

2025 年度晶科能源气候转型年度行动实践

2025 Annual Climate Transition Action Practices of Jinko Solar

气候变化相关财务风险说明

Explanation of financial risks related to climate change

转型风险：若企业管控不当，未达成现行政策要求，可能面临罚款、生产限制等风险；另外，各国为应对气候变化，可能会制定更严格的碳排放法规和碳定价机制。企业需投入更多资源开展节能减排措施、降低温室气体排放，进而增加企业的运营成本。

Transition Risk: Inadequate corporate governance or failure to meet existing regulatory requirements may expose the Company to risks such as fines, production restrictions, and other penalties. In addition, as countries continue to strengthen climate actions, stricter carbon emission regulations and carbon pricing mechanisms may be introduced. This trend would necessitate greater corporate investment in energy conservation and emission reduction efforts, driving up operational costs associated with reducing greenhouse gas emissions.

1、财务影响评估：晶科能源采用 IEA 的 NZE 2050、APS 和 STEPS 三种转型情景，覆盖短期（1—3 年）、中期（3—5 年）及长期（5—10 年及以上），评估公司转型路径下的额外减排量、减排成本及企业价值影响。分析基于 2025 年范围一、范围二温室气体排放数据进行线性模拟。结果显示，额外减排成本随时间整体下降，长期趋近于零；短中期财务影响处于公司可接受范围。在 NZE 2050 情景下，2050 年企业价值影响为 0.0044%，未触发财务规划重大性风险阈值；基于晶科能源 2025 年资产分布情况，晶科能源的企业价值约为 1,533.05 亿元人民币，加权平均资本成本约为 6.62%。根据国际能源署对未来排放情况及碳价走势的预测，到 2050 年，晶科能源所需承担的额外减排成本约为 6,719 万元人民币。在 STEPS 情景下，2043 年后碳预算出现盈余，公司将无需承担额外减排成本。据公司内部测算，年度节能减排支出约占节能环保

总投入的 1%。2025 年 ESG 报告披露公司节能环保总投入为 27,274.91 万元，据此测算，年度节能减排支出约为 272.75 万元。

1. Financial impact assessment: Jinko Solar uses the IEA's NZE 2050, APS, and STEPS transition scenarios across short-term (1–3 years), medium-term (3–5 years), and long-term (5–10 years and beyond) horizons to assess additional emissions reductions, abatement costs, and impacts on enterprise value along its transition pathway. The analysis linearly models the Company's 2025 Scope 1 and Scope 2 greenhouse-gas emissions. Results indicate that additional abatement costs decline over time and approach zero in the long term, while short- and medium-term financial impacts remain within the Company's acceptable range. Under NZE 2050, the impact on enterprise value in 2050 is 0.0044%, below the materiality threshold for financial planning; According to the Company 2025 asset allocation, Jinko Solar's enterprise value as of the end of 2024 is approximately 1,533.05 billion CNY, with a weighted average cost of capital of approximately 6.62%. Based on the IEA's projections on future emissions scenarios and carbon price forecasts, the present value of Jinko Solar's potential additional abatement costs by 2050 is estimated to be approximately 67.19 million CNY. under STEPS, the carbon budget becomes positive after 2043, so the Company would no longer incur additional abatement costs. According to the Company's internal estimate, annual expenditure on energy conservation and emissions reduction is approximately 1% of total investment in energy conservation and environmental protection. The 2025 ESG Report discloses total investment in energy conservation and environmental protection of CNY 272.7491 million; on this basis, the estimated annual expenditure on energy conservation and emissions reduction is approximately CNY 2.7275 million.

2、风险管理方法：晶科能源构建“决策层—管理层—执行层”三级气候治理架构，风险合规与 ESG 管理委员会负责统筹管理，应对气候变化专项工作组推动具体落实。公司已建立气候风险识别与评估体系，综合考虑急性、慢性物理风险以及政策与法律、市场、技术、监管和声誉等转型风险，并从发生可能性、影响时期、影响程度、价值链环节和财务影响等维度进行评估。公司将气候风险管理

流程进一步嵌入企业整体风险管理体系，提升对运营高风险节点的识别和财务影响评估能力。2025 年，公司持续完善自然风险管理制度建设，明确公司各项风险管理政策、识别和评估制度、监测和控制制度、业务风险管理制度、风险报告和沟通制度。公司积极构建风险因子库，分类管理包含气候风险在内的各项已被识别到的风险，并通过定期报告、独立内部审计、内控评价等方式开展风险因子调整以及管理方法调整，从而简化机遇的识别、评估和管理流程整合至全公司风险管理流程。

2. Risk management method: Jinko Solar operates a three-tier climate governance structure comprising decision-making, management, and execution. The Risk Compliance and ESG Management Committee coordinates climate management, while its Climate Change Task Force drives implementation. The Company has established a climate-risk identification and assessment system covering acute and chronic physical risks as well as transition risks related to policy and law, markets, technology, regulation, and reputation. Risks are assessed by likelihood, time horizon, severity, value-chain stage, and financial impact. Climate-risk management is further embedded in the enterprise risk-management system to improve the identification of high-risk operational nodes and the assessment of financial impacts. In 2025, the Company continued to improve the construction of natural risk management systems, clarifying various risk management policies, identification and assessment systems, monitoring and control systems, business risk management systems, as well as risk reporting and communication systems. The Company actively builds a risk factor database to manage various identified risks, including climate risks, in a classified manner. Through regular reporting, independent internal audits, and internal control evaluations, it adjusts risk factors and management methods, thereby simplifying the processes of identifying, assessing, and managing opportunities and integrating them into the company-wide risk management process.

3、风险应对策略：公司在全球各运营区域配备专业法务团队，持续跟踪碳权交易、碳费、碳边境调节机制等法律法规和政策进展，并通过专题培训提升相关人员的合规应对能力；同时将内部影子碳价应用于部分资本支出、运营及风险

管理决策，在设备选型和能源采购等决策中纳入碳成本考量。公司还预留资金用于抗灾设备、高效设备和清洁能源改造，并通过购买覆盖自然灾害的专项保险分摊潜在经济损失。

3. Risk response strategy: The Company maintains professional legal teams across its operating regions to track developments in carbon trading, carbon fees, the Carbon Border Adjustment Mechanism, and related laws and policies, and provides targeted training to strengthen relevant personnel's compliance capabilities. It also applies its internal shadow carbon price to selected capital-expenditure, operational, and risk-management decisions, incorporating carbon costs into equipment selection, energy procurement, and other decisions. The Company reserves funds for disaster-response equipment, high-efficiency equipment, and clean-energy retrofits and purchases dedicated natural-catastrophe insurance to share potential financial losses.

物理风险：晶科能源采用 IPCC RCP2.6 和 RCP8.5 情景，覆盖短期（1—3 年）、中期（3—5 年）及长期（5—10 年及以上），分析极端降水、湿润趋势、气旋等主要物理风险。情景分析显示，在 RCP8.5 下仍有一定比例资产位于高风险地区，相关子公司主要集中在中国江西省、浙江省及东南亚地区。公司已在全部运营点建立物理风险应急响应机制，并针对高风险运营点制定洪涝、台风和飓风等极端天气应急预案。2025 年，公司未有生产制造基地因上述物理风险遭受重大财务损失。

Physical Risk: Jinko Solar uses the IPCC RCP2.6 and RCP8.5 scenarios across short-term (1–3 years), medium-term (3–5 years), and long-term (5–10 years and beyond) horizons to analyze major physical risks including extreme precipitation, humid trends, and cyclones. The analysis indicates that under RCP8.5, a proportion of assets remain in high-risk areas, with relevant subsidiaries mainly located in Jiangxi and Zhejiang provinces in China and in Southeast Asia. The Company has established physical-risk emergency response mechanisms at all operating sites and has emergency plans for floods, typhoons, hurricanes, and other extreme

weather at high-risk sites. In 2025, no manufacturing base suffered a significant financial loss due to these physical risks.

1、财务影响评估：以洪水风险为例，我们假设，在中期的时间范围内（5 年），洪水将造成资产价值损失金额最多出现 5%，最少出现 1%。在长期的时间范围内（20 年），洪水将造成年度资产价值损失金额最多出现 15%，最少出现 5%。已知公司基于生产制造型子公司进行情景分析，资产价值总计：179,606,265,870.07 元。由此：中期预期财务影响最大： $179,606,265,870.07 \times 5\% \times 5 = 44,901,566,467.52$ 元，中期预期财务影响最小： $179,606,265,870.07 \times 1\% \times 5 = 8,980,313,293.50$ 元；长期预期财务影响最大： $179,606,265,870.07 \times 15\% \times 20 = 538,818,797,610.21$ 元，长期预期财务影响最小： $179,606,265,870.07 \times 5\% \times 20 = 179,606,265,870.07$ 元。

1. Financial impact assessment: Taking flood risk as an example, we assume that, over the medium-term time horizon (5 years), floods will cause annual asset value losses of up to 5% and at least 1%. Over the long-term time horizon (20 years), floods will cause annual asset value losses of up to 15% and at least 5%. The Company conducts the scenario analysis based on its manufacturing subsidiaries, with a total asset value of CNY 179,606,265,870.07. Therefore, the maximum expected financial impact over the medium term is $\text{CNY } 179,606,265,870.07 \times 5\% \times 5 = \text{CNY } 44,901,566,467.52$, while the minimum expected financial impact over the medium term is $\text{CNY } 179,606,265,870.07 \times 1\% \times 5 = \text{CNY } 8,980,313,293.50$; the maximum expected financial impact over the long term is $\text{CNY } 179,606,265,870.07 \times 15\% \times 20 = \text{CNY } 538,818,797,610.21$, while the minimum expected financial impact over the long term is $\text{CNY } 179,606,265,870.07 \times 5\% \times 20 = \text{CNY } 179,606,265,870.07$.

我们预计通过在建设阶段融入洪水风险防范、制定洪水风险应急预案和配备应急物资等方式应对洪水风险。其中，前两项措施可纳入公司正常厂房建设及 EHS 应急预案制定，额外成本可忽略不计；应对成本主要用于采购防洪设施及应急事件物资。依据往年实际支出情况，预计每年相关支出可达 116,746,200.00 元人民币。

We plan to address flood risk by integrating preventive measures into the construction phase, formulating flood-risk emergency plans, and

equipping emergency supplies. The first two measures can be incorporated into routine factory construction and EHS emergency planning with negligible incremental cost; response costs are expected to arise mainly from purchasing flood-control facilities and emergency supplies. Based on actual expenditure in previous years, related annual expenditure is estimated at CNY 116,746,200.00.

2、风险管理方法：晶科能源将物理风险纳入气候风险识别与评估体系，从发生可能性、影响时期、影响程度、价值链环节和财务影响等维度进行评估，并将相关流程嵌入企业整体风险管理体系。公司依据气象单位信息库，结合 WRI Aqueduct 工具和 IPCC 情景开展风险筛查，从地理位置、供应链依赖性、业务连续性和资源脆弱性划分风险敞口；对可能威胁员工生命安全或核心资产的物理风险采取极低容忍原则。2025 年，公司持续完善自然风险管理制度建设，明确公司各项风险管理政策、识别和评估制度、监测和控制制度、业务风险管理制度、风险报告和沟通制度。公司积极构建风险因子库，分类管理包含气候风险在内的各项已被识别到的风险，并通过定期报告、独立内部审计、内控评价等方式开展风险因子调整以及管理方法调整，从而简化机遇的识别、评估和管理流程整合至全公司风险管理流程。

2. Risk management method: JinkoSolar incorporates physical risks into its climate-risk identification and assessment system, evaluating them by likelihood, time horizon, severity, value-chain stage, and financial impact, and embeds the related process in its enterprise risk-management system. Using meteorological databases together with the WRI Aqueduct tool and IPCC scenarios, the Company screens risks and classifies exposure by location, supply-chain dependence, business continuity, and resource vulnerability. It applies a very-low-tolerance approach to physical risks that could threaten employee safety or critical assets. In 2025, the Company continued to improve the construction of natural risk management systems, clarifying various risk management policies, identification and assessment systems, monitoring and control systems, business risk management systems, as well as risk reporting and communication systems. The Company actively builds a risk factor database to manage various identified risks, including climate risks, in a classified manner. Through regular reporting, independent internal

audits, and internal control evaluations, it adjusts risk factors and management methods, thereby simplifying the processes of identifying, assessing, and managing opportunities and integrating them into the company-wide risk management process.

3、风险应对策略：

3、Risk response strategy:

(1) 洪水风险防范：工厂建设阶段考虑洪水风险防范，如对仓库进行防渗、防雨、防腐处理。

(1) Flood risk prevention: Consider flood risk prevention during the factory construction phase, such as implementing anti-seepage, rainproof, and anti-corrosion treatments for warehouses.

(2) 洪水风险应急预案制定：公司制定并执行《突发环境事件应急预案》，各生产基地设立应急联动中心和应急响应小组，并根据生产经营需要定期开展专项应急预案及现场处置方案演练，提升一线人员应急实操能力。

(2) Formulation of flood-risk emergency plans: The Company implements its Emergency Plan for Sudden Environmental Incidents. Each manufacturing base has an emergency coordination center and response team and regularly conducts drills for special emergency plans and on-site response procedures based on operational needs, strengthening frontline response capabilities.

(3) 提升安全保障：增加员工健康安全保障措施。

(3) Enhancing safety guarantees: Strengthen health and safety protection measures for employees.

(4) 应急物资配备：增加水资源应急物资。

(4) Equipping emergency supplies: Increase emergency supplies for water resources.

(5) 产品防水性能提升：公司计划持续增加耐湿热组件研发投入，并将防水、高抗风等要求纳入产品设计，提升产品在恶劣气候条件下的适应性。

(5) Improving product waterproof performance: The Company plans to continue investing in the development of heat- and humidity-resistant modules and to incorporate waterproofing and high-wind-resistance requirements into product design, improving product adaptability under severe climatic conditions.

气候变化相关财务机遇说明

Explanation of financial opportunities related to climate change

在晶科能源的转型机遇分析中，公司采用短期（1—3 年）、中期（3—5 年）和长期（5—10 年及以上）的时间范围，并围绕光伏主业重点分析能源转型带来的市场增长机遇。

In its transition-opportunity analysis, JinkoSolar uses short-term (1–3 years), medium-term (3–5 years), and long-term (5–10 years and beyond) horizons and focuses on market-growth opportunities created by the energy transition and aligned with its core photovoltaic business.

我们同样采用转型风险分析中的 IEA NZE 2050、APS 和 STEPS 三种情景，基于三种情景下光伏组件未来需求增长情况进行预测，模拟公司光伏业务在不同能源转型路径下的潜在增长空间。根据 IEA 的分析预测，在短期至中期时间范围内，光伏市场呈现较快增长趋势。2030 年前，三种情景下光伏装机量的复合年均增长率均高于 20%，组件产品具有较高的销售潜力；至 2030 年，光伏市场机遇增长最为显著，预计市场需求增长可能进一步超过预测周期平均水平。作为开发相关市场机遇所需投入的参考，2025 年公司研发投入为 25.35 亿元。在长期时间范围内，虽然光伏市场需求增速有所放缓，但光伏组件销售总量仍将保持较高水平，其中在 NZE 2050 和 APS 情景下，2038—2050 年潜在光伏组件销售量相对较高，从而为公司收入增长带来潜在机遇。

We also use the IEA' s NZE 2050, APS, and STEPS scenarios adopted in the transition risk analysis to forecast future growth in PV module demand and model the potential growth of the Company' s PV business under different energy transition pathways. According to the IEA' s analysis and projections, the PV market is expected to experience relatively rapid growth over the short to medium term. Before 2030, the compound annual growth rate of PV installed capacity under all three scenarios is expected to exceed 20%, indicating strong sales potential for PV modules. Around 2030, growth opportunities in the PV market are expected to be most significant, with market demand growth potentially

exceeding the average level over the projection period. As a reference for the investment required to develop the related market opportunities, the Company' s R&D investment in 2025 amounted to CNY 2.535 billion. Over the long term, although the growth rate of PV market demand is expected to slow, total PV module sales are expected to remain relatively high. In particular, under the NZE 2050 and APS scenarios, potential PV module sales from 2038 to 2050 are expected to remain at a relatively high level, creating potential opportunities for the Company' s revenue growth.

内部碳定价机制说明

Explanation of the internal carbon pricing mechanism

本公司已建立并实施内部影子碳价机制，用于覆盖范围一（直接排放）及范围二（间接排放）的二氧化碳（CO₂）排放管理，报告期覆盖比例为 100%。当前内部影子碳价以 10 元/吨二氧化碳当量作为最低实际使用价格及管理基线，该价格参考 2025 年中国绿色电力证书（GEC）风电、光伏价格均值，并纳入绿证交易的边际成本；针对欧盟碳边境调节机制（CBAM）带来的碳价格合规压力，对于特殊海外项目，公司以 800 元/吨二氧化碳当量作为最高实际使用价格。定价模型结合 NZE 2050 及 APS 情景分析，综合考虑国内外短中期绿电、绿证和碳抵消成本、碳配额免除值以及不同产品销售市场的合规要求，并根据绿证、绿电价格变化进行动态调整，以支持成本效益分析、资本支出、运营和风险管理决策。

The Company has established and implemented an internal shadow carbon pricing mechanism to manage carbon dioxide (CO₂) emissions under Scope 1 (direct emissions) and Scope 2 (indirect emissions), covering 100% of the relevant emissions during the reporting period. The current internal shadow carbon price uses CNY 10 per tCO₂e as the minimum price applied and the management baseline. This price is determined with reference to the average 2025 prices of Chinese green electricity certificates (GECs) for wind and solar power, with the marginal cost of GEC transactions also taken into account. To reflect carbon-price compliance pressure arising from the EU Carbon Border Adjustment Mechanism (CBAM), for special overseas projects, the Company uses CNY 800 per tCO₂e as the maximum price applied. The pricing model incorporates the IEA NZE 2050 and APS scenarios and considers the short- and medium-term costs of green electricity, GECs and carbon offsets in domestic and international markets, carbon allowance exemptions, and the compliance requirements of different product markets. The price is dynamically adjusted in line with changes in GEC and green electricity prices to support cost-benefit analysis and

decision-making relating to capital expenditure, operations and risk management.

实施内部影子碳价的核心目标包括：

The core objectives of implementing the internal shadow carbon price include:

1. 支持资本项目及运营决策的成本效益分析：按项目所在地法规及满产排放量测算碳成本；若内部碳价无法覆盖相关成本，则重新审视项目；在设备选型中比较折旧期内的碳成本节约与增量投资。

Supporting cost-benefit analysis for capital projects and operational decisions: Carbon costs are estimated using local requirements and emissions at full production; projects are reconsidered if the internal carbon price does not cover the relevant costs; and carbon-cost savings over the depreciation period are compared with incremental investment when equipment is selected.

2. 推动能源效率提升：运用影子碳价测算新设备折旧期内的碳成本节约，优先选择减排量较高、增量投资较低的设备，并将用能及降碳成本作为淘汰高耗能设备、提升新产线电气化水平的重要参考。

Promoting energy-efficiency improvement: The shadow price is used to estimate carbon-cost savings from new equipment over its depreciation period, prioritize equipment with greater reductions and lower incremental investment, and inform the phase-out of energy-intensive equipment and higher electrification of new production lines.

3. 引导在业务决策及风险评估中系统纳入气候相关因素：建立总部横向覆盖基地、纵向延伸至车间的碳账户，每季度更新、每年汇总，并以上一年度25%分位排放量与降碳成本设置风险预警线，纳入整体风险管理。

Guiding the systematic integration of climate factors into business decisions and risk assessments: Carbon accounts span manufacturing bases horizontally and extend to workshops vertically, are updated quarterly and consolidated annually, and use the prior year's 25th-

percentile emissions and abatement costs to set early-warning thresholds for overall risk management.

4. 助力识别低碳发展机遇：综合考虑绿电、绿证、碳抵销成本以及 NZE 2050 和 APS 等情景分析结果，为低碳解决方案应用和资源配置提供决策依据。

Helping identify low-carbon development opportunities: Green electricity, green electricity certificates, carbon-offset costs, and scenario results such as NZE 2050 and APS are considered to support decisions on low-carbon solutions and resource allocation.

5. 确保符合国内外碳监管要求，实现气候目标对标：将 CBAM 潜在影响、碳配额免除值和不同产品销售市场要求纳入定价模型，并与公司碳管理合规目标及气候战略保持一致。

Ensuring compliance with domestic and international carbon requirements and alignment with climate goals: The pricing model incorporates the potential impact of CBAM, carbon-allowance exemptions, and market requirements for different products and is aligned with the Company's carbon-compliance objectives and climate strategy.

6. 为设定碳补偿相关预算提供依据，通过年度评估内部碳费用对外部成本的覆盖情况，动态优化管理策略。

Providing a basis for setting budgets related to carbon offset, and dynamically optimizing management strategies by annually evaluating the coverage of internal carbon costs against external costs.

该影子碳价已用于部分资本支出、运营及风险管理决策。资本项目按地方法规和满产排放量测算碳成本；运营端比较设备折旧期内的碳成本节约与增量投资；风险管理端按季度更新、按年度汇总碳账户，并将预警结果纳入基地整体风险管理分析，以持续监测和评估定价方法。

The shadow carbon price is used in selected capital-expenditure, operational, and risk-management decisions. Capital projects estimate carbon costs using local requirements and emissions at full production; operations compare carbon-cost savings over the equipment

depreciation period with incremental investment; and risk management updates carbon accounts quarterly, consolidates them annually, and incorporates early-warning results into site-level risk analysis to monitor and evaluate the pricing method.

低碳产品说明

Explanation of low carbon product

公司是一家以光伏产业技术为核心，以“改变能源结构，承担未来责任”为发展愿景的全球知名光伏产品制造商。公司主要业务范围包括单晶硅棒、硅片切割、电池制备、组件封装在内的光伏业务，已建立从硅片生产、电池片生产到光伏组件生产的垂直一体化产能，并向全球范围内的光伏电站投资商、开发商、承包商以及分布式光伏系统终端客户提供高效率、高质量的太阳能光伏组件及储能产品。截至 2025 年底，公司已形成约 100GW 的一体化先进产能，其中国内约 86GW、海外约 14GW。报告期内，公司持续深耕储能业务，面向户用、源网侧大型储能应用场景及工商业市场迭代升级储能产品解决方案；储能系统产线实现规模化稳定运营，关键核心零部件的自研、量产能力持续增强，全年储能系统出货量较上年实现跨越式增长，并连续多个季度入选 BNEF Tier 1 一级储能厂商名录。

With PV technology at its core and guided by the vision of “optimize the energy portfolio and take responsibility for enabling a sustainable future”, the Company is a globally recognized PV product manufacturer. Its PV businesses cover monocrystalline ingots, wafer slicing, cell fabrication, and module assembly. Its vertically integrated capacity spans wafers, cells, and PV modules, supplying high-efficiency, high-quality PV modules and energy-storage products to power-plant investors, developers, contractors, and distributed-system end-users worldwide. At the end of 2025, the Company had approximately 100 GW of advanced integrated capacity, comprising approximately 86 GW in China and 14 GW overseas. During the reporting period, the Company upgraded energy-storage solutions for residential, utility-scale, and commercial and industrial markets. Its energy-storage production lines achieved stable large-scale operation, in-house development and mass-production capabilities for key components continued to strengthen, and full-year shipments recorded substantial year-on-year growth. The Company was also included in the BNEF Tier 1 energy-storage manufacturer list for multiple consecutive quarters.

太阳能光伏组件是公司生产环节的终端产品，也是公司面向市场的主要产品，客户群体为全球范围内的光伏电站投资商、开发商、承包商以及分布式光伏系统的经销商。公司光伏组件产品目前以单晶组件为主，并应用 TOPCon、双面（含双玻和透明背板技术）、半片、叠焊、多主栅、大尺寸等电池及组件工艺技术，根据全球市场需求差异化开发多个系列的高功率光伏组件产品。当前，公司组件出货的主力产品为应用 N 型 TOPCon 电池技术的 Tiger Neo 系列高端组件。自 2021 年底推向市场以来，公司持续开展技术和工艺升级，报告期内 N 型 TOPCon 电池转换效率刷新至 27.79%，进一步提高产品全生命周期发电效益。同时，公司进一步优化多分片、贱金属化等电池及组件工艺，为 TOPCon 技术提效降本提供支撑。

Solar PV modules are the final products of the Company's manufacturing process and its primary market-facing products, serving power-plant investors, developers, contractors, and distributors of distributed PV systems worldwide. The portfolio mainly comprises monocrystalline modules and applies TOPCon, bifacial designs (dual-glass and transparent-backsheet technologies), half-cut cells, ribbon overlay, multi-busbar, and large-format technologies to develop high-power products for diverse market needs. The principal product shipped is the premium Tiger Neo series based on N-type TOPCon cells. Since its launch at the end of 2021, the series has undergone continuous technological and process upgrades. During the reporting period, N-type TOPCon cell conversion efficiency reached a new high of 27.79%, further improving lifetime energy yield. The Company also optimized multi-cut cell and base-metal metallization processes, supporting TOPCon efficiency gains and cost reductions.

通过向全球客户提供优质的光伏组件产品，公司持续助力下游客户避免温室气体排放，从而创造正向环境价值。公司使用归因估算方法计算避免排放量，基本假设光伏电力在运营期间不产生碳排放或相关排放量可以忽略不计，计算方法如下：

- 假设年峰值小时数：1,400 h。

- 参数：2025 年晶科能源股份有限公司售出的光伏组件总量；国际电网平均排放因子来自国际能源署（IEA）《Electricity 2025》；光伏电站系统效率。
- 避免的排放计算公式：2025 年公司售出光伏组件为 86,805.51MW，使用 2025 年公司售出组件的年发电量=光伏电站装机容量*年峰值小时数*光伏电站系统效率（一般取值在 75%-85%之间，这里我们取 80%），得出 2025 年售出组件的年发电量
 $86,805.51\text{MW} \times 1,400\text{h} \times 80\% = 97,222,171.20\text{MWh}$ ，使用总发电量
 (MWh) *国际平均电网排放因子 $0.435\text{tCO}_2 / \text{MWh}$ ，得出避免的排放量 ($\text{tCO}_2 \text{ e}$)，即 $97,222,171.20 \times 0.435 = 42,291,644.47$ 吨二氧化碳当量。

By supplying high-quality PV modules to customers worldwide, the Company continuously helps downstream customers avoid greenhouse-gas emissions, thereby creating positive environmental value. The Company uses an attributional estimation method to calculate avoided emissions, based on the assumption that PV electricity generates no carbon emissions during operation or that such emissions are negligible. The calculation method is as follows:

- Assumed annual peak-sun hours: 1,400 h.
- Parameters: total PV module sales of JinkoSolar Co., Ltd. in 2025; the international average grid emission factor from the International Energy Agency's (IEA) Electricity 2025; and PV plant system efficiency.
- Avoided emissions calculation: In 2025, the Company sold 86,805.51 MW of PV modules. Annual electricity generated by the modules is calculated as PV plant installed capacity $\times$ annual peak-sun hours $\times$ PV plant system efficiency (typically 75%–85%; 80% is applied here). Thus, $86,805.51 \text{ MW} \times 1,400 \text{ h} \times 80\% = 97,222,171.20 \text{ MWh}$. Multiplying total generation by the international average grid emission factor of $0.435 \text{ tCO}_2/\text{MWh}$ gives avoided emissions of $97,222,171.20 \times 0.435 = 42,291,644.47 \text{ tCO}_2\text{e}$.