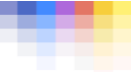


东方日升ESG绩效一览表 Risen Energy ESG Performance



	指标 Indicator	指标解释 Explanation	单位 Unit	2021	2022	2023	2024
工厂总数 Reporting Boundary	基地数 Number of our production bases	/	个 Number	5个生产基地: 5 production bases: 宁海基地 Ninghai Base, 常州基地 Changzhou Base, 滁州基地 Chuzhou Base, 义乌基地 Yiwu Base, 马来西亚基地 Malaysia Base	6个生产基地: 6 production bases: 宁海基地 Ninghai Base, 常州基地 Changzhou Base, 滁州基地 Chuzhou Base, 义乌基地 Yiwu Base, 巴彦淖尔基地 Bayannur Base, 马来西亚基地 Malaysia Base	8个生产基地: 8 production bases 宁海基地 Ninghai Base, 常州基地 Changzhou Base, 滁州基地 Chuzhou Base, 义乌基地 Yiwu Base, 巴彦淖尔基地 Bayannur Base, 马来西亚基地 Malaysia Base, 南滨基地 Nanbin Base, 包头基地 Baotou Base	12个生产基地12 production bases: 宁海基地 Ninghai Base, 常州基地 Changzhou Base, 滁州基地 Chuzhou Base, 义乌基地 Yiwu Base, 马来西亚基地 Malaysia Base, 南滨基地 Nanbin Base, 包头基地 Baotou Base, 安徽基地 Anhui Base, 固阳基地 Guyang Base, 双一力宁波 SYL Ningbo, 双一力天津 SYL Tianjin, 双宇公司Twinsel
董事会类型 Board Type	执行董事数量 Executive Directors	/	人 Number	4	4	4	3
	独立董事数量 Number of independent directors	/	人 Number	3	3	3	3
	非执行董事 Number of non-executive directors	/	人 Number	0	0	0	0
	董事会总人数 Total board size	/	人 Number	7	7	7	6
非执行主席/首席董事 Non-Executive Chairperson/ Lead Director	董事会或监事会是否由一名非执行独立主席和/或独立首席董事领导? Is the board of directors/supervisory board headed by a non-executive and independent chairperson and/or an independent lead director?	/	/	首席执行官和董事长的角色被分开，前首席执行官/董事长（目前担任非执行职位）现在担任董事长。 Role of CEO and chairperson is split and former CEO/chairperson (presently in a non-executive position) is now chairperson.			
董事会性别多样性 Board Gender Diversity	女性董事数量 Number of female directors	/	人 Number	1	1	1	1
董事会问责制 Board Accountability	董事会会议平均出席率 Average board meeting attendance	/	/	/	/	/	100%
	需要股东批准才可修改章程 Shareholder approval required for changes in bylaw	/	/	是的，《公司章程》及其附件的修改（包括股东大会议事规则、董事会议事规则及监事会议事规则），需由股东大会以特别决议通过。 Yes, amendments to the Articles of Association and its appendices (including the rules of procedure for the general meeting of shareholders, the rules of procedure for the board of directors, and the rules of procedure for the board of supervisors) shall be adopted by the general meeting of shareholders by way of a special resolution.			
	公司有董事会成员，他们拥有4个或更少的其他职务 The company has board members with 4 or less other mandates	/	/	/	/	/	3
	董事的责任没有限制 There is no limitation to directors' liabilities	/	/	否 No			
	董事会成员每年选举一次 Board members are elected on an annual basis	/	/	否 No			
	首席执行官继任计划已到位 CEO succession plan is in place	/	/	否 No			
	董事会平均任期时间 Average tenure of board members in years	/	年 Year	4.7			4.1

董事会平均任期 Board Average Tenure	各董事任期时长 Tenure of each board members in years	/	年 Year	林海峰：3年 Haifeng Lin: 3 years , 伍学纲：4年 Xuegang Wu: 4 years , 杨钰：4年 Yu Yang: 4 years , 王圣建：1年 Shengjian Wang: 1 year, 霍佳震：4年 Jiazhen Huo: 4 years, 陈柳：4年 Liu Chen: 4 years, 吴瑛：4年 Ying Wu: 4 years, 曾学仁：15年 Xueren Zeng: 15 years 应建飞：10年 Jianfei Ying: 10 years 徐海涛：4年 Haitao Xu: 4 years			林海峰：4年 Lin Haifeng: 4 years, 伍学纲：5年 Wu Xuegang: 5 years, 霍佳震：4年 Jiazhen Huo: 4 years, 陈柳：4年 Liu Chen: 4 years, 吴瑛：4年 Ying Wu: 4 years, 王翼飞：1年 Wang Yifei: 1 year
董事会行业经验 Board Industry Experience	具有行业经验的独立或非执行董事的数量 Number of independent or non-executive members with industry experience	依据GICS1级区分，东方日升属于信息技术行业 According to GICS Level 1 sector classification, Risen Energy belongs to the industries	人 Number	2			
CEO薪酬 - 长期绩效调整 CEO Compensation - Long-Term Performance Alignment	CEO薪酬计划中用于评估可变薪酬的最长绩效期限是多长 What is the longest performance period applied to evaluate variable compensation	/	年 Year	1年 one year			
管理人员持股 Management Ownership	首席执行官和其他执行委员会成员是否持有公司股份 Company CEO and other executive officers hold company shares	/	/	/	/	财报P43 Please refer to page 43 of 2023 Annual Report	财报P46 Please refer to page 46 of 2024 Annual Report
政府所有权 Government Ownership	是否有政府拥有公司5%以上的股权 Whether individual governmental institutions own more than 5% of the total voting rights of the Company	/	/	否 No			
	是否为政府机构提供黄金股 Golden shares for governmental institutions	/	/	否 No			
家庭所有权 Family Ownership	拥有5%以上股权的创始家族 Founding individuals or family members individually own more than 5% of the voting rights	/	/	林海峰：24.82% Haifeng Lin: 24.82%			
违规事件 Reporting on breaches	腐败和贿赂 Corruption or Bribery	/	起 Number	0	0	0	0
	歧视和骚扰 Discrimination or Harassment	/	起 Number	0	0	0	0
	客户隐私数据 Customer Privacy Data	/	起 Number	0	0	0	0
	利益冲突 Conflicts of Interest	/	起 Number	0	0	0	0
	洗钱或内幕交易 Money Laundering or Insider trading	/	起 Number	0	0	0	0
捐赠与其他支出 Contributions & Other Spending	行业协会或免税团体 trade associations or tax-exempt groups	/	元 RMB	118,823.01	264,960.90	359,428.79	4,160,355.96
	游说、利益代表或类似行为 lobbying, interest representation or similar	/	元 RMB	0	0	0	0
	地方、区域或国家政治运动/候选人 local, regional or national political campaigns /organizations /candidates	/	元 RMB	0	0	0	0
	其他（例如与投票措施或公投相关的支出） Other (e.g. spending related to ballot measures or referendums)	/	元 RMB	0	0	0	0
	总支出 Total contributions and other spending	/	元 RMB	118,823.01	264,960.90	359,428.79	4160355.96
	数据覆盖率 Data coverage	/	%	100%	100%	100%	100%

	3项最大协会支出和对应事项 3 largest contributions and corresponding issues	/	元 RMB	中国上市公司协会：50000 China Association for Public Companies: 50000 角色：向该协会提供意见，协会向政府有关方面反映公司群体呼声，维护上市公司合法权益，为上市公司健康发展营造良好环境 Role of the Association: The Association reflects the voices of companies to the government, protects the legitimate rights and interests of listed companies, and creates a favorable environment for the healthy development of listed companies.		SSI (trade association) :124228.8 体现了公司在太阳能行业推动负责任采购、环境保护和人权方面的承诺。SSI 通过建立可持续标准来影响政策和行业规范，公司出资支持其第三方ESG评估和政策倡导，推动全球供应链的透明和合规。 Solar Stewardship Initiative (SSI) reflects a strategic commitment to promoting responsible sourcing, environmental stewardship, and human rights within the solar industry. SSI is a multi-stakeholder initiative designed to influence public policy and industry standards by creating a sustainability assurance framework tailored for solar PV. The company's financial contributions support transparent, third-party ESG assessments and policy advocacy that encourage traceability and ethical practices across the global solar supply chain.	
		/	元 RMB	宁波市甬商发展研究会：30000 Ningbo Yongshang Development Research Association: 30000 角色：与宁波企业加强交流，互相提供商机，形成合力，共同发展，助力宁波“246” 万千级产业集群建设 Role of the Association: Strengthen communication among Ningbo companies, provide with business, achieve common development, and promote the construction of Ningbo's "246" ten-thousand industrial clusters.		UNGC ((trade association): 106984.5 UNGC 是一个推动企业遵守人权、劳工、环保和反腐原则的全球倡议。它不是游说组织，而是鼓励企业负责任经营、对接联合国可持续发展目标的自愿平台。UNGC supports a global movement to align business operations with ten universally accepted principles in the areas of human rights, labor, environment, and anti-corruption. UNGC is not a lobbying organization but a voluntary initiative that facilitates constructive dialogue, responsible corporate conduct, and alignment with UN Sustainable Development Goals (SDGs).	
		/	元 RMB	宁海县金融上市联合会：20000 Ninghai Financial Listing Association: 20000 发挥平台纽带作用，资源整合能力，发挥金融智库效用，构建“4+1” 综合金融服务体系，团结广大会员单位，服务实体经济、促进金融改革 Role of the Association: Play the role as a connecting platform and financial think tank, make full use of the ability to integrate resources, construct the "4 +1" integrated financial services system, unite members, contribute to economy, and promote financial reform.		中国上市公司协会 ((trade association))：60000 China Association for Public Companies: 60000 角色：向该协会提供意见，协会向政府有关方面反映公司群体呼声，维护上市公司合法权益，为上市公司健康发展营造良好环境 Role of the Association: The Association reflects the voices of companies to the government, protects the legitimate rights and interests of listed companies, and creates a favorable environment for the healthy development of listed companies.	
供应商分类 KPI for Supplier Screening	一级供应商数量 Total number of Tier-1 suppliers	/	家 Number	/		100	752
	重要一级供应商的数量 Total number of significant suppliers in Tier-1	重要供应商：被确定为对公司具有重大负面ESG 影响风险或重大业务相关性的供应商，或两者兼而有之的供应商 Unique Significant suppliers: Suppliers that are identified as having substantial risks of negative ESG impacts or significant business relevance to the company or a combination of both	家 Number	/	/	68	311
	在重要一级供应商的支出占供应商总支出的百分比 Percentage of total spend on significant suppliers in Tier-1	/	%	/	/	68%	41%
	重要非一级供应商的数量 Total number of significant suppliers in non Tier-1	/	家 Number	/	/	0	0
	所有重要供应商的总数 Total number of significant suppliers	/	家 Number	/	/	68	311
	接受评估的供应商总数 Total number of suppliers assessed	/	家 Number	/	/	68	188
	2024年接受评估的供应商目标 Target for FY 2024	/	家 Number	/			124
	接受评估的重要供应商的百分比 % of unique significant suppliers assessed	/	%	/	/	100%	60.45%
	经评估具有重大实际/潜在负面影响的供应商数量 Number of suppliers assessed with substantial actual/potential negative impacts	/	家 Number	/	0	6	0

供应商评估与发展 KPIs for Supplier Assessment and/or Development	具有重大实际/潜在负面影响并商定改进计划的供应商百分比(双方同意) % of suppliers with substantial actual/potential negative impacts with agreed corrective action/improvement plan	/	%	/	/	100%	100%	
	被终止合作的具有重大实际/潜在负面影响的供应商数量 Number of suppliers with substantial actual/potential negative impacts that were terminated	/	家 Number	/	/	6	0	
	改进计划覆盖的供应商总数 Total number of suppliers supported in corrective action plan implementation	/	家 Number	/	/	6	0	
	2024年改进计划覆盖的供应商总数目标 Corrective action Target for FY 2024	/	家 Number	/			0	
	被评估为具有重大实际/潜在负面影响并收到改进计划支持的供应商百分比（提供帮助） % of suppliers assessed with substantial actual/potential negative impacts supported in corrective action plan implementation	/	家 Number	/	0	100%	0%	
	参与赋能计划的供应商总数 Total number of suppliers in capacity building programs	/	家 Number	/	/	68	165	
	2024年参与赋能计划的供应商总数目标 Target forTotal number of suppliers in capacity building programs in 2024	/	家 Number	/			135	
	参与赋能计划的重要供应商的百分比/一级供应商数量 % of unique significant suppliers in capacity building programs/significant suppliers in Tier-1	/	%	/	/	100%	53.05%	
冲突矿产 Conflict Minerals	含冲突矿产的产品收入占总收入的百分比 Percentage of total revenues from products containing minerals from conflict-affected and high-risk areas	/	%	0	0	0	0	
	供应商不涉及冲突的上述产品中，产生的收入占总收入的百分比 Percentage of total revenues from products containing minerals from conflict-affected and high-risk areas coming from suppliers that have been verified conflict-free	/	%	0	0	0	0	
实际税率 Effective Tax Rate	税前营业收入/税前利润 Earnings before Tax	/	元 RMB	/	1,073,024,173.99	1,462,631,130.32	-4,005,820,130.67	
	申报税款 Reported Taxes	/	元 RMB	/	238,727,961.29	259,003,218.24	69,330,407.84	
	有效税率 Effective Tax Rate	申报税款/税前利润 Reported taxes/Earnings before tax		%	/	22.248%	17.708%	-1.730%
	已交现金税 Cash Taxes Paid	/	元 RMB	/	321,169,908.55	223,814,762.18	158,157,698.24	
	现金税率 Cash Tax Rate	已交现金税/税前利润 Cash taxes paid/Earnings before tax		%	/	29.931%	15.302%	-3.948%
产品召回 Product Quality & Recall Management	召回产品的总数 Total units recalled	/	条 Number	0	0	0	0	
	产品召回导致的花费 Expenses incurred due to recalls issued in the corresponding fiscal year		元 RMB	0	0	0	0	
环保体系 Environmental Management System	EMS已经通过认证的比例 the coverage of verification	ISO14001 International Standards Coverage	%	/	/	76.92%	100%	

环保投资回报 Return on Environmental Investments	环保资本投入 Capital investments	/	元 RMB	123,070,777.03	137,416,415.51	519,588,672.31	107,587,759.95
	环保运营花费 Operating expenses	/	元 RMB	4,334,877.87	4,476,847.10	7,371,803.50	11,317,604.52
	环保投入带来的节约成本 Savings, cost avoidance, income, tax incentives	/	元 RMB	/	/	25,060.00	32,526.12
	环保、节能改造项目涉及的工厂或基地占总数的比例 % of operations covered	/	%	100%	100%	100%	100%
能源 Energy Consumption	不可再生能源消耗量 Total non-renewable energy consumption	/	MWh	511,782.32	833,004.07	1,479,757.56	1,078,885.10
	2024年不可再生能源消耗量的目标 The target for non - renewable energy consumption in 2024	/	MWh	/			1,376,174.53
	可再生能源消耗量 Total renewable energy consumption	/	MWh	23,661.36	28,619.29	31,320.21	179,536.63
	能源数据的统计范围 Data coverage	数据统计的工厂数/总工厂数 The coverage of the data reported on as a percentage of total sites	%	80%	83.33%	87.50%	100%
废弃物 Waste Disposal	固废总量 total solid waste	/	吨 metric tonnes	24,523.42	36,014.07	68,486.45	44,544.57
	回收/再利用的废弃物总量 Total waste recycled/reused	/	吨 metric tonnes	22,896.56	30,456.41	60,056.63	12,587.22
	废弃物处置的总量 Total waste disposed	/	吨 metric tonnes	1626.86	5,557.66	8429.82	31,957.35
	2024年不可再生能源消耗量的目标值 The target for the total amount of waste disposed in 2024	/	吨 metric tonnes	/			32,000.00
	以焚烧方式处理（不带能量回收）的废弃物总量 Waste incinerated without energy recovery	/	吨 metric tonnes	1626.86	2886.8	5239.2	25,565.88
	以焚烧方式处理（带能量回收）的废弃物总量 Waste incinerated with energy recovery	/	吨 metric tonnes	不涉及 Not applicable			
	以填埋方式处理的废弃物总量 Waste landfilled	/	吨 metric tonnes	/	2,670.86	3,190.62	6,391.47
	以其他形式处置的废弃物总量 Waste otherwise disposed	/	吨 metric tonnes	0	0	0	0
	处置方法不明的废弃物总量 Waste with unknown disposal method	/	吨 metric tonnes	0	0	0	0
	废弃物数据的统计范围 Data coverage	数据统计的工厂数/总工厂数 The coverage of the data reported on as a percentage of total sites	%	80%	83.33%	87.50%	100.00%
危险废弃物 Hazardous Waste	回收/再利用的危废总量 Total hazardous waste recycled/reused	/	吨 metric tonnes	91.59	199.57	377.42	1339.41
	危废处置的总量 Total hazardous waste disposed	/	吨 metric tonnes	249.74	459.67	644.61	2,286.11
	2024年危废处置总量的目标值 The target for the total hazardous waste disposed in 2024	/	吨 metric tonnes	/			2500.00
	以焚烧方式处理（不带能量回收）的废弃物总量 Hazardous waste incinerated without energy recovery	/	吨 metric tonnes	221.00	419.45	607.30	2268.17
	以焚烧方式处理（带能量回收）的废弃物总量 Hazardous waste incinerated with energy recovery	/	吨 metric tonnes	不涉及 Not applicable			
	以填埋方式处理的废弃物总量 Hazardous waste landfilled	/	吨 metric tonnes	28.74	40.22	37.31	17.94
	以其他形式处置的废弃物总量 Hazardous waste otherwise disposed	/	吨 metric tonnes	0	0	0	0

	处置方法不明的废弃物总量 Hazardous waste with unknown disposal method	/	吨 metric tonnes	0	0	0	0
	废弃物数据的统计范围 Data coverage	数据统计的工厂数/总工厂数 The coverage of the data reported on as a percentage of total sites	%	80%	83.33%	87.50%	100.00%
挥发性有机化合物排放 Volatile Organic Compounds Emissions	VOC的排放数据 Direct VOC emissions	/	吨 metric tonnes	0.062	62.60	66.70	40.92
	2024年VOC排放的目标值 The target for direct VOC emissions in 2024	/	吨 metric tonnes	/			45.00
	VOC的排放数据的统计范围 Data coverage	数据统计的工厂数/总工厂数 The coverage of the data reported on as a percentage of total sites	%	7.69%	100.00%	100.00%	100.00%
水 Water	取水量 Water withdrawal	/	百万立方米 Million cubic meters	4.37	6.51	10.82	7.47
	排水量 Water discharge	/	百万立方米 Million cubic meters	3.49	5.09	8.41	5.95
	淡水净消耗量总额 Total net fresh water consumption	/	百万立方米 Million cubic meters	0.87	1.42	2.40	1.52
	2024年淡水净消耗量目标值 The target for total net fresh water consumption in 2024	/	百万立方米 Million cubic meters	/			2.50
	超纯水使用量 Ultra-pure water usage	/	立方米 Cubic meters	不涉及 Not applicable	不涉及 Not applicable	4,340,469	2,265,885
	2024年超纯水使用量目标值 The target for Ultra-pure water usage in 2024	/	立方米 Cubic meters	/			2,500,000
	水相关数据的统计范围 Data coverage	数据统计的工厂数/总工厂数 The coverage of the data reported on as a percentage of total sites	%	80%	83.33%	87.50%	100%
温室气体排放 Greenhouse Gas Emissions	范围1的碳排放 Total direct GHG emissions (Scope 1)	/	tCO2e	3,927.35	2,087.22	58,895.04	37,399.11
	2024年范围1的碳排放目标值 The target for total direct GHG emissions (Scope 1) in 2024	/	tCO2e	/			54,772.39
	范围2的碳排放（基于地点计算） Total indirect GHG emissions (Scope 2)- Location-based	/	tCO2e	425,463.51	49,478.12	718,189.65	659,872.34
	2024年范围2的碳排放目标值 Total indirect GHG emissions (Scope 2) in 2024	/	tCO2e	/			667,916.37
	范围3的碳排放 Total indirect GHG emissions (Scope 3)	/	tCO2e	/	/	18,260,201.00	32,701,172.82
	类别1：采购商品 Purchased Goods and Services	/	tCO2e	/	/	12,854,506.24	32,199,105.86
	类别2：资本货物 Capital Goods	/	tCO2e	/	/	460,400.93	126,360.02
	类别4：上游运输和配送 Upstream transportation and distribution	/	tCO2e	/	/	/	190,676.01
	类别5：运营中产生的废弃物 Waste generated in operations	/	tCO2e	/	/	/	11,267.44
	类别6：商务旅行 Business travel	/	tCO2e	/	/	464	5,727.03
	类别7：员工通勤 Employee commuting	/	tCO2e	/	/	7741	590.91
	类别9：下游运输 Downstream transportation and distribution	/	tCO2e	/	/	4,558,152.81	161,813.15
	类别12：售出产品的报废处理 End of life treatment of sold products	/	tCO2e	/	/	289,943.77	5,632.41

	PFC (全氟化碳) 排放数据 Direct PFC emissions	/	吨 metric tonnes	0	0	0	0
	2024年PFC (全氟化碳) 排放目标值 The target for direct PFC emissions in 2024	/	吨 metric tonnes	/			0
	温室气体排放的统计范围 Data coverage	数据统计的工厂数/总工厂数 The coverage of the data reported on as a percentage of total sites	%	80%	33%	87.50%	100.00%
LCA评估 (Life Cycle Assessment)	公司已做过LCA (产品生命周期评估) 的产品比例 Percentage of total products covered by Life Cycle Assessment approaches	/	%	/	/	83.33%	57.10%
	公司已经做过的LCA方法 The relevant description of the Full LCA Assessment approach	/	/	法国能源监管委员会 (CRE) 对《太阳能发电设施的建设和运营相关招标规范 (AO PPE2 PV Sol) 》(简称PPE2文件) 进行了更新, 要求面向法国出口的光伏企业执行简化碳评估 (ECS) 工作, 按要求披露出口光伏产品的碳足迹评估结果。我们的LCA 的评估按照ECS 的PPE2评估方法。相比其他碳核算规范, ECS 简化了ISO14040规定的四个阶段, 目标和范围的确定由ECS文件规定。清单分析被越过、影响评价阶段通过表格取值得出、且不要求做LCIA结果解释。企业只需要使用ECS文件给定的碳足迹因子值, 乘以不同形态下产品的重量或数量, 即可获得碳足迹结果。 The French Commission de la Régulation de l'Energie (CRE) has updated the "AO PPE2 PV Sol" (the PPE2 document), which requires photovoltaic (PV) companies exporting to France to carry out a simplified carbon assessment (ECS) and disclose the results of the carbon footprint assessment. Our LCAs approach are in accordance with the ECS PPE2 assessment methodology. Compared to other carbon footprinting standards, ECS simplifies the four stages of the ISO 14040 process. The definition of the objectives and scope is defined in the ECS document, the inventory analysis is skipped, the impact assessment stage is based on tabular values, and there is no requirement for interpretation of the LCIA results. Company only need to use the carbon footprint factor value given in the ECS document and multiply it by the weight or quantity of the product in different forms to obtain the carbon footprint result.			生命周期评价 (LCA) 方法由[ISO14040:2006]和[ISO14044:2006]标准规范。LCA方法包四个主要阶段: 研究目标与范围界定、生命周期清单分析 (LCI)、生命周期影响评估 (LCIA) 以及生命周期解释。 1.原材料获取:涵盖了主要产品生产阶段之前的所有活动、与该生命周期阶段产生的废弃物管理有关的所有活动和基本流程均包括在该生命周期阶段的碳足迹计算中、同时包括所有原辅料从供应商厂址运输至光伏组件公司的运输阶段碳足迹。2.生产过程:涉及主要产品生产的过程排放与能耗, 以及该生命周期阶段产生的废弃物运输与处置有关的所有活动和流程均包括在本阶段的碳足迹计算中。3.包装: 包括晶体硅光伏组件产品的内层膜包装与外部箱子包装。 Life Cycle Assessment (LCA) is standardized by ISO14040:2006 and ISO14044:2006, with four main stages: defining research objectives and scope, Life Cycle Inventory (LCI), Life Cycle Impact Assessment (LCIA), and life cycle interpretation. 1.Raw material acquisition: Covers activities before main product production; includes carbon footprint of waste management-related activities/processes in this stage, and of transporting all raw/auxiliary materials from suppliers to photovoltaic module companies. 2.Production process: Involves process emissions and energy consumption in main product production; includes carbon footprint of waste transportation/disposal-related activities/processes in this stage.3.Packaging: Includes inner film and outer box packaging for crystalline silicon photovoltaic modules.
	Choice of raw materials or components that have a lower environmental footprint 选择具有更低环境足迹的原材料或组件	/	/	/	/	/	在组件生产过程中, 我们优先选用环保材料: 采用环境足迹更低的铝制边框, 并积极推广无氟光伏背板, 从源头降低产品对环境的影响。 在储能领域, 公司采用高效率、长循环寿命的电芯, 以减少充放电过程中的效率损耗, 延长产品使用寿命, 并降低全生命周期的碳排放。 We prioritize environmentally friendly materials in our component manufacturing, utilizing aluminum frames with lower environmental footprints and actively promoting fluorine-free PV backplanes to reduce product environmental impact from the source. In the energy storage sector, the Company adopts high-efficiency battery cells with long cycle life to minimize efficiency loss during charging/discharging, extend service lifespan, and reduce carbon emissions throughout the entire lifecycle.

产品设计标准 Product Design Criteria	直接运营、生产及制造 Direct operations, production & manufacturing	/	/	/	/	HJT电池的平均批量生产效率超过26.2%，比PERC电池提高了1.5%，从而降低了单位发电的能耗和碳排放。与铝框架相比，钢框架的生命周期碳排放量降低了77%节能三倍，每吉瓦模块容量减少煤炭消耗9万多公吨。 从集团层面制定了涵盖用水用电、污水和废气、噪声、危险废物与一般固体废物、环保设施、碳排放、排污许可等多方面的环保制度。各制造基地在集团环保制度的框架内，分别制定了 94 项针对废水、废气、噪声、固废、危废等的环保制度。 HJT cells have achieved an average mass-production efficiency exceeding 26.2%, representing a 1.5% increase over PERC cells, thereby reducing energy consumption and carbon emissions per unit of power generation.Compared to aluminum frames,steel frames demonstrate 77% lower lifecycle carbon emissions and triple the energy savings, with coal consumption reduced by over 90,000 metric tons per GW of module capacity. At the group level, environmental protection systems have been formulated, covering various aspects such as water and electricity consumption, sewage and waste gas, noise, hazardous waste and general solid waste, environmental protection facilities, carbon emissions, and pollutant discharge permits. Within the framework of the group's environmental protection systems, each manufacturing base has separately developed 94 environmental protection systems targeting wastewater, waste gas, noise, solid waste, hazardous waste, and other areas.
	分销、仓储及运输 Distribution, storage and transportation	/	/	/	/	仓储阶段：公司根据产品特性优化仓储布局与拣选方式，最大限度减少货物搬运距离；同时与仓储供应商探讨三维仓库堆叠方法，以提升空间利用率，节省能源与资源消耗。场内运输：以电动叉车替代传统柴油叉车，减少尾气排放与噪音污染。下游运输：优先采用低碳物流与多式联运模式，同时通过优化路线、鼓励供应商采用新能源汽车，在提升运输效率的同时，降低物流能耗、成本及碳排放。包装与托盘使用：在托盘应用上，已从木托盘完全过渡到可循环使用的镀锌钢托盘，减少物料损耗、木材消耗及环境足迹。 Warehousing Stage: The company optimizes warehouse layout and picking based on product traits to minimize goods handling distance; meanwhile, it discusses with warehousing suppliers a 3D warehouse stacking method to improve space utilization and save energy/resource consumption.On-Site Transportation: It replaces traditional diesel forklifts with electric ones to reduce exhaust emissions and noise pollution.Downstream Transportation: It prioritizes low-carbon logistics and multimodal transport. Meanwhile, by optimizing routes and encouraging suppliers to use new energy vehicles, it cuts logistics energy use, costs and carbon emissions while boosting transport efficiency.Packaging & Pallet UsageFor pallets, it has fully transitioned from wooden ones to recyclable galvanized steel pallets, cutting material loss, wood use and environmental footprint.
	使用阶段 —— 运营及维护 / 保养 Use phase - operation and servicing/maintenance	/	/	/	/	在储能领域，公司采用两大核心策略以提升产品性能与可持续性。一方面，公司选用高效率、长循环寿命的电芯，这不仅能减少充放电过程中的效率损耗、延长产品使用寿命，还可降低全生命周期的碳排放。另一方面，公司融入高效率液冷板与制冷剂循环系统，将电芯维持在安全温度范围内 —— 此举进一步延长了电芯寿命并提升了可靠性。公司旗舰产品 eTronP 通过混合冷却技术，实现了运行能耗降低 30% 的效果。 In the energy storage sector, the Company adopts two core strategies to enhance product performance and sustainability. On one hand, it uses high-efficiency battery cells with a long cycle life, which minimizes efficiency loss during charging and discharging, extends the product's service lifespan, and reduces carbon emissions throughout the entire lifecycle. On the other hand, the Company incorporates high-efficiency liquid cooling plates and refrigerant circulation systems to maintain battery cells within safe temperature ranges—further prolonging lifespan and improving reliability. Its flagship product, eTronP, achieves a 30% reduction in operational energy consumption through hybrid cooling technology.

接触有害物质 Exposure to Hazardous Substances	与包含此列表中物质的产品相关的收入占比 % of revenue associated with products containing substances in this list	/	/	/	/	/	无 NONE
生命周期结束的电子废弃物指标 End of Life Cycle E-waste	从回收计划收集的废弃电气电子设备（WEEE）的总重量 Total weight of WEEE collected from takeback programs	/	吨 metric tonnes	0	0	0	2688.93
	回收的电子废物（WEEE）重用/转售/回收的百分比 Percentage of takeback WEEE reused / resold / recycled	/	%	0	0	0	96%
	处置/填埋的回收电子废物的百分比 Percentage of takeback WEEE disposed / landfilled	/	%	0	0	0	4%
可持续收入 Sustainable Revenues	产品/服务描述 Product/service description	/	公司主营业务以太阳能电池组件的研发、生产、销售为主，业务亦涵盖了光伏电站 EPC、光伏电站运营、储能领域等，主要处于光伏产业链的中游位置，并涉足光伏产业链的上游和下游。 The company's main business focuses on the R&D, production, and sales of solar cell modules. Its operations also cover photovoltaic (PV) power plant EPC (engineering, procurement, and construction), PV power plant operation, and the energy storage sector. It is mainly positioned in the midstream of the PV industry chain, while also involving itself in the upstream and downstream segments.				
	总营业收入 Total Revenues	/	元 RMB	18,830,724,181	29,384,723,113	35,326,804,378	20,239,346,275
	可持续收入 sustainable revenues	/	元 RMB	17,493,090,566.32	27,870,935,442.54	33,872,400,992.21	19,152,225,077.44
	可持续收入的占比 Percentage of sustainable revenues	气候变化缓解相关的收入 Climate change mitigation	%	92.897%	94.848%	95.883%	94.629%
金属原材料 Metal Raw Materials	各类金属的用量（铝、钴、铜、钢铁、镍、锂、钛） The amount of mental material used (Aluminium, Cobalt, Copper, Iron/steel, Nickel, Lithium, Titanium)	/	吨 metric tonnes	/	/	铝64400吨 Aluminium: 64400 tonnes 铜5520吨 Copper: 5520 tonnes	铝：54119吨 Aluminium: 54119 tonnes 铜：： 5154吨 Copper: 5154 tonnes
	来自回收来源的材料占所用材料总额的百分比 % of the total of the material used that comes from recycled sources	/	%	/	/	0	0
员工多元化 Workforce Breakdown: Gender	女性在员工总数中的比例 Share of women in total workforce	/	%	/	/	29.21%	33.19%
	女性在管理岗位中的比例 Share of women in all management positions	/	%	/	/	18.04%	19.60%
	女性在初级管理岗位中的比例 Share of women in junior management positions	/	%	/	/	19.90%	20.80%
	女性在高级管理岗位中的比例 Share of women in top management positions	/	%	/	/	18.18%	15.40%
	女性在创收（如销售）管理岗位中的比例 Share of women in management positions in revenue-generating functions	创收岗位：销售、一线生产人员 Revenue-generating functions: sales, production	%	/	/	33.68%	22.89%
	女性在STEM（科学、技术、工程和数学）相关岗位中的比例 Share of women in STEM-related positions	STEM相关岗位：IT、物流、研发、工程部 STEM-related positions: IT, logistics, R&D, engineering	%	/	/	56.43%	15.16%
	汉族员工在员工总数中的比例 Share of Han employees in total workforce	/	%	/	/	86.31%	90.72%
	回族员工在员工总数中的比例 Share of Hui employees in total workforce	/	%	/	/	5.19%	1%
	苗族员工在员工总数中的比例 Share of Miao employees in total workforce	/	%	/	/	0.74%	0.85%
	其他民族员工在员工总数中的比例 Share of other ethnic employees in total workforce	/	%	/	/	7.76%	3.40%
	汉族员工在管理岗位中的比例 Share of Han employees in all management positions	/	%	/	/	95.37%	96.05%
	回族员工在管理岗位中的比例 Share of Hui employees in all management positions	/	%	/	/	0.51%	0.60%

	苗族员工在管理岗位中的比例 Share of Miao employees in all management positions	/	%	/	/	0.10%	0
	其他民族员工在管理岗位中的比例 Share of other ethnic employees in all management positions	/	%	/	/	4.02%	1.70%
	数据占全职员工的比例 Coverage of the data as a percentage of FTEs	/	%	/	/	> 75%	> 75%
结社自由和集体谈判 Freedom of Association	由独立工会代表或由集体谈判协议代表的员工占员工总数的百分比 Percentage of employees represented by an independent trade union or covered by collective bargaining agreements	/	%	100%	100%	100%	100%
人权评估——本公司 Human Rights Assessment- Own Operations	进行过人权评估的部分占总数的比例 Percentage of total assessed	/	%	/	/	30.76%	100%
	已识别风险的评估的部分占总数的比例 Percentage of total assessed where risks have been identified	/	%	/	/	0.2%	0%
	采取缓解措施的风险的部分占总数的比例 Percentage of risk with mitigation actions taken	/	%	/	/	0.2%	0%
人权评估——供应商 Human Rights Assessment- Suppliers	进行过人权评估的部分占总数的比例 Percentage of total assessed	/	%	/	/	68%	40%
	已识别风险的评估的部分占总数的比例 Percentage of total assessed where risks have been identified	/	%	/	/	0.2%	0%
	采取缓解措施的风险的部分占总数的比例 Percentage of risk with mitigation actions taken	/	%	/	/	0.2%	0%
人权评估——合资公司 Human Rights Assessment- Joint Ventures	进行过人权评估的部分占总数的比例 Percentage of total assessed	/	%	/	/	100%	100%
	已识别风险的评估的部分占总数的比例 Percentage of total assessed where risks have been identified	/	%	/	/	0.2%	0%
	采取缓解措施的风险的部分占总数的比例 Percentage of risk with mitigation actions taken	/	%	/	/	0.2%	0%
培训与发展输入 Training & Development Inputs	人均培训小时数 Average hours per FTE of training and development	/	小时 Hour	/	/	9.01	90.20
	人均培训花费 Average amount spent per FTE on training and development	/	元 RMB	/	/	277.42	324.60
人力投资 Human Capital Return on Investment	人力资本投资回报率 Resulting HC ROI	(a - (b-c))/c	比率 Ratio	/	/	2.490	-0.218
	总收入 (a) Total revenue	/	元 RMB	18830724181	29384723113	35,326,804,378	20,239,346,275
	营业费用总额 (b) Total operating expenses	/	元 RMB	/	/	32,860,898,305.96	21,907,700,123.53
	员工相关费用总额 (c) Total employee-related expenses	/	元 RMB	/	/	1,654,548,394.47	1,369,622,763.13
	员工总数 Total Employees	/	人 Number	5624	8600	15,228	8,351
	人力资本数据收集范围 Data coverage	/	%	/	/	100%	100%
	新员工招聘的总数量 Total number of new employee hires	/	人 Number	3374	4816	7179	1985
	由内部候选人（内部雇佣）填补的空缺职位比例 Percentage of open positions filled by internal candidates (internal hires)	/	/	/	/	/	20%
	平均招聘成本 Average hiring cost/FTE	/	/	/	/	/	3705

招聘 Hiring	公司根据以下类别细分新员工招聘和/或内部招聘的数据。 The company breaks down the new employee hires and/or internal hires data based on the following categories.	/	/	【管理能力】在人才招聘领域，我们持续加大资金投入，挖掘行业内具有丰富经验和卓越能力的头部研发人才，确保在核心业务领域保持领先优势；同时，公司强调对跨行业优秀人才（人力资源、风险控制、财务管理等）的引进，注重吸纳具备多元化背景和专业技能的复合型人才，以提升企业的综合竞争力。 【活力人才】此外，公司积极推动校企合作，目前已与南开大学、东南大学等多所国内 985、211 院校开展管培生项目合作及核心人才储备计划，并以订单班形式与院校合作，将企业的最新产业线技术引进课堂教学，通过产教融合培养富有“双文化”特征的职业人才。同时，作为国家级博士后工作站，我们持续吸纳博士、博士后等高级人才，以确保自身研发技术的前沿性。 【Management Capabilities】In the field of talent recruitment, we continue to increase capital investment to identify top R&D talents with rich experience and outstanding capabilities in the industry, ensuring that we maintain a leading edge in core business areas. Meanwhile, the company also emphasizes the introduction of outstanding interdisciplinary talents (in human resources, risk control, financial management, etc.), and focuses on recruiting compound talents with diversified backgrounds and professional skills to enhance the comprehensive competitiveness of the enterprise. 【Dynamic Talents】Furthermore, the company actively promotes university-enterprise cooperation. Currently, it has launched management trainee programs and core talent reserve plans in collaboration with multiple domestic 985 and 211 universities such as Nankai University and Southeast University. It also cooperates with colleges and universities in the form of "order-based classes", introducing the enterprise's latest industrial line technologies into classroom teaching, and cultivating professional talents with "dual-cultural" characteristics through the integration of industry and education. At the same time, as a national-level postdoctoral research station, we continuously recruit senior talents such as doctors and postdoctoral researchers to ensure the cutting-edge nature of our own R&D technologies.			
	支持项目描述 Description of support programs	/	/	运动与健康倡议：通过提供健身房和开展运动会，鼓励员工积极参与体育锻炼 Sport & health initiatives: Encourage employees to participate in physical activity by providing gyms and organizing sports events 工作场所压力管理：公司在遵守相关法律法规的基础之上，鼓励员工工作生活平衡，落实各项福利举措，提供如食堂、住宿、生日礼品、班车等福利，开展摄影比赛、演讲比赛、主播大赛等多元化的企业文化活动，营造舒适、积极的工作氛围。 Workplace stress management: On the basis of complying with relevant laws and regulations, we encourages our employees to have a work-life balance, implements various welfare initiatives, provides benefits such as canteens, accommodation, birthday gifts, shuttle buses, etc., and carries out diversified activities such as photography contests, speech contests, broadcasting contests, etc. 母乳喂养设施：配备有哺乳室，为女性员工提供便利； Breast-feeding/lactation facilities: Provide breastfeeding rooms for female employees 儿童保育设施/活动：举办小候鸟活动，帮助留守儿童与父母团聚的同时学习知识、收获友谊，让“小候鸟”们度过一个充实的暑假。 Childcare facilities or contributions: Organize "Small Migratory Birds" activities to help left-behind children and parents reunite, learn, and build friendships, creating a fulfilling summer vacation for these children 孕期关怀：公司关怀新生妈妈和怀孕女工，制定了《新生妈妈和怀孕女工风险评估程序》，对其所在工作场所进行风险评估，并针对性制定预防整改措施，加强对女性员工的保护。 Pregnancy care: Formulate the "Risk Assessment Procedures for New Mothers and Pregnant Female Workers", conduct risk assessments of their workplaces, and develop targeted preventive measures to strengthen the protection of female employees.			
员工支持项 Employee Support Programs	提供给男性员工带薪产假时长 Paid parental leave for the non-primary caregiver	/	天 Day	15天 15 days			
	提供给女性员工带薪产假时长 Paid parental leave for the primary caregiver	/	天 Day	女职工在享受国家规定产假的基础上，一孩延长产假 60天，即合计产假 158 天；二孩、三孩延长产假90 天，即合计产假 188 天，自生育之日起按照自然日计算；女职工怀孕未满4个月流产的，享受 15 天产假；怀孕 4 个月流产的，享受 42 天产假。 On the basis of the maternity leave stipulated by the national government, female workers enjoy 60 days of extended maternity leave for one child, i.e., a total of 158 days of maternity leave; 90 days of extended maternity leave for two or three children, i.e., a total of 188 days of maternity leave, which is calculated in accordance with the natural days from the date of childbirth; 15 days of maternity leave for a female worker who miscarries before the fourth month of pregnancy; and 42 days of abortion for a female worker who miscarries after the fourth month of pregnancy.			
离职数据 Employee Turnover Rate	员工总离职率 Total employee turnover rate	/	/	16%	21%	26%	54.54%
	员工主动离职率 Voluntary employee turnover rate	/	/	16%	21%	26%	42.65%
	离职率数据统计范围 Data coverage	/	/	100%	100%	100%	100%
	参与满意度调查的员工占比 Percentage of employees who responded to the survey	/	%	89.52%	87.14%	96.20%	96%
	员工满意度 Percentage of employees with top level of satisfaction	/	%	77.20%	84.20%	86.20%	93.10%
	2024年的目标 Target for FY 2024	/	%	/			85%

员工满意度 Trend of Employee Wellbeing	员工满意度/敬业度调查的内容 Aspects addressed in employee surveys	/	/	1.近期，您的领导是否对您的工作予以认可？ Have your leaders recognized your work recently? 2.在工作中，您有很多机会做您擅长的事吗？ Do you have opportunities to do what you are good at? 3.完成日常工作任务后，你通常会因为成果感到开心吗？ Do you usually feel happy about the achievements after completing your daily work tasks? 4.在工作中，您觉得您的意见受到了重视吗？ Do you feel that your opinions are valued at work? 5.您的领导会及时和你传达公司战略/部门目标吗？ Do your leaders communicate company strategies/departmental goals to you in a timely manner? 6.工作压力是否影响过你的休息质量或情绪状态？ Do work-related stress regularly affect your quality of rest?			
员工缺勤数据 Absentee Rate	公司员工缺勤率 % of total days scheduled	/	%	/	1%	0.66%	1.86%
	2024年缺勤率目标 Absentee rate target for FY2024	/	%	/			2%
	缺勤数据收集范围 Data coverage	/	%	100%	100%	100%	100%
客户满意度 Customer Satisfaction measurement	客户满意度 Percentage of satisfied customers	/	%	96.59%	99.40%	99.54%	95.87%
	2024年客户满意度目标 Customer satisfaction target for FY2024	/	%	/			95.0%
	覆盖范围 Data coverage	/	%	/	/	/	93.70%