessions to timely introduce investors productions and operations of the Company.



Taisheng Yangzhou Wind Tower Project

Investors Visited and Investigated the 250,000 t/a Wind Tower Project of TSP Yangzhou

In September 2023, the Group organized 80 investors to visit and investigate the Yangzhou base for investors' concerns about the TSP Yangzhou's 250,000 t/a Wind Tower Project and fully communicated the location purpose, strategic positioning, suppliers' certification progress, equipment automation, wharf depth, and other key issues on Yangzhou base.

The good investor interaction mechanism and related practices boosted the Group to achieve honors and awards such as the "2023 Flush A-share Investor Relations Elite Award for Listed Companies" and the "14th Investor Relations Tianma Award for Listed Companies in China" during the reporting period.

3.4 Risk Management

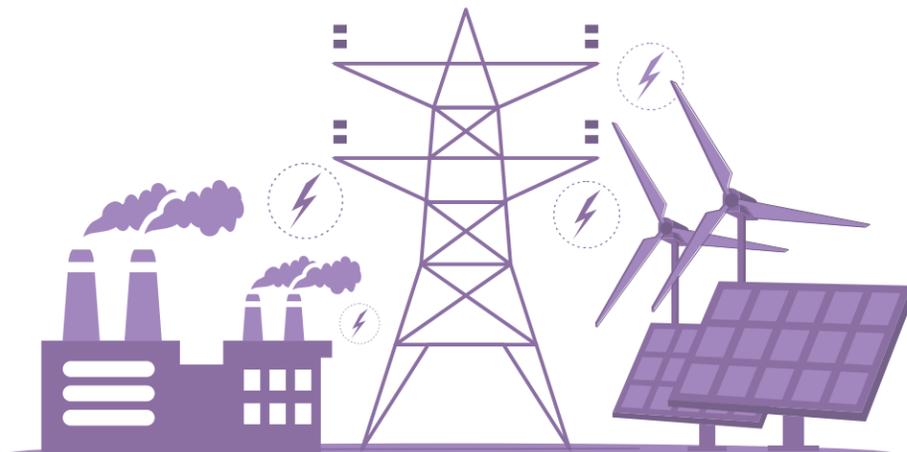
TSP formulated the *Risk Management Rules* to enhance risk prevention and control capability, which stipulates the risk type, risk management link, risk supervision, and risk evaluation process, as well as the corresponding assessment and accountability. The Group also formulated the *Rules and Regulations* and the *Contract Management Measures* to enhance internal compliance and minimize the various types of risks it may face.

The Group established a three-line risk control system of "Units - Enterprise Management Department - Audit Committee and Audit Department."



Risk Control System

The Group adopts multi-level and multi-form training and education measures to enhance employees' awareness of and ability to prevent legal risks. In addressing the critical area of contract management, the Group has organized specialized training courses on "Precautions for Using Contract Templates," aiming to ensure that employees in contract management departments of both the headquarters and subsidiaries fully understand the requirements of standardized contract templates in practical applications. This is to mitigate potential legal disputes resulting from improper use or misunderstanding.



The Group also makes the maximum use of digital tools and platforms to establish an internal "Legal Knowledge Classroom," through which legal regulations interpretation, case analysis, and other relevant content are regularly disseminated every week. This initiative fosters continuous learning among all employees and keeps them updated on the latest legal regulations and trends.

The Group actively implemented various audits to comprehensively test and assess the compliance and risk status of the Company in internal control, fulfillment of economic responsibilities, and execution of specific projects. During the reporting period, the Group completed 16 audit projects, including 8 special audit projects, 4 internal control audit projects, 2 economic responsibility audit projects, and 2 infrastructure audit projects. The audited entities took timely corrective measures and improvement programs to address all the issues identified in the audits, thereby effectively reducing the Group's overall operational risks and safeguarding sound and efficient operations.

3.5 Business Ethics

TSP strictly complies with the *Anti-Unfair Competition Law of the People's Republic of China*, the *Interim Provisions on Banning Commercial Bribery* and other relevant laws and regulations, and newly revised the *Management Rules for Internal Audit Rewards and Punishments* during the reporting period, clearly defining the nature, scope, and penalties for acts of disciplinary violations, malpractice and corruption, and improving the management standards and bases.

The Group developed and implemented rigorous and disciplined measures to prevent any unethical behavior, from internal employee management to external supply chain cooperation.

Anti-corruption Precautions

Employees		Signing the <i>Employee Integrity Agreement</i> with labor contracts
Suppliers		Signing the <i>Integrity And Compliance Commitment</i> with contracts between suppliers or including integrity-related clauses in the contracts
Customers		Including integrity-related clauses in sales contracts with customers

The Group constructed a sound reporting and processing mechanism to further strengthen the internal integrity-building and anti-corruption efforts. The sources share flexible ways of reporting, including but not limited to calling a dedicated reporting phone, sending a text message to a designated number, submitting a report via the official WeChat account, sending an e-mail, submitting a written report, or reporting face-to-face. The Group's Audit Department receives all reported information, and records, verifies, investigates, and handles strictly per the established workflow.

The Group attaches great importance to protecting the rights and interests of sources and undertakes to keep the identity of all sources, the content of the report, and other relevant information strictly confidential. The Group bears zero tolerance for any information leakage or retaliation of sources and takes stringent measures including but not limited to fines, and termination of labor contracts and legal prosecution, to effectively safeguard the legitimate rights and interests of sources.



During the reporting period, the Group conducted anti-corruption training on the theme of "Self-restraint & Dedication, Steadiness & Prosperity" in the headquarters, bases, and subsidiaries, introducing the relevant concepts, case studies, corrective mechanisms, and how to enhance the ability to resist and prevent corruption and the awareness of practicing with integrity.

During the reporting period, the Group engaged in neither corruption, bribery, extortion, fraud, and money laundering in violation of business ethics, nor any litigation cases arising from corrupt practices.



4

Driven by
Innovation
to Enhance Service Quality

4.1 Adherence to Scientific Research Innovation

Scientific research innovation continuously drives enterprises forward. TSP insists on improving product and service quality and market competitiveness through scientific research innovation.

● Scientific Research Innovation Management System

The Group formulated the *Management System of the Research& Development Department*, the *Management System of the Technology Department*, the *Incentives for Job-related Scientific and Technological Innovation*, the *Management Measures for Declaring Government Funding Projects*, the *Management System for Patent Work*, the *Management System for Declaring Standards*, the *Management System for System Certification*, etc. to standardize and encourage scientific research innovation. The Group also set up a management system and a team for scientific research innovation projects.

Research & Development Project Management and Implementation Process



R&D Investment and Proportion of R&D Personnel

R&D Investment	RMB 212,561,300	Proportion of R&D Personnel	17.98%
----------------	------------------------	-----------------------------	---------------

The Group established an incentive mechanism for scientific research innovation to achieve wider participation in scientific research activities. Based on *Incentives for Job-related Scientific and Technological Innovation*, etc., the Group set up incentives for job-related inventions, the declaration of external honors and projects, the participation in the formulation of standards, as well as the publication of papers and other behaviors, creating positive incentives for employees' innovations.

Employee Science and Technology Innovation Incentives

Scientific and Technological Innovations	Incentive Description
Job-related inventions	Awarding bonuses based on invention patents, utility model patents, software copyrights, trademark rights, etc.
Declaration of enterprise qualifications (honor), government projects, special projects for scientific and technological achievements	Awarding bonuses based on project type
Participation in formulating national standards, industry standards and local standards	Awarding bonuses in proportion to the Matching incentive funds of the government and social organizations if any For those without accompanying government or social organization reward funds, a certain bonus will be distributed according to regulations.
Participation in developing corporate standards	Specifically formulating the incentive program for implementation upon Approval by the general manager on a case-by-case basis
Individual accomplishments	Awarding as required by the Human Resources department
Published papers	Awarding bonuses according to the level of the Journal in which the paper is published

● Technological Innovation and Application

During the reporting period, the Group promoted an innovation strategy and focused on the research, development, and application of emerging technologies to initiate and substantially advance the research programs of six new technologies. At the end of the reporting period, the Group has completed the in-depth research and development of three of these technologies and realized the application in specific business scenarios.

2023 Technological Innovation Projects

- Intelligent Cutting Process Development for Wind Tower Door Frame
- Construction Applicability Welding Evaluation Test on Q500MD Steel Plate for Wind Power
- Backing Deep Penetration Welding Process Development
- Intelligent Welding Technology Development for Wind Tower Door Frame (under development)
- Robot Cleaning Equipment of Tower Exterior Wall (under development)
- Tower Automatic Spraying Equipment (under development)

Second Prize in the Science and Technology Advancement of Mechanical Industry Science and Technology Award

TSP Blue Island, a subsidiary of the Group, won the Second Prize in the Science and Technology Advancement of Mechanical Industry Science and Technology Award issued by the China Machinery Industry Federation for the project of "Research and Application of Key Technologies for Efficient and Controllable Construction of High-Bearing Offshore Ultra-Large Wind Power Foundation Equipment "



During the reporting period, the Group obtained many honors and awards for scientific research innovation based on the above scientific research innovation management system and measures.

Honors for Scientific Research Innovation During the Reporting Period



2023 Zero Carbon City Innovation Model Award - Global Zero Carbon

Research & Development and Industrialization of Key Technologies for Efficient and Controllable Construction of Offshore Wind Power Super-large Basic Equipment - First Prize of Jiangsu Provincial Science and Technology

Industry-Academia Exchange and Cooperation

The Group understands the importance of in-depth industry-university-research cooperation and builds strategic bridges with many colleges and universities, closely centered on scientific research and technological innovation for in-depth cooperation. The Group gives full play to its experience and strength in production and manufacturing to cooperate with the scientific research resources and talents intellectual advantages of colleges and universities, jointly promoting technological research and development, and accelerating the training of industry talents.

Industry-Academia-Research Cooperation Program

Cooperating Units	Project Name	Starting And Ending Time	Results Or Expected Results
Tongji University	Research on Deformation Monitoring Technology of Super-large Pipe Piles for Offshore Wind Power	2022.5.1 - 2025.12.31	· Obtained one Authorized invention patent, · Drafting a national standard <i>Foundation health monitoring for offshore wind power</i>
Zhejiang University	Calculation of Welding Temperature Fields and tresses in Large Bearing Pipe-Tube Steel Joist Structures	2023.6.1 - 2023.12.31	· Applied for one Invention patent · Published one paper
Anhui University of Technology	Research on Key Process Optimization Technologies for the Construction of Offshore Wind Power Conduit Rack	2023.1.1 - 2024.12.31	· Applied for three invention patents, including one authorized invention patent

Postdoctoral Programme Station of TSP Blue Island

During the reporting period, TSP Blue Island, a subsidiary of the Group, established a Postdoctoral Programme Station to provide a research platform and a practice site for high-end academic talents and to further promote Industry-Academia-Research exchanges.



4.2 Enhancement of Product Quality

Product Quality Management System

TSP adheres to the core value concept of "Precision manufacturing, Sincerity leads to success" and always puts product quality in the important position of enterprise development.

The Group complies with the *Product Quality Law of the People's Republic of China* and other relevant laws and regulations, and formulated the *Quality Performance Appraisal Management System* and the *Management Measures for Unannounced Inspection and Sampling Inspection of Non-Destructive Testing* from the headquarters level, as well as four control procedures of the *Procedures for Monitoring and Measuring Control of Products*, the *Procedures for the Control of Product Marking and Traceability*, the *Procedures for Control of Unqualified Outputs* and the *Procedures for the Control of Corrections and Corrective Actions*, which constitute the basic systemic framework of product quality management to enhance the standardization of product quality management. Branch companies led by the documents of the headquarters formulate relevant product quality control documents according to the practical products. During the reporting period, the Company had neither quality and safety-related penalized incidents nor any litigation arising from the above matters.

The Group improves its quality management structure by setting up a Quality Department at headquarters and a Quality Management Department in each branch responsible for monitoring, inspecting, controlling, and improving the product quality. During the reporting period, many subsidiaries of the Group received the ISO 9001 Quality Management System Standard Certification.

ISO 9001 Certified Subsidiaries

Name of Subsidiary	Latest Certification Date
TSP Shanghai	June 8, 2021
TSP Dongtai	February 5, 2021
TSP Blue Island	August 2, 2021
TSP Baotou	September 23, 2022
TSP Yangzhou	June 20, 2023
TSP Xinjiang	November 7, 2021
TSP Mulei	November 13, 2022

• **Quality Performance Appraisal**

The Group established a three-tier quality performance appraisal management framework of "Quality Performance Appraisal Leading Group - Quality Performance Appraisal Standing Working Group - Functional Departments and Subsidiaries" for quality enhancement.

The Group's "Quality Performance Appraisal Leading Group" is the decision-making center of the whole appraisal system, and the "Quality Performance Appraisal Standing Working Group" specifically implements and executes the quality appraisals. The quality performance appraisal mechanism penetrates all functional departments and subsidiaries as a grassroots quality management network to ensure that the entire product quality runs through production, sales, and service, thereby steadily improving the Group's overall product quality level.

Quality Performance Appraisal Management Framework

Management Level	Responsible Department	Main Duties
Quality Performance Appraisal Leading Group	Manager's Office	<ul style="list-style-type: none"> Reviewing measures for the management of quality performance appraisal, developing and revising related systems; Making decisions on major issues in the operation of the quality performance appraisal management system; Deliberating and determining the final results of the quality performance appraisal of the Quality Department and Subsidiaries; Accepting quality performance appraisal appeals; Other related duties that the Company's Quality Performance Appraisal Leading Group should perform.
Quality Performance Appraisal Standing Working Group	Quality Department	<ul style="list-style-type: none"> Formulating and improving quality performance appraisal management-related systems and processes;
	Enterprise Management Department	<ul style="list-style-type: none"> Organizing to develop quality appraisal indicators for the departments, branches, and subsidiaries according to the Company's annual strategic objectives and business plans;
	Marketing Department	<ul style="list-style-type: none"> Organizing quality performance appraisal, and timely solving related issues; Reviewing the performance appraisal complaints from the heads of Functional Departments and Subsidiaries and putting forward preliminary opinions to submit to the Quality Performance Appraisal Leading Group for decision-making and processing.
Functional Departments, Branches and Subsidiaries	<ul style="list-style-type: none"> Heads of the Quality Department and Marketing Department Heads of Subsidiaries 	<ul style="list-style-type: none"> Determining and adjusting annual quality performance appraisal indicators; Assisting the responsible leader in managing the quality performance appraisal; Assisting the Quality Performance Appraisal Working Group in providing timely and relevant data, and being responsible for its interpretation; Complaining about issues related to quality performance appraisal and providing appropriate information.

The Group completes the appraisal under the quality performance appraisal management framework by the end of March each year and formulates the appraisal objectives for the current year. The appraisal indicators are divided into three categories: quality loss in the production process, quality complaints of domestic projects and foreign projects.

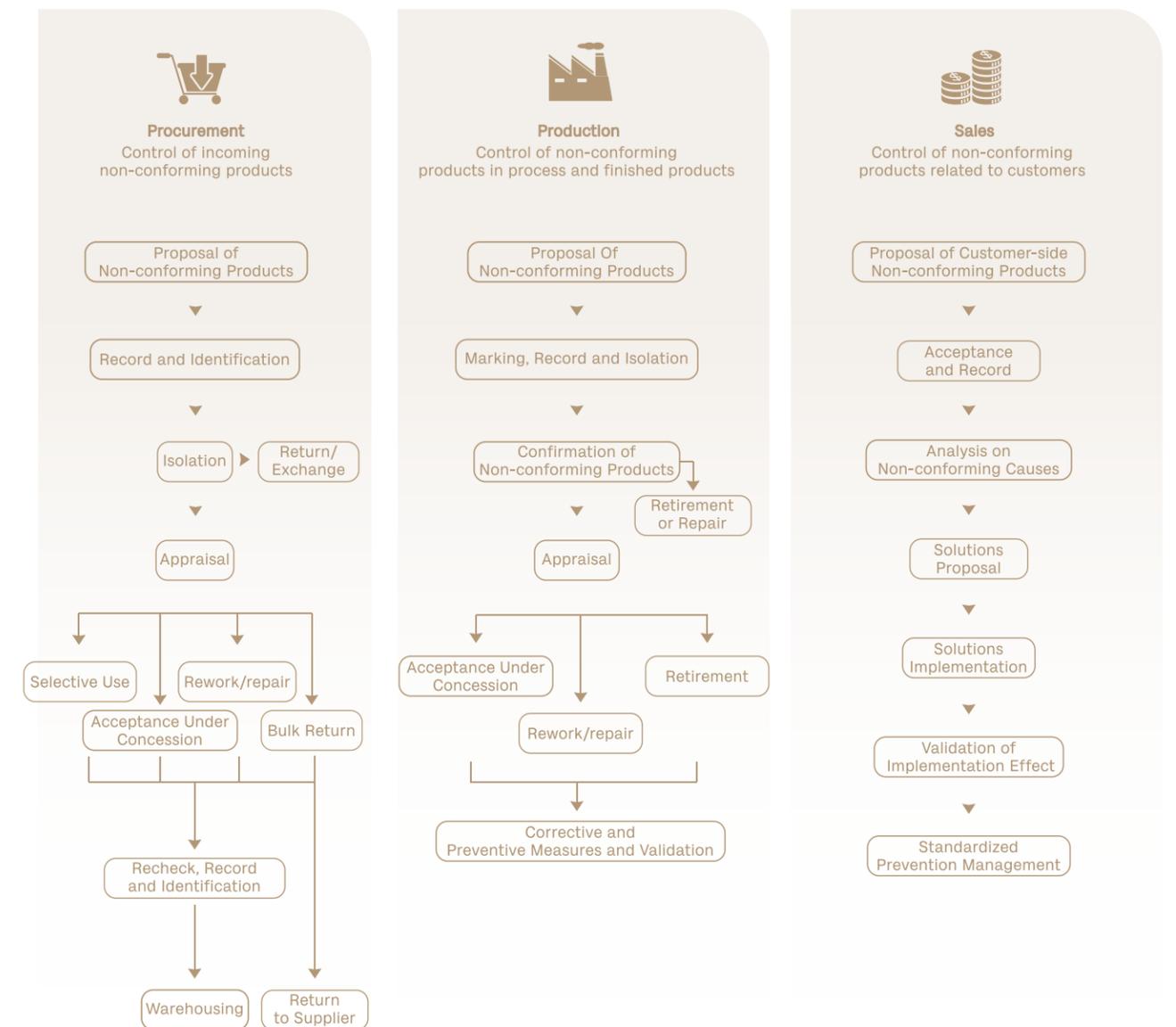
The Group continuously tracks and analyzes the entire process of quality performance appraisal management, regularly solicits management opinions from the responsible departments and relevant staff members, and promotes the participation of the responsible departments through the setting of observational indicators to continuously improve and optimize the system.

• **Manufacturing Inspection and Nonconforming Product Control**

The Group established processes to inspect raw materials (main materials, welding materials, etc.), semi-finished products (welding, dimensions, etc.), and finished products (installation of internal parts, film thickness, appearance, etc.). The Group handles quality issues identified during inspections per the requirements of procedural documents.

The Group establishes a complete mechanism for quality supervision, inspection, and handling of unqualified products in the procurement, manufacturing, and sales processes.

Quality Control Processing Mechanism



• Outgoing Product Inspection

Welding quality affects the safe operation of wind power generation infrastructure equipment. The Group conducts unscheduled unannounced inspections and sampling inspections on qualified products to ensure that the welding meets the requirements of the technical specifications in use and to reduce the quality risks. During the reporting period, the Group carried out unannounced inspections in subsidiaries, proposed suggestions, and followed up the improvement.

Handling Process for Products Found to be Exceeding the Standard Defects in the Unannounced Inspection and Sampling Inspection



• Quality Culture Construction

The group attaches importance to the construction of a product quality culture. During the reporting period, the group established a monthly quality meeting system to discuss quality issues and their handling methods, enhancing communication among subsidiary companies regarding product quality management and reducing the probability of recurring quality issues. During the reporting period, the subsidiaries organized 106 trainings on the topic of product quality, with attendance of 964 times.

106 Times
Theme Training

964 Times
Attendance

4.3 Optimization of Customer Service

• Customer Complaint Handling Mechanism

TSP adheres to the "Market-oriented, Technology-led, Customer-based" business philosophy to continuously improve customer service. The Group formulated the *Procedures for Managing Customer-Related Processes* at the headquarters level to standardize the customer service process. The subsidiaries formulated responsive system documents based on the headquarters' documents and their practical condition to guide the customer service for relevant departments and employees.

The Group set up a complaint channel and a mechanism for handling customer complaints. Customers can provide feedback and suggestions by e-mail, telephone, and notice letter. The Group clarifies the timeframe for handling customer complaints to address customer concerns. The Group provides written feedback on customer complaints within 2 working days, replies on immediate improvement measures within 3 working days, and the implementation within 2 weeks. During the reporting period, all customer complaints have been fully resolved and addressed, achieving a 100% complaint resolution rate.



Customer Satisfaction Survey Process



• Customer Satisfaction Survey

The Group formulated the *Customer Satisfaction Monitoring Procedures* to better understand customer services, established a complete customer satisfaction survey process, the Marketing Department serves as the monitoring department for customer satisfaction and conducts regular customer satisfaction surveys.



The Group conducts a written customer satisfaction survey on product quality, delivery period, service, and price after the completion of projects. During the reporting period, the Group invited customers to score the satisfaction of 25 key projects, with an average score of 8.97 out of 10.

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Win-win
Cooperation
to Boost Industry Development



5.1 Enhancement of Supply Chain Management

• Daily Management of Suppliers

The Group formulated the *Procedures for the Control of Externally Supplied Processes, Products and Services* at the headquarters level to establish and maintain a secure and competitive supply chain. It instructed subsidiaries to formulate the *Supplier Management Control Procedures*, the *Procurement Management Control Procedures*, the *Procurement Management Measures*, and other relevant documents according to their supplier management to standardize the procurement of materials and services, and the management of suppliers.

The Group established a supplier classification management system at the headquarters and subsidiaries according to different purchased materials and conducted regular appraisals and evaluations to ensure that the quality of purchased materials and services meets the manufacturing requirements.

Supplier Classification Management and Appraisal Measures

Hierarchy	Criteria for Classification of Suppliers	Appraisal and Evaluation Method
Group Headquarters	Class-A Suppliers: Supplying raw materials, key production equipment, and other important materials;	Class-A Suppliers: The technical quality department organizes a half-yearly field examination and scoring. Based on factors such as quality, price, delivery cycle, etc., the production capacity and quality assurance capability are evaluated.
	Class-B Suppliers: Supplying general materials other than important materials;	Class-B Suppliers: Generally, the Company does not rate unless an abnormal quality;
	Class-C Suppliers: Supplying low-value consumables and other related materials.	Class-C Suppliers: The company does not rate but requires a reasonable cost performance and in-place service.
Subsidiary	Class-I Suppliers: Important materials directly related to product quality in the bom;	Appraising all suppliers monthly, quarterly, and annually; The appraisal mainly includes quotation timeliness, satisfaction with the execution of daily affairs, timely delivery, quality of incoming materials, the number of Non-Conformance Report (NCR) Forms, the Quality Information Framework (QIF) Feedback, and EHS facts;
	Class-II Suppliers: Other bom materials and more important materials;	There are Class-A, Class-B, Class-C, and Class-D suppliers. The Company conducts interview warnings for Class-C suppliers. For suppliers that receive a D grade, besides conducting warning interviews, disposal plans will be formulated based on the actual deduction situation and the severity of the issues through internal supply chain meetings.
	Class-III Suppliers: Non-project bom materials procured in the market.	Preparing an annual summary report based on the appraisal and evaluation of suppliers.

As of the end of the reporting period, the total number of qualified suppliers for the Group's headquarters and its subsidiaries amounted to 1,203. All suppliers have signed the Supplier Code of Conduct through contract terms and other agreed-upon methods."

• Supplier ESG Management Measures

The Group attaches importance to the ESG performance of suppliers, formulates the *Responsible and Socially Responsible Procurement Policy*, the *Green Supply Chain Management*, and other documents to regulate the ESG management of suppliers, integrates the principles of sustainability and responsibility into the Group's procurement, prohibits the procurement of any materials and services from suppliers who seriously pollute the environment or engage in serious socially irresponsible behaviors such as the use of child labor and forced labor, and prioritizes the procurement of products with better performance in the environment and climate.

Supply Chain ESG Management Measures

The company requires qualified suppliers to conduct self-appraisal of social responsibility. The procurement department reviews and scores the self-appraisal information provided by the supplier, and only those with a score over class 3 continue to be qualified suppliers of the company.

The number of suppliers with certificates for the quality management system required by GB/T 19001, the occupational health and safety management system required by GB/T 45001, and the environmental management system required by GB/T 24001 exceeds 80% of the total number of suppliers.

The number of suppliers with the energy management system certification by GB/T 23331 or ISO50001 exceeds 10% of the total number of suppliers.

The Company encourages its suppliers to use energy-saving and environmentally friendly processes/equipment belonging to the recommended category of the *Guidance Catalog for Industrial Structure Adjustment*.

The Company establishes an annual green supply chain training mechanism for suppliers for at least one training every year.

During the reporting period, the Group's headquarters and its subsidiary companies conducted ESG audits on multiple suppliers and found no significant issues related to severe environmental pollution or major concerns such as child labor or forced labor."

5.2 Empowerment of Industry Development

TSP has grown into a professional manufacturer of onshore and offshore wind power equipment with global influence, huge production capacity, and rich products through a long time of industry accumulation and professional development. The Group participates in various industry exchange activities, and the process of formulating national and international standards to grasp the direction of industry development, influence, and guide to establish and improve industry norms.

During the reporting period, the Group participated in formulating 15 national standards, industry-recommended standards, and group standards, among which 8 were released during the reporting period, 2 were under approval and 5 were in the process of drafting.

National, Industry and Group Standards Participated & Published in 2023

<i>Ships and Marine Technology Marine Cranes Manufacturing Requirements (GB/T42689-2023)</i>
<i>Wind Energy Generation Systems -Tower and Foundation Design Requirements of Wind Turbines (GB/T 42600-2023 IEC 61400-6:2020)</i>
<i>Ships and Marine Technology Navigation and Shallow-water Engineering Vessels Anchor Winches (GB/T42799-2023)</i>
<i>Ships and Marine Technology - Marine Environment Protection - Tanks and Piping Systems for Facilitating 5 ppm Oil-water Separation (GB/T43124-2023)</i>
<i>Design Requirements for Auxiliary Components of Offshore Wind Turbine Foundations (NB/T 10988-2022)</i>
<i>Specification for Lifting Equipment of Offshore Wind Turbine External Platform (NB/T 10994-2022)</i>
<i>Guidance for Numerical Simulation Design of Hull Resistance (T/SAS0023-2023)</i>
<i>Weathering steel plates for wind power towers (T/SSEA 0260-2023)</i>

The Group takes the initiative to participate in important seminars, forums, and summits in the industry, etc., tracking in real-time and discussing in depth the latest trends, cutting-edge technologies, and hot topics in the industry, to maintain a high degree of sensitivity to and a precise grasp of the dynamics of the industry.

During the reporting period, the Group participated in many events with significant impact and was invited to share knowledge and experience as an industry representative, joining hands with peers to promote the industry development.

Important Industrial Events Participated in 2023

- 6th Offshore Wind Asia Summit 2023
- Tower Lightweight Design Review and Project Development Meeting
- 6th Congress of Jinshan District Science and Technology Association
- Seminar on New Steel Technology for Wind Turbine Tower and Baowu New Product Launch Event
- 27th National Welding Conference 2023, making a speech on welding technology research for tower manufacturing on behalf of tower manufacturers
- 2023 International Symposium on High Performance Steel for Wind Power, making a speech on welding quality control of high performance steel for wind power on behalf of tower manufacturers

● TSP Participating in the 6th Offshore Wind Asia Summit 2023

In November 2023, TSP exhibited at the 6th Offshore Wind Asia Summit 2023, jointly organized by the Shanghai Industrial Cooperative Association, WFO, and China Decision Makers Consultancy (CDMC), with the theme of "Precision Manufacturing for Onshore-Offshore Coexistence." TSP delivered in detail at the meeting its industry position in business scale, production capacity planning, product quality, technological advantages, and research and development capabilities, exchanged with industry peers from around the world about offshore wind products and services, and discussed the future of the offshore wind power industry in Asia.



Offshore Wind Asia Summit



People
Oriented
for a Harmonious Workplace

6

6.1 Employment and Employee's Benefits

The Group strictly complies with the *Labor Law of the People's Republic of China*, the *Labor Contract Law of the People's Republic of China*, the *Law of the People's Republic of China on the Protection of Minors*, the *Law of the People's Republic of China on the Promotion of Employment*, and the *Special Provisions of the People's Republic of China on the Labor Protection of Female Workers and Employees*, etc.

The Group established a complete system for employee recruitment, attendance and leave, remuneration and performance, and termination of employment to regulate the employment and the benefits protection of employees. All of the Group's system documents related to the immediate interests of employees are formulated based on full communication and exchange with the employees and submitted to the Company's Staff Representative Meeting for consideration and approval before implementation.

The Group Headquarters formulated management documents such as the *Employee Manual* and the *Human Resources Management System* and guided subsidiaries to formulate relevant norms like the *Human Resources Management Control Procedures*, the *Recruitment and Employment Management Regulations*, the *Entry Management Regulations*, the *Probationary Period Management Regulations*, the *Personnel Appointment and Removal Management Regulations*, and the *Internship Management Regulations*.

The Group aims to establish systematic processes and norms for employee recruitment, onboarding, and probation, as well as the appointment and removal of staff and internships.

The Group adheres to the legal employment of labor and prohibits the employment of child labor and forced labor. In the recruitment process, the Group strictly checks the age of candidates to prevent minors from being listed in the Company's roster of candidates. The Group conducts a secondary verification of the identity information of employees at the time of joining the Group, establishes a roster of all employees, and conducts identity checks regularly. The subsidiaries formulate the *Child Labor Rescue Plan* and other system documents and strengthen the check by the Human Resources Department beforehand to avoid the recruitment of child laborers. The subsidiaries shall immediately stop the work of child laborers admitted to the plant or discovered afterward, report to the local Human Resources and Social Security Bureau, and offer the necessary health inspections and financial assistance.

During the reporting period, the Group's Headquarters signed with labor contract workers, and the subsidiaries signed with labor contract workers, outsourcing workers, and interns. The Group and its subsidiaries bore no penalties by the administrative departments for violating national labor laws and regulations on employment.

The Group safeguards the legitimate rights and interests of employees. The Group's Headquarters formulated the *Attendance and Leave Management Measures* and other management systems closely related to the immediate interests of employees, and guided subsidiaries to formulate the *Leave and Attendance Management Provisions*, the *Overtime Management Provisions*, and other standardized documents in light of practical circumstances. The Group discourages overtime work in principle and compensates employees who work overtime for special reasons by transferring them to another day off or granting them overtime subsidies, etc., to protect the rights and interests of employees.

The Group implements reasonable remuneration and performance management policies. During the reporting period, the Group's Headquarters prepared the *Annual Performance Appraisal Program* to achieve fair and impartial performance appraisal for employees through multi-dimensional and 360-degree assessments.

The Group requires heads of departments to conduct performance interviews, provide feedback on the results of performance appraisals, and also propose improvement plans in the Performance Appraisal Program. Meanwhile, each subsidiary under the group has established relevant management systems in accordance with the requirements of the headquarters and conducted monthly performance assessments separately.

The Group strictly follows the relevant provisions of the Labor Contract Law to equally negotiate with employees, respect their opinions, and make post adjustments or economic compensation in termination of employment. During the reporting period, TSP Dongtai under the Group decided to cease production due to adjustment of company's production capacity planning, which involved a small-scale workforce optimization.

The Company fully communicated with its employees before workforce optimization and encouraged them to continue working in other production bases of the Company. More than 30 employees were transferred to other posts within the Company. Other employees chose to terminate their labor contracts with the Company due to the geographical location of work. The Company strictly followed the relevant provisions of the Labor Contract Law and internal management documents to provide economic compensation to the employees.

6.2 Employee Communication and Care

• Employee Care

The Group fosters a happy and harmonious working atmosphere. It provides all employees with supplementary insurance, various subsidies, holiday gifts, and other welfare benefits besides the statutory basic rights and interests, and strives to create a harmonious and warm working environment and corporate culture to enhance the employees' sense of belonging to the Group as well as their recognition of company value.

The Group focuses on the care of female employees and protects their rights and interests by granting holiday leave, health care, and childcare facilities besides the statutory rights and benefits such as parental leave.

Employee Care and Benefits Measures

Basic Benefits			Care for Female Employees
<ul style="list-style-type: none"> Organizing regular physical examinations 	<ul style="list-style-type: none"> Providing supplementary commercial insurance such as accident insurance 	<ul style="list-style-type: none"> Providing high-temperature allowance for front-line staff 	<ul style="list-style-type: none"> Carrying out Women's Day activities and giving female employees half a day off Providing women's health examination Providing care facilities like mother and baby rooms
<ul style="list-style-type: none"> Providing allowance for working meals or free working meals 	<ul style="list-style-type: none"> Providing free staff dormitory 	<ul style="list-style-type: none"> Wintertime and summertime working system 	
<ul style="list-style-type: none"> Giving gifts on holidays 	<ul style="list-style-type: none"> Giving employee condolences for weddings, funerals, or serious illnesses 	<ul style="list-style-type: none"> Organizing various amateur interest activities 	



• Communication with Employees

The Group cares about the voices and demands of employees, builds online and offline multi-channel communication mechanisms, and encourages them to express their interests and demands and to put forward opinions and suggestions for the Group's development, to create a harmonious and open working environment.

2023 Practices to Facilitate Communication with Employees

Labor Union and Staff Representative Meeting	The Company regularly holds the annual Staff Representative Meetings to consider rules and regulations concerning the immediate interests of employees. Employees can raise their demands to the Company through the Labor Union.
Providing Reporting E-mail Address	Employees can report incidents of discrimination, harassment, unethical business practices, etc., and the employees involved to the Group via the reporting e-mail address
Conducting Employee Satisfaction Surveys	The Company organizes employees to carry out service satisfaction surveys of functional departments, gives feedback on the results of the survey, and requires each department to optimize the employee structure per their opinions
Establishing Employees' Home	The subsidiaries set up Employees' Home as the circumstances may require, launch the "Caring" hotline to listen to the front-line employees, and bond to promote the harmonious development of the Group

6.3 Employee Training and Development

TSP adheres to the talent development concept of "Equal Stress on Integrity and Ability for the Pooling of the Talented and Capable Elites in the World," formulates a sound system of talent introduction, and employee training and incentives to promote the growth and development of employees and the Group.

The Group carries out the "Gold and Blue Collar Plan" to efficiently introduce external talents through social recruitment, campus recruitment, and internal and external recruitment to lay a solid foundation for the long-term development of the Group. During the reporting period, the Group achieved a fill rate of over 90% for vacant positions, a pass rate of 92% for new hires during the probationary period, an increased rate of 9% for master's degree holders, and the establishment of the management trainee team "from ground zero to one" was achieved at the same period of time.

The Group established a sound employee training management system to enhance the competence of employees and their understanding of various aspects of work. During the reporting period, the Group's Headquarters revised the *Measures for the Administration of Employee Training* to comprehensively cover employee training. Subsidiaries formulated the *Training Administration Regulations* and other management systems according to the Group's requirements.

Employee Training in the Headquarters and Subsidiaries (Partial) in 2023

The Group's Headquarters implemented a three-tier training system, i.e., Company level, subsidiary level, and team level. During the reporting period, the Group organized many professional and technical training like certification training for special types of work and production skill training for employees, concerning more than 300 training participants, including employees at middle and senior levels and the front line of the Company.

TSP Blue Island organized 21 training activities during the reporting period, covering the core departments of the base, like the Production Department, Quality Department, Technology R&D Department, Safety and Environment Department and Human Resources Department. The training activities were carried out through a combination of internal and external ways, and the effectiveness of the training was examined through on-site Q&A to ensure the quality of the training.

TSP Xinjiang organized 8 training activities covering all employees during the reporting period, which were themed on important topics such as professional skills. It provided targeted skill training for individual groups of employees, like new hires and VT inspectors. The aim was to provide employees with training courses that are most suitable for their post responsibilities and to promote their abilities.

In respect of employee development, the Group's Headquarters formulated management systems such as the *Employee Post Level Program* and guided each subsidiary to prepare employee appraisal and promotion systems like the *Performance Appraisal Provisions* and the *Employee Post Competency Measurement Management Measures*, establishing dual development channels for employees in management positions and professional and technical posts.

During the reporting period, the Group and its subsidiaries selected advanced collectives and individuals for the year 2023. They intended to encourage collectives and individuals with outstanding achievements during the reporting period by praising the advanced and setting up typical examples, foster the employees' collective sense of honor, sense of responsibility and sense of mission, and stimulate the enthusiasm of the employees for their work and personal technical enhancement.

6.4 Occupational Health Protection

The Group strictly complies with the *Law of the People's Republic of China on Prevention and Control of Occupational Diseases* and other relevant laws and regulations. The Group spares no efforts to safeguard the occupational health of its employees by means of system regulation, identification and management of occupational disease hazards and occupational health protection.

The Group's Headquarters specifies the management system of employee occupational health and safety in the *Employee Manual*, the employees facing potential occupational health risks are required to wear protective measures during working hours. Subsidiaries formulate detailed management systems such as the *Environment, Occupational Health and Safety Manual* and the *Occupational Hazard Management*, incorporating employee occupational health into the daily operation of the bases. As of the end of the reporting period, subsidiaries like TSP Shanghai, TSP Xinjiang and TSP Blue Island have obtained ISO45001 Occupational Health Management System Certification.

The Group organizes annual health examinations for occupational diseases, conducts real-time monitoring of employees exposed to occupational hazards, and provides adequate occupational health protection for employees through multi-dimensional actions.

Occupational Health and Safety Protection Measures

Protection of the Working Environment	<ul style="list-style-type: none"> ● Setting up danger signs in hazardous areas
Staff Protection	<ul style="list-style-type: none"> ● Providing safety protection facilities such as welding fume collector, dust collector, ventilator, VOC treatment facilities, etc. ● Informing employees of the hazards of occupational disease posts and providing training during their entry into the Company, and enhancing their awareness of occupational health protection ● Providing employees with labor protection gears and proper protection ● Conducting annual pre-employment physical examination and adjusting the posts of employees who are found to have occupational contraindications in time to get them out of the environment of the occupational disease hazards

6.5 Ensuring Work Safety

● Safety Management System

Work safety is critical to the sustainable and stable development of enterprises. TSP strictly abides by the *Work Safety Law of the People's Republic of China*, the *Management Measures for the Extraction and Use of Corporate Work Safety Expenses*, the *Determination Standards for Hidden Dangers of Major Accidents of Industrial and Trade Enterprises*, and other relevant laws and regulations. To further standardize the work safety and emergency management, the Group guides the subsidiaries to formulate a number of system documents on work safety and emergency management based on their own actual production conditions.

Subsidiaries' Work Safety Management Documents (Partial)

TSP Shanghai	● <i>EHS Operation Control Procedures, Emergency Preparedness and Response Management Procedures</i>
TSP Blue Island	● <i>Emergency Response Plan for Work Safety Accidents, Work Safety Responsibility System, Rated Control and Management System of Safety Risks, Hidden Danger Identification and Management System</i>
TSP Xinjiang	● <i>Environmental, Occupational Health and Safety Manual, Standardized Safety System</i>

● Safety Risk Assessment

The Group endeavors to strengthen the management of work safety, enhance the ability of accident prevention and control, effectively prevent serious work safety accidents and reduce safety risks. The Group guides its subsidiaries to establish a safety risk identification and assessment system to categorize and classify the possible risks and provide corresponding measures to deal with them. Based on this standard, each subsidiary sets up an evaluation team to conduct hazard identification and risk evaluation, and guides the relevant departments and employees to implement the system based on the evaluation results.

The Group instructs its subsidiaries to establish a work safety identification and assessment mechanism. It categorizes risks into five levels, clearly defines the assessment criteria for each risk level, and specifies corresponding control measures and rectification deadlines in accordance with the degree of hazard of the risks.

● Safety Inspection Mechanism

The subsidiaries of the Group conduct systematic and comprehensive safety inspections for each production process to reduce potential dangers. The types of inspections include comprehensive inspections, specialized inspections, seasonal inspections, holiday inspections and daily inspections. For general problems found in the inspections, the subsidiaries shall issue the *Hidden Danger Rectification Notices* based on the inspections and require the relevant responsible departments to rectify the problems within a certain period of time.

For major hidden dangers found in the inspections, the subsidiaries shall organize the formulation of hidden danger management plans, take emergency precautionary measures immediately, and report the hidden dangers to the local safety supervision and management authorities in written form.

Safety Inspection Measures

Comprehensive Inspection	<p>The inspection mainly includes: the implementation of the safety management system and fire safety management system, the environmental conditions of the site, safety warning signs, the integrity of safety facilities and fire facilities, the process conditions of each post and the implementation of process indicators, the integrity of electrical facilities and the mechanical equipment of each post, raw materials warehouse, finished goods warehouse, accessories warehouse, theft prevention and the rectification of the hidden dangers on the site, etc. The above inspections are on a monthly basis.</p>
Specialized Inspection	<ul style="list-style-type: none"> ● The inspection mainly includes: electrical facilities and fire prevention. The inspection of electrical facilities is on a monthly basis and the fire prevention inspection is on a quarterly basis.
Seasonal Inspection	<p>The inspection is subject to the seasons, with spring inspections focusing on fire prevention and lightning protection, summer inspections focusing on rain prevention, flood prevention and heat stroke prevention, autumn inspections focusing on wind and fire prevention, and winter inspections focusing on the "four precautions in winter."</p>
Holiday Inspection	<ul style="list-style-type: none"> ● The inspection mainly includes: the safe operation status of all kinds of equipment and electrical facilities, fire and theft prevention in each warehouse, etc. The above inspections are carried out before legal holidays.
Daily Inspection	<ul style="list-style-type: none"> ● The inspection mainly includes: operation of equipment by production employees, fire safety, use of protective equipment, unsafe factors or hidden dangers, work safety violations, and implementation of safety inspections.

• Work Safety Training

During the reporting period, the Group's Headquarters and subsidiaries organized a number of activities to enhance safe work capacity, including safety training for new employees, training on work safety topics, work safety month, safety emergency drills, etc., and set up warning signs in hazardous areas. These efforts effectively bolstered employees' awareness of work safety and reduced the risks of work safety accidents. During the reporting period, no major work safety accidents occurred at the Group's Headquarters and subsidiaries.



| Operation Safety Training

In January 2023, TSP Shanghai, a subsidiary of the Group, carried out safety training on the topic of post operating procedures. The training was intended to assist employees in further understanding and mastering the necessary knowledge and skills of the post operating procedures, as well as correctly comprehending and implementing the relevant operating requirements to avoid safety accidents and production losses caused by improper operation.



| Safety Education and Training

In 2023, TSP Blue Island, a subsidiary of the Group, organized and carried out a series of safety education and training sessions, including gas safety education, safety education for special operators, MSDS education for hazardous chemical practitioners, limited space safety education for production sites, ground operation qualification certificate training, elevated vehicle operation qualification certificate training and so forth. These efforts comprehensively enhanced the employees' awareness of work safety.



| Firefighting Training

In November 2023, TSP Yangzhou, a subsidiary of the Group, worked in concert with the local fire brigade and 45 staff members of the surface treatment workshop to jointly organize an emergency drill training on fire fighting and evacuation. The aim was to learn about emergency escape, to gain a comprehensive understanding of the fire risks and countermeasures of the surface treatment workshop, and to enhance the ability to respond to emergencies.





Following the Concept of
**Environmental
Protection**
for Green Development



7.1 Environmental Management System

TSP upholds the concept of green development, actively promotes the establishment of environmental management system, and strictly abides by the *Environmental Protection Law of the People's Republic of China* and other relevant laws and regulations.

Under the guidance of the Group's Headquarters, each subsidiary, taking into account the environmental management needs of its own production and manufacturing processes, formulates environmental management-related system documents such as the *EHS Operation Control Procedures* and the *Environmental Factor Identification and Management Procedures* to standardize the environmental-related affairs in each link.

During the reporting period, to enhance employees' awareness of environmental management, the Group's Headquarters and subsidiaries organized a number of environmental management-related trainings. Those trainings were intended to assist participants to better understand environmental protection laws and regulations, policies and systems, and environmental protection technologies.

Subsidiaries Actively Conduct Environmental Management Training

In May 2023, TSP Shanghai, a subsidiary of the Group, carried out the Environmental Protection Training to introduce the Company's current environmental protection objectives and status, enhance the participants' awareness of environmental protection and strengthen the environmental management capability.



Environmental Protection Training

In September 2023, TSP Blue Island, a subsidiary of the Group, organized the Training on VOCs Control Equipment Project in the Painting Room of TSP Blue Island. Through the training, to help staff in relevant departments understand and master equipment operation methods, thereby increasing familiarity with equipment operation, reducing VOC pollution, and enhancing environmental management capabilities.



Training on Control Equipment Project of TSP Blue Island

The Group's efforts in establish environmental management system, environmental management system certification and environmental management training have achieved remarkable results. As at the end of the reporting period, the Group's subsidiaries, including TSP Shanghai, TSP Blue Island, TSP Dongtai, TSP Baotou and TSP Xinjiang, had obtained ISO14001 environmental management system certification. During the reporting period, Shanghai Taisheng Wind Power Equipment Co., Ltd. was listed among green plants of the Ministry of Industry and Information Technology for the year 2023, highlighting the Group's outstanding performance in environmental management.

7.2 Resource Management

The Group attaches great importance to the management of energy and water resources, etc., and values them as an important part of the sustainable development of the Group. It is committed to improving the efficiency of energy utilization and reducing the consumption of water resources.

The energy consumed by the Group mainly includes natural gas, propane, fuel oil, electricity, etc., and directly or indirectly results in certain greenhouse gas (GHG) emissions. To enhance the efficiency of energy utilization and reduce the cost of energy usage, the Group instructs its subsidiaries to formulate management systems like the *Energy Review Management Procedures*, the *Energy Performance Management Procedures*, the *Energy Benchmarking Management Procedures*, the *Energy Data Management Procedures* and the *Energy Design Management Procedures*, etc., based on the environmental management needs of its own production and manufacturing process. Those systems are intended to guide the management of energy in the production and manufacturing process. As at the end of the reporting period, TSP Shanghai, a subsidiary of the Group, passed the ISO 5001 energy management system certification.

Major Types of Energy Usage and Consumption

Energy Types	Energy Consumption
Natural gas consumption	5,277,955.51 m ³
Propane consumption	151,563.00 m ³
Fuel oil consumption	170.00 t
Purchased electricity consumption	37,059.10 MWh

During the reporting period, the Group guided its subsidiaries to actively implement energy conservation measures. TSP Shanghai, TSP Blue Island and other subsidiaries replaced the diesel forklifts used in their plants with electric forklifts to reduce the consumption of diesel.

The Group's use of water resources is mainly for domestic use and the source of water is municipal water. To minimize the waste of water resources, the Group and its subsidiaries install water conservation signs at the water points and remind employees of the conservation of water resources in their daily management to bolster their awareness of water conservation.

7.3 Emissions and Waste Management

Wastewater Management

The wastewater in the subsidiaries of the Group is mainly domestic wastewater, which is discharged directly through the municipal pipeline network. There is no industrial wastewater in the production process, and the production base recycles the cooling water used for machining.

The Group strictly complies with the *Law of the People's Republic of China on Prevention and Control of Water Pollution* and manages wastewater discharges in accordance with the *Integrated Wastewater Discharge Standard (GB 8978-1996)*, the *Standard for Groundwater Quality (GBT14848-2017)* and other relevant standards.

To standardize the management of wastewater, the Group instructs its subsidiaries to formulate management documents such as the *Wastewater Management Regulations*. It entrusts professional third-party institutions to regularly monitor and inspect the indicators of five-day BOD, COD, ammonia nitrogen, pH value, suspended solids, total nitrogen and total phosphorus in the discharged wastewater, and issue monitoring reports. During the reporting period, the Group's Headquarters and its subsidiaries were not penalized for exceeding the standard of wastewater discharge.

● Exhaust Gas Management

The exhaust gases of the subsidiaries of the Group mainly originate from the processes of sand blasting, zinc spraying, paint spraying, cutting, sanding, welding and assembly. The main pollutants of the exhaust gas include: Particulate matter (PM), sulfur oxide (SOx), Nitrogen oxide (NOx), Volatile organic compounds (VOCs) and such.

The Group and its subsidiaries strictly comply with the *Law of the People's Republic of China on Prevention and Control of Air Pollution* and manage exhaust gas emissions in accordance with the *Integrated Emission Standard of Air Pollutants (DB32 4041-2021)*, the *Emission Standard of Air Pollutants for Surface Coating of Engineering Machinery and Steel Structure Manufacturing Industry (DB 32/4147- 2021)*, the *Standard for Fugitive Emission of Volatile Organic Compounds (GB 37822- 2019)*, and other relevant standards. To standardize the management of exhaust gases, the Group guides its subsidiaries to formulate management documents like the *Regulations on the Management of Air Pollutants* and adopt different disposal methods according to the types of exhaust gases.

Types of Exhaust Gases and Disposal Method

Exhaust Gas Type	Disposal Method
PM	Cyclone + bag filter (organized emissions) Welding fume dedusting purifier (unorganized emissions)
VOCs	Activated carbon adsorption + desorption and catalytic combustion (organized emissions)

● Waste Management

The Group strictly abides by the *Law on Prevention and Control of Environmental Pollution by Solid Wastes* and manages the storage and disposal of solid wastes and hazardous wastes in accordance with the *Standard for Pollution Control on the Non-hazardous Industrial Solid Waste Storage and Landfill (GB18599-2020)*, the *Standard for Pollution Control on Hazardous Waste Storage (GB18597-2023)*, and the *Technical Specification for Setting Identification Signs of Hazardous Waste (HJ 1276-2022)* and other relevant standards.

To effectively control the generation of waste and avoid the hazards caused by waste, the Group instructs its subsidiaries to formulate relevant management documents such as the *Solid Waste Control Procedures* and the *Hazardous Waste Management System*, and establish a mechanism for the classification, management and disposal of waste. The purpose is to minimize the negative impacts of waste on the environment and the health of personnel.

Types of Waste and Disposal Methods

Type	Waste	Disposal Method
General solid waste (recyclable)	Office waste paper, old books, old newspapers, cardboard boxes, wrapping paper, paper scraps, etc.	Recycling by third-party companies
	Wooden boards, wooden strips, wooden blocks, packaging wooden boxes, sample materials, etc.	Self-recycling
	Scrap nails, iron, scrap metal equipment and accessories scrap tools, metal cans, scrap trolleys, scrap iron pallets, welding slag, cutting slag, etc.	Recycling by third-party companies
General solid waste (non-recyclable)	Toilet paper, toilet roll, crushed dry food, foam lunch boxes, used ointment, etc.	Processing by third-party companies
	Foam, used gloves, cloths, mops, etc.	
	Tapes, grinding wheels, insulated gloves, razor blades, scarp stationery, waste computer parts	
Hazardous wastes	Waste engine oil, waste diesel, waste lubricating oil, waste mineral oil, etc.	Processing by qualified third-party companies
	Glue bottles and other empty bottles (oil, solvent), ink cartridges, toner cartridges, toner, thinners, paint buckets, waste developer, paint waste, etc.	
	Paint sludge, waste activated carbon, waste filter cotton, etc.	
	Lead-containing batteries, fluorescent tubes, etc.	

During the reporting period, the Group's Headquarters and subsidiaries were not penalized for exceeding the standards for waste storage and disposal.

7.4 Addressing Climate Change

To actively respond to climate change, the Group upholds the concept of sustainable low-carbon green development and implements the national targets of carbon peaking by 2030 and carbon neutrality by 2060. It makes great efforts to reduce carbon emissions and effectively address climate change challenge through energy management and transformation measures.

With reference to the recommendations of the International Sustainability Standards Board, the Group identifies the impacts on climate and the environment caused by its own operations, and builds a climate change management system at four levels, namely, governance, strategy, risk management, and indicators and targets. The Group aims to identify the risks and opportunities related to climate change, and to incorporate climate change mitigation and adaptation into its daily management.

Climate Change Management System

Governance	<ul style="list-style-type: none"> Incorporating climate change topics into material topics of concern to the Company, designating the Board of Directors to oversee and manage the Company's climate change topics; Relevant functional and operational departments include the management of climate change in their daily priorities.
Strategy	<ul style="list-style-type: none"> Actively identifying major sources of GHG emissions; Identifying the risks that climate change poses to the Company's operations and planning to incorporate climate change risks and opportunities into overall operational risk management.
Risk management	<ul style="list-style-type: none"> Combined with the advantages of wind power equipment manufacturing, investing and expanding business based on the wind power industry chain to promote the diversification of new energy business; Promoting the electrification of suitable production processes and exploring energy transitions to reduce GHG emissions from energy use; Encouraging employees to work in a green manner and choose low-carbon commuting ways to reduce GHG emissions.
Indicator and target	<ul style="list-style-type: none"> Regularly counting and disclosing GHG emissions and emission density, and evaluating the performance of companies in dealing with climate change management; Conducting out measurements based on consecutive years of GHG emission data to provide a basis for the development of quantitative climate targets.

In accordance with the ISO 14064 standard, the Group carries out internal carbon accounting for direct emissions in Scope 1 and indirect emissions from purchased energy in Scope 2. After accounting, the carbon emissions (Scope 1 and Scope 2) generated by the Group and its subsidiaries from their own production and operation during the reporting period amounted to 34,567.44 tons.

GHG Emissions

Indicator	Unit	Data 2023
Total GHG emissions	t CO ₂ e	34,567.44
Scope 1 GHG emissions	t CO ₂ e	13,363.24
Scope 2 GHG emissions	t CO ₂ e	21,204.21
GHG emissions intensity	t CO ₂ e/RMB 1 million	0.072

The Group is actively involved in the development, construction and operation of new energy resources. 2023, TSP Songxian invested, constructed and operated the 50 MW decentralized wind power project in Luoyang. After put into operation, the project shows an annual on-grid energy of 72,393.45 MWh, equivalent to savings 8,900 tons of standard coal and reduce 41,300 tons of carbon dioxide emissions annually. It has positive significance in promoting the development of green energy and assisting the State in realizing the goal of "carbon peaking and carbon neutrality."

Global Zero Carbon City Pioneer Award 2023 - Platinum

During the reporting period, the project of "High-performance Green Wind Power Steel Solution and Industrialization" declared by the Group and its partners, was awarded the "Global Zero Carbon City Pioneer Award 2023 - Platinum" by the Organizing Committee of Global Zero Carbon City Pioneer Award. The project was committed to contributing to the low carbon transformation of the city.



In the future, based on its own emissions, the Group plans to further identify the various risks and opportunities of climate change for the Company, including physical risks and transition risks. It intends to formulate measures to address the relevant risks and enhance the Company's adaptive capacity under the impact of climate change.



Building a
Warm Society
with Charity in Mind



8.1 Public Service Activities

With a high sense of responsibility, TSP has always been mindful of society and concerned about the local community. The Group and the subsidiaries carry out charitable activities with rich themes like public welfare donations, assistance to those in need, the disabled and the elderly, and rural revitalization to give warmth to the needy people.

During the reporting period, the Group's Headquarter and its subsidiaries made donations of more than RMB 546,700 for social welfare. Since its inception, the Group has made accumulated donations of more than RMB 4 million for social welfare.

Social Welfare Activities in 2023

Public Welfare Donation

The Group's Headquarters participated in the "Love under the Blue Sky" public welfare donation program carried out by the Jinshan Branch of the Shanghai Charity Foundation. During the reporting period, the Group donated a total of RMB 200,000 to this program.

Assistance to Those in Need

Condolences for poor households

TSP Altay gave condolences to 15 poor households in Kuoketuogan Village, donating rice, noodles, oil and other living materials.

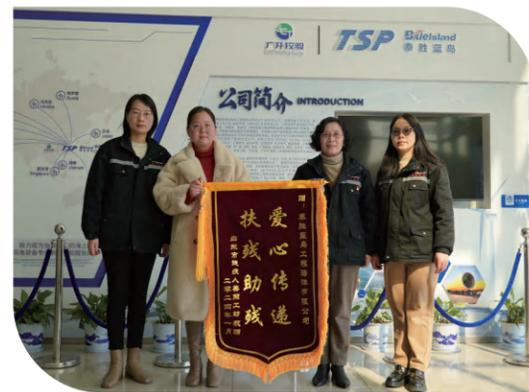


Condolences for poor households in Kuoketuogan Village

Assistance to the Disabled and the Elderly

Condolences for the disabled

TSP Blue Island actively provided services to Nantong Suxiaomai Food Co., Ltd. to help secure income for the Company's disabled employees.



Condolences for the disabled of Nantong Suxiaomai Food Co., Ltd.

Condolences for old party members

The Group's Headquarter visited and gave condolences to the old party members over 80 years old of Xinjiang Village Party Branch on the eve of the 2023 CPC Founding Day, providing RMB 20,000 for condolence and giving sincere blessings. It replaced the old multimedia equipment in the Village's senior activity room to enrich the cultural life of the senior groups. TSP Blue Island Party Branch visited the village committee of Houzi Village to give condolences to the old party members over 80 years old of Houzi Village and donate daily necessities and other materials.



Condolences for old party members of Xinjiang Village



Condolences for old party members of Houzi Village

Condolences for military and police officers

The Group's Headquarters donated 1,000 cases of mineral water and salt soda water to the Shanyang Police Station for high-temperature condolences to frontline police officers and auxiliary police officers. The Group's Headquarters carried out high-temperature condolences to frontline firefighting officers and soldiers on the Army Day, donating cleaning kits and cool summer drinks.



Condolences for the Shanyang Police Station



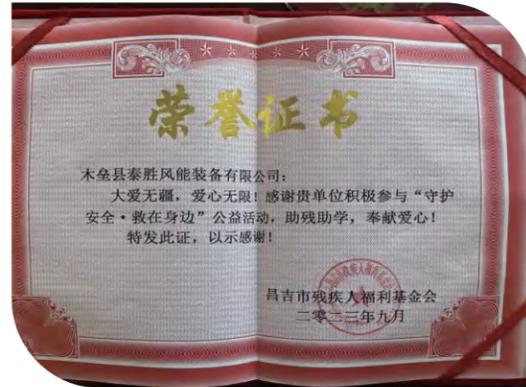
Condolences for firefighting officers and soldiers

School construction

TSP Blue Island donated RMB 100,000 to the Central School of Xiakou Town, Xixiang County for the renovation and upgrading of the sports ground. TSP Mulei participated in the "Keeping Safe - Saving Lives" safety and health guarding action for children and teenagers held by the local Disabled Persons' Federation, donating 50 safety protection kits.



Renovation and upgrading of the sports ground in the Central School of Xiakou Town



Certificate of Honor for "Keeping Safe - Saving Lives"

Rural Revitalization

Rural construction

TSP Xinjiang donated RMB 50,000 to Jijitai Village for square renovation and other infrastructure construction. TSP Mulei donated RMB 50,000 to Dongchengkou Village to support the construction of its "One-meter Project at the Doorstep."



Donation for infrastructure renovation in Jijitai Village



Donation for "One-meter Project at the Doorstep" in Dongchengkou Village

8.2 Volunteering

The group has cultivated a dynamic volunteer force primarily composed of party members, actively involved in a wide range of support activities including tree planting, rural development, and charitable exam aid.

Volunteerism 2023

• Reforestation

Party member volunteers from the Group's Headquarters participated in the Tree-planting Day activities organized by the Jinyun Residential Community. They planted more than 500 flowers and trees of various types to beautify the environment of the community and help enhance the residents' awareness of loving and caring for greenery and ecological civilization-TSP Altay formed a team of volunteers to conduct a 2-day tree-planting activity around the county, planting a total of 100 trees in the windbreak greenbelt.



Tree-planting activities for volunteers in the Jinyun Residential Community



Tree-planting activities around Jeminay County

• Rural Construction

Volunteers from the Group's Headquarter participated in the "Clean and Beautiful Countryside" themed human settlement optimization activities in Xinjiang Village to enhance the environmental improvement of the public areas of the natural homestead.



"Clean and Beautiful Countryside" themed human settlement optimization activities in Xinjiang Village

• Examination Assistance

TSP Mulei dispatched a volunteer team on the day of the college entrance examination to set up an examination assistance point in the First Middle School of Mulei County. The aim was to provide mineral water and other materials for the candidates for the college entrance examination and their parents, and to send warm wishes to the candidates.



Voluntary service for examination assistance in the First Middle School of Mulei County

ESG Performance Indicators

Corporate governance performance

Scope of statistics: The scope of all corporate governance performance statistics is consistent with the scope of the Company's consolidated financial statements.

Corporate Governance

Name of indicator	Unit	Annual Data 2023
Time of General Meeting of Shareholders held	Time	3
Number of members of Board of Directors	Person	13
Number of independent directors	Person	5
Time of Meeting of Board of Directors held	Time	4
Time of Meeting of the Audit Committee of Board of Directors held	Time	4
Time of Meeting of the Remuneration and Appraisal Committee of Directors held	Time	1
Time of Meeting of the Strategy Committee of Board of Directors held	Time	1
Time of Meeting of the Nomination Committee of Board of Directors held	Time	2
Number of supervisors	Person	3
Number of female supervisors	Person	1
Time of Meeting of Board of Supervisors held	Time	4

Anti-corruption

Name of indicator	Unit	Annual Data 2023
Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period	Time	0
Anti-corruption training hours for employees per capita	Hour	1.20
Anti-corruption training hours for directors per capita	Hour	4.00
Proportion of directors participating in anti-corruption training	%	100

Social Performance

Scope of statistics: The scope of all social performance statistics is consistent with the scope of the Company's consolidated financial statements.

R&D and Innovation

Name of indicator	Unit	Annual Data 2023
R&D expenses	RMB 10,000	21,256.13
Proportion of R&D expenses to operating revenue	%	4.42
Number of projects in progress	No.	48
Number of R&D personnel ¹	Person	176
Proportion of R&D personnel	%	17.98

Note 1: The number of R&D personnel refers to the number of R&D personnel as of the end of the reporting period.

Products and Services

Name of indicator	Unit	Annual Data 2023
Total fines for violating laws and regulations related to products and services	RMB 10,000	0
Number of incidents of violation of laws and regulations related to products and services	No.	0

Supply Chain

Name of indicator	Unit	Annual Data 2023
Total number of suppliers	No.	1,203
Number of suppliers in Mainland China	No.	1,203
Total number of new suppliers	No.	154
Proportion of suppliers signing Supplier Code of Conduct	%	100

Employees

Name of indicator	Unit	Annual Data 2023
Employee recruitment and hiring¹		
Total number of employees	Person	979
Number of full-time labor contract employees	Person	927
Number of full-time labor dispatching employees	Person	12
Number of employees in other forms of employment	Person	40
Number of male employees	Person	755
Number of female employees	Person	224
Number of employees under the age of 30	Person	336
Number of employees at age between 30 and 50	Person	507
Number of employees aged over 50	Person	136
Number of employees whose highest degree is a master's degree or above	Person	47
Number of employees whose highest degree is a bachelor's degree	Person	256
Number of employees whose highest degree is a college degree or below	Person	676
Number of employees with disabilities	Person	5
Number of ethnic minority employees	Person	33
Total number of new employees	Person	327
Number of new full-time labor dispatching employees	Person	5
Number of new full-time labor contract employees	Person	303
Number of new employees in other forms of employment	Person	19
Number of new male employees	Person	253
Number of new female employees	Person	74
Number of new employees under the age of 30	Person	162
Number of new employees at age between 30 and 50	Person	144
Number of new employees aged over 50	Person	21
Number of violations in terms of hiring and firing, compensation and benefits, working hours and vacations, equal opportunity, anti-discrimination of employees, etc.	No.	0

Name of indicator	Unit	Annual Data 2023
Employee rights and benefits		
Funds for physical examination of employees	RMB 10,000	21.76
Employees' physical examination coverage	%	100
Coverage of social insurance	%	100
Employee training and development		
Coverage of employees receiving regular performance and career development appraisals ²	%	82.53
Coverage of male employees receiving regular performance and career development appraisals	%	82.91
Coverage of female employees receiving regular performance and career development appraisals	%	81.25
Coverage of employees under the age of 30 receiving regular performance and career development appraisals	%	96.73
Coverage of employees at age between 30 and 50 receiving regular performance and career development appraisals	%	74.16
Coverage of employees aged over 50 receiving regular performance and career development appraisals	%	78.68
Employee training coverage ³	%	84.07
Male employee training coverage	%	82.78
Female employee training coverage	%	88.39
Training coverage for employees under the age of 30	%	87.80
Training coverage for employees at age between 30 and 50	%	87.77
Training coverage for employees aged over 50	%	61.03
Average training hours for employees ⁴	Hour	16.21
Average training hours for female employees	Hour	7.29
Average training hours for male employees	Hour	18.85
Average training hours for employees under the age of 30	Hour	17.30
Average training hours for employees at age between 30 and 50	Hour	17.77
Average training hours for employees aged over 50	Hour	7.68

Note 1: All metrics regarding the number of relevant personnel are based on the personnel count as of the end of the reporting period.

Note 2: Coverage of employees receiving regular performance and career development appraisals = number of employees receiving regular performance and career development appraisals/total number of employees × 100%

Note 3: Employee training coverage = total number of employees trained / total number of employees

Note 4: The average training hours for employees = Total training hours for employees / Total number of employees × 100%

Community and Public Benefit

Name of indicator	Unit	Annual Data 2023
Public Charity		
Amount of public welfare investment	RMB 10,000	54.67
Amount of public welfare donations	RMB 10,000	40.97
Amount of rural revitalization investments	RMB 10,000	11.50
Amount of community public welfare investment	RMB 10,000	2.20
Voluntary service		
Volunteer service hours of employees per capita ¹	Hour	0.52

Note 1: Volunteer service hours of employees per capita = total volunteer service hours of employees/total number of employees

Environmental Performance

Scope of Statistics: The scope of environmental performance statistics includes TSP Shanghai, TSP Blue Island, TSP Yangzhou, TSP Dongtai, TSP Baotou, TSP Xinjiang, TSP Mulei, TSP Altay, TSP Ruoqiang, TSP Daqing, TSP Guangdong, TSP Qinzhou, TSP Songxian, TSP South China, a total of 14 subsidiaries.

Environmental Management

Name of Indicator	Unit	Annual Data 2023
Annual environmental investment expenditure	RMB 10,000	1,775.66
Number of incidents in which penalties were imposed for violations against environmental protection laws and regulations	No.	0
Total fines for violations against environmental protection laws and regulations	RMB 10,000	0
Number of incidents in which penalties were imposed for exceeding pollutant standards or discharging in violation of the law	No.	0
Number of incidents in which lawsuits were filed through dispute settlement mechanisms for violations of environmental laws and regulations	No.	0

Resource Management

Name of Indicator	Unit	Annual Data 2023
Energy management		
Natural gas consumption	m ³	5,277,955.51
Propane consumption	m ³	151,563.00
Fuel oil consumption	t	170.00
Stationary source diesel fuel consumption	t	67.12
Liquefied natural gas consumption	t	12.65
Liquefied petroleum gas consumption	t	5.29
Gasoline consumption for official vehicles	l	92,744.36
Diesel consumption for official vehicles	l	9,840.88
Purchased electricity consumption	MWh	37,059.10
Consumption of self-generated renewable energy	MWh	4,324.84
Purchased electricity consumption: Renewable energy	MWh	1,813.44
Purchased steam consumption	GJ	630.93
Total integrated energy consumption	Tons of standard coal	13,321.17
Comprehensive energy consumption intensity per unit of operation revenue ¹	t standard coal/ RMB 10,000	0.028
Water resources management		
Total water consumption (by source of water withdrawal)	m ³	149,036.31
Water consumption by source of water withdrawal: Municipal water supply	m ³	147,836.31
Water consumption by source of water withdrawal: Surface water	m ³	1,200.00

Note 1: Integrated energy consumption intensity per unit of operating revenue = total integrated energy consumption/gross operating revenue.

Emissions and Waste Management

Name of Indicator	Unit	Annual Data 2023
Wastewater management¹		
Total wastewater discharge	m ³	64,595.39
Chemical oxygen demand (COD) emissions	t	7.69
Biochemical oxygen demand (BOD) emissions	t	2.46
Ammonia nitrogen (NH ₃ -N) emissions	t	0.57
Exhaust gas management²		
Total exhaust gas discharge	10,000 m ³	694,64.08
Particulate matter (PM) emissions	t	2.54
Volatile Organic Compounds (VOCs) emissions ³	t	46.3
Nitrogen oxide (NO _x) emissions	kg	5.64
Sulfur oxides (SO _x) emissions	kg	2.11
Waste management		
Total amount of hazardous waste	t	575.01
Amount of hazardous waste by disposal method: Landfill	t	31.26
Amount of hazardous waste by disposal method: Incineration with energy recovery	t	116.81
Amount of hazardous waste by disposal method: Incineration with no energy recovery	t	71.15
Amount of hazardous waste by disposal method: Other	t	355.79
Total non-hazardous waste	t	14,534.86
Amount of non-hazardous waste by disposal method: Landfill	t	134.00
Amount of non-hazardous waste by disposal method: Incineration with energy recovery	t	10.00
Amount of non-hazardous waste by disposal method: Incineration with no energy recovery	t	104.20
Amount of non-hazardous waste by disposal method: Recycling/reuse	t	4,284.26
Amount of non-hazardous waste by disposal method: Other	t	10,002.40

Note 1: Part of the subsidiary companies are not subject to monitoring requirements by Environmental Supervision Department for parameters such as COD, BOD and NH₃-N emissions, and thus their data have not been included in the statistics. The figures provided only account for TSP Blue Island, TSP Yangzhou, TSP Dongtai, TSP Xinjiang, and TSP Mulei. Each subsidiary will strengthen the management of wastewater emission and gradually broaden the scope of data collection. This clarification is provided accordingly.

Note 2: Part of the subsidiary companies are not subject to monitoring requirements by Environmental Supervision Department for parameters such as NO_x, SO_x and PM emissions, and thus their data have not been included in the statistics. The figures provided only account for TSP Shanghai, TSP Blue Island, TSP Yangzhou, TSP Baotou. Each subsidiary will strengthen the management of exhaust gas emission and gradually broaden the scope of data collection. This clarification is provided accordingly.

Note 3: Part of the subsidiary companies are not key sewage discharge units and not subject to monitoring requirements by Environmental Supervision Department for VOCs emissions, and thus their data have not been included in the statistics. The figures provided only account for TSP Blue Island. Each subsidiary will strengthen the management of VOCs emission and gradually broaden the scope of data collection. This clarification is provided accordingly.

Addressing Climate Change

Name of Indicator	Unit	Annual Data 2023
Direct GHG emissions (Scope 1)	t CO ₂ e	13,363.24
Indirect GHG emissions (Scope 2)	t CO ₂ e	21,204.21
Total GHG emissions (Scope 1 and Scope 2)	t CO ₂ e	34,567.44
GHG emission intensity per unit of operation revenue ¹	t CO ₂ e/RMB 10,000	0.072

Note 1: GHG emission intensity per unit of operating revenue = total GHG emissions (Scope 1 and Scope 2)/gross operating revenue.

Index

Index Table for the Shenzhen Stock Exchange Guideline No. 2 on Self-Regulation of Listed Companies - Standardized Operation of Companies Listed on the Growth Enterprise Market (Revised in December 2023)

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9.9 (IV) Management of pollutant discharges	7.3 Emissions and waste management
9.9 (V) Construction and operation of environmental protection facilities	7.3 Emissions and waste management
9.9 (VI) Waste treatment, disposal, recycling and comprehensive utilization of waste products	7.3 Emissions and waste management
9.9 (VII) Voluntary agreements with environmental authorities	/

Clause and Disclosure	Section
9.9 (VIII) Incentives received from the environmental authorities	/
9.9 (IX) Other voluntary disclosures	7.4 Addressing climate change
9.10 Implementation of environmental protection policies	7.1 Environmental management system
9.11 Disclosure of environmental information	/
9.12 (I) Product safety laws and regulations and industry standards	6.5 Ensuring work safety
9.12 (II) Production environment and production process	6.5 Ensuring work safety
9.12 (III) Product quality and safety guarantee mechanism and contingency plans	4.2 Enhancement of product quality 6.5 Ensuring work safety
9.12 (IV) Other production and product safety responsibilities	6.5 Ensuring work safety
9.13 (I) Employee management system and measures to deal with violations	6.1 Employee employment and benefits
9.13 (II) Prevention of occupational hazards and supporting safety measures	6.4 Occupational health protection
9.13 (III) Employee training	6.3 Employee training and development
9.13 (IV) Other responsibilities for protecting employee rights and interests	6.2 Employee communication and care
9.14 Science ethics	/
9.15 Supervision and monitoring	/

Index Table for the Sustainability Reporting Standards (GRI Standards)

Statement of use	TSP reported the information referenced in this GRI Content Index from January 1, 2023 to December 31, 2023 by reference to the GRI Standards.
GRI 1 used	GRI 1: Foundation 2021

GRI Standard	Disclosure	Section
GRI 2: General Disclosures 2021	2-1 Organizational details	1. About TSP
	2-2 Entities included in the organization's sustainability reporting	About the Report
	2-3 Reporting period, frequency and contact point	About the Report
	2-6 Activities, value chain and other business relationships	1. About TSP
	2-7 Employees	ESG Performance Indicators
	2-8 Workers who are not employees	ESG Performance Indicators
	2-9 Governance structure and composition	2.1 ESG management strategy 3.1 Corporate governance
	2-10 Nomination and selection of the highest governance body	3.1 Corporate governance
	2-12 Role of the highest governance body in overseeing the management of impacts	3.1 Corporate governance
	2-13 Delegation of responsibility for managing impacts	3.1 Corporate governance
	2-14 Role of the highest governance body in sustainability reporting	2.1 ESG management strategy
	2-16 Communication of critical concerns	3.1 Corporate governance
	2-27 Compliance with laws and regulations	Parts III to VII of the Report set out the laws and regulations with which the Group complies on various ESG topics.
	2-29 Approach to stakeholder engagement	2.3 Analysis on material topics
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	7.4 Addressing climate change
GRI 3: Material Topics 2021	3-1 Process to determine material topics	2.2 Communication with stakeholders
	3-2 List of material topics	2.3 Analysis on material topics
GRI 3: Material Topics 2021	3-3 Management of material topics	2.3 Analysis on material topics Business ethics
GRI 205: Anti-corruption 2016 ESG Performance Indicators	205-1 Operations assessed for risks related to corruption	3.5 Business ethics
	205-2 Communication and training about anti-corruption policies and procedures	
	205-3 Confirmed incidents of corruption and actions taken	
GRI 3: Material Topics 2021	3-3 Management of material topics	2.3 Analysis on material topics Resource management Emissions and waste management Addressing climate change
GRI 302: Energy 2016	302-1 Energy consumption within the organization	7.2 Resource management ESG Performance Indicators
	302-3 Energy intensity	
	302-4 Reduction of energy consumption	

GRI Standard	Disclosure	Section
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	7.2 Resource management 7.3 Emissions and waste management ESG Performance Indicators
	303-2 Management of water discharge-related impacts	
	303-3 Water withdrawal	
	303-5 Water consumption	
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	7.4 Addressing climate change ESG Performance Indicators
	305-2 Energy indirect (Scope 2) GHG emissions	
	305-4 GHG emissions intensity	
	305-7 Nitrogen oxides (NO _x), sulfur oxides (SO _x), and other significant air emissions	
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	7.3 Emissions and waste management ESG Performance Indicators
	306-2 Management of significant waste-related impacts	
	306-3 Waste generated	
	306-4 Waste diverted from disposal	
	306-5 Waste directed to disposal	
GRI 3: Material Topics 2021	3-3 Management of material topics	2.3 Analysis on material topics Supply chain management
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	5.1 Enhancement of supply chain management ESG Performance Indicators
	308-2 Negative environmental impacts in the supply chain and actions taken	
GRI 3: Material Topics 2021	3-3 Management of material topics	2.3 Analysis on material topics Employee employment and benefits Employee communication and care Employee training and development Occupational health protection Work safety
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	6.1 Employee employment and benefits 6.2 Employee communication and care ESG Performance Indicators
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	6.4 Occupational health protection 6.5 Ensuring work safety ESG Performance Indicators
	403-2 Hazard identification, risk assessment, and incident investigation	
	403-3 Occupational health services	
	403-5 Worker training on occupational health and safety	
	403-6 Promotion of worker health	
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	6.4 Employee training and development ESG Performance Indicators
	404-2 Programs for upgrading employee skills and transition assistance programs	
	404-3 Percentage of employees receiving regular performance and career development reviews	
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governing bodies and employees	6.1 Employee employment and benefits ESG Performance Indicators
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	6.2 Employee communication and care ESG Performance Indicators

GRI Standard	Disclosure	Section
GRI 408: Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	6.1 Employee employment and benefits
GRI 3: Material Topics 2021	3-3 Management of material topics	2.3 Analysis on material topics Supply chain management
GRI 409: Forced or Compulsory Labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	5.1 Enhancement of supply chain management
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	5.1 Enhancement of supply chain management ESG Performance Indicators
	414-2 Negative social impacts in the supply chain and actions taken	