

高景太阳能股份有限公司

Gokin Solar Co., Ltd.

2025 年度温室气体减排报告

2025 Annual Greenhouse Gas Emissions

Reduction Report

以能源效率提升和清洁能源应用推动低碳运营

Advancing Low-Carbon Operations Through Energy Efficiency Improvements and Clean Energy Adoption

报告期：2025 年 1 月 1 日至 2025 年 12 月 31 日

Reporting Period: January 1, 2025 to December 31, 2025

一、报告概述

I. Report Overview

高景太阳能股份有限公司（以下简称“高景太阳能”或“公司”）积极应对气候变化，将温室气体管理纳入运营管理体系。公司通过设定排放强度目标、按月跟踪绩效、识别节能减排机会并推进改善措施，持续提升生产运营的低碳水平。

Gokin Solar Co., Ltd. (hereinafter referred to as “Gokin Solar” or the “Company”) actively addresses climate change and has incorporated greenhouse gas management into the operational management system. By setting emissions intensity targets, tracking performance monthly, identifying energy-saving and emissions-reduction opportunities, and implementing improvement measures, the Company continuously enhances the low-carbon performance of production and operations.

本报告披露公司 2025 年度范围一和范围二温室气体排放、减排目标及达成情况，并说明年度主要减排措施与后续行动计划。报告数据边界以公司《年度碳排放管理目标监控表》纳入范围为准。

This report discloses the Company's Scope 1 and Scope 2 greenhouse gas emissions, emissions-reduction targets, and target achievement for 2025, together with the principal measures implemented during the year and subsequent action plans. The reporting boundary corresponds to the scope covered by the Company's Annual Carbon Emissions Management Target Monitoring Form.

二、管理边界与核算口径

II. Management Boundary and Accounting Approach

2.1 排放类别

2.1 Emission Categories

- 范围一：公司拥有或控制的排放源产生的直接温室气体排放。
Scope 1: Direct greenhouse gas emissions from sources owned or controlled by the Company.
- 范围二：公司购入电力等能源产生的间接温室气体排放，分别按市场法和位置法披露。
Scope 2: Indirect greenhouse gas emissions from purchased electricity and other energy, disclosed using both the market-based and location-based methods.

2.2 核心管理指标

2.2 Core Management Indicator

考虑生产规模变化对排放总量的影响，公司以单位产品温室气体排放强度作为年度减排目标的核心考核指标，同时持续监测绝对排放量。排放强度的计算方式为相应范围温室气体排放量除以同期总产量，单位为 $\text{tCO}_2\text{e}/\text{万片}$ 。

Considering the impact of changes in production scale on total emissions, the Company uses greenhouse gas emissions intensity per unit of product as the core indicator for assessing annual emissions-reduction targets, while continuing to monitor absolute emissions. Emissions intensity is calculated by dividing greenhouse gas emissions for the relevant scope by total production during the same period and is expressed in tCO_2e per 10,000 wafers.

三、目标设定

III. Target Setting

公司以 2024 年为基准年，建立至 2030 年的温室气体排放强度目标，并依据逐年改善路径设置年度目标。2025 年度目标如下：

Using 2024 as the base year, the Company established greenhouse gas emissions intensity targets through 2030 and set annual targets based on a year-on-year improvement pathway. The targets for 2025 were as follows:

管理指标 Management Indicator	2024 年基准 2024 Baseline	2025 年目标 2025 Target	2030 年目标 2030 Target
单位产品范围一排放强度 Scope 1 Emissions Intensity per Unit of Product	0.0320	≤0.0295	≤0.0170
单位产品范围二排放强度（市场法） Scope 2 Emissions Intensity per Unit of Product (Market-Based)	2.9922	≤2.8400	≤2.1000
单位产品范围二排放强度（位置法） Scope 2 Emissions Intensity per Unit of Product (Location-Based)	2.7418	≤2.5800	≤1.8000

单位：tCO₂e/万片。数据来源：公司《年度碳排放管理目标监控表（2026.08.25）》。
Unit: tCO₂e per 10,000 wafers. Source: the Company's Annual Carbon Emissions Management Target Monitoring Form (2026.08.25).

四、2025 年度目标达成情况

IV. Achievement of 2025 Targets

管理指标 Management Indicator	2025 年目标 2025 Target	2025 年实际 2025 Actual	较 2024 年变化 Change vs. 2024	结论 Result
单位产品范围一排放强度 Scope 1 Emissions Intensity per Unit of Product	≤0.0295	0.0213	下降 33.6% Down 33.6%	已达成 Achieved
单位产品范围二排放强度（市场法） Scope 2 Emissions Intensity per Unit of Product (Market-Based)	≤2.8400	2.5167	下降 15.9% Down 15.9%	已达成 Achieved
单位产品范围二排放强度（位置法） Scope 2 Emissions Intensity per Unit of Product (Location-Based)	≤2.5800	2.1905	下降 20.1% Down 20.1%	已达成 Achieved

注：2025 年实际强度根据全年排放量与同期产量计算，数值按四位小数展示。
Note: Actual 2025 intensity was calculated using full-year emissions and production for the same period. Values are shown to four decimal places.

4.1 排放总量

4.1 Total Emissions

排放类别 Emission Category	2024 年基准排放量 2024 Baseline Emissions	2025 年排放量 2025 Emissions	变化 Change
范围一 Scope 1	8,629.78	6,577.35	下降 23.8% Down 23.8%
范围二（市场法） Scope 2 (Market-Based)	812,266.75	778,571.27	下降 4.1% Down 4.1%
范围二（位置法） Scope 2 (Location-Based)	744,300.44	677,673.74	下降 8.9% Down 8.9%

单位：tCO₂e。范围二两种方法为替代性披露，不进行合计。
Unit: tCO₂e. The two Scope 2 methods are alternative disclosures and are not aggregated.

4.2 绩效分析

4.2 Performance Analysis

2025 年，公司单位产品范围一排放强度为 0.0213 tCO₂e/万片，较年度目标低约 27.9%；单位产品范围二市场法和位置法排放强度分别较年度目标低约 11.4%和 15.1%。三项指标均优于年度目标，表明公司在生产规模变化的同时保持了单位产品排放绩效改善。

In 2025, the Company's Scope 1 emissions intensity per unit of product was 0.0213 tCO₂e per 10,000 wafers, approximately 27.9% below the annual target. Scope 2 emissions intensity under the market-based and location-based methods was approximately 11.4% and 15.1% below the respective annual targets. All three indicators outperformed their annual targets, demonstrating that the Company maintained improved emissions performance per unit of product amid changes in production scale.

公司将排放强度作为核心绩效指标，有助于识别生产效率、能源效率和能源结构变化对排放表现的综合影响。绝对排放量仍受产量、设备运行、能源供应和业务边界等因素影响，公司将持续同步监测。
Using emissions intensity as a core performance indicator helps the Company identify the combined effects of production efficiency, energy efficiency, and changes in the energy mix on emissions performance. Absolute emissions remain affected by production volume, equipment operation, energy supply, and organizational boundaries, and the Company will continue to monitor them in parallel.

五、主要减排措施与后续计划

V. Principal Emissions-Reduction Measures and Subsequent Plans

5.1 2025 年度主要减排措施

5.1 Principal Emissions-Reduction Measures in 2025

1. 强化能源与碳排放管理。持续完善能源和碳排放数据台账，按月跟踪范围一、范围二排放及单位产品强度，及时分析异常波动并推动改善闭环。

Strengthen energy and carbon emissions management. The Company continued to improve energy and carbon emissions data records, track Scope 1 and Scope 2 emissions and emissions intensity per unit of product each month, analyze abnormal fluctuations promptly, and ensure that improvement actions were followed through to completion.

2. 推进生产系统节能。围绕主要用能设备和关键生产环节，开展运行参数优化、负荷匹配、待机能耗控制和预防性维护，提升设备运行效率。

Advance energy conservation in production systems. The Company optimized operating parameters and load matching, controlled standby energy consumption, and conducted preventive maintenance for major energy-consuming equipment and key production processes to improve operating efficiency.

3. 优化公用工程运行。关注空压、冷却、供配电、泵组、照明及暖通等系统的运行效率，通过分区控制、泄漏管理、合理启停和设备更新降低能源损耗。

Optimize utility system operations. The Company focused on the operating efficiency of compressed air, cooling, power supply and distribution, pump, lighting, and HVAC systems, reducing energy losses through zoned control, leak management, appropriate start-stop practices, and equipment upgrades.

4. 提升清洁能源使用。结合基地条件和电力市场政策，推进可再生能源电力采购、绿色电力证书应用及分布式光伏等清洁能源方案，提高低碳电力使用水平。

Increase clean energy use. Based on site conditions and electricity market policies, the Company advanced clean energy solutions, including renewable electricity procurement, the use of green electricity certificates, and distributed photovoltaic generation, thereby increasing the use of low-carbon electricity.

5. 加强直接排放源管理。持续关注燃料使用、车辆运行、制冷剂和其他直接排放源，通过设备维护、泄漏检查、替代评估及操作规范降低排放风险。

Strengthen management of direct emissions sources. The Company continued to manage fuel use, vehicle operation, refrigerants, and other direct emissions sources, reducing emissions risks through equipment maintenance, leak inspections, substitution assessments, and operating procedures.

6. 促进工艺效率和资源利用。通过良率改善、材料损耗控制、生产计划优化和数字化管理，减少单位产品能源消耗和资源投入。

Improve process efficiency and resource utilization. The Company reduced energy consumption and resource inputs per unit of product through yield improvement, material loss control, optimized production planning, and digital management.

7. 开展员工低碳行动。通过节能宣传、岗位培训和日常检查，提升员工节能意识，将低碳要求融入办公与生产运营。

Promote low-carbon action among employees. Through energy-saving communication, job-specific training, and routine inspections, the Company strengthened employee awareness and embedded low-carbon requirements into office and production operations.

5.2 2026 年度及中长期减排计划

5.2 Emissions-Reduction Plans for 2026 and the Medium to Long Term

- 将年度强度目标分解至相关职能和运营环节，保持月度监测、季度复盘和年度评价。
Cascade annual intensity targets to relevant functions and operational processes, supported by monthly monitoring, quarterly reviews, and annual evaluation.
- 持续识别高耗能设备和重点工序的节能机会，建立项目清单并跟踪节能效益。
Continue identifying energy-saving opportunities for energy-intensive equipment and key processes, establish a project register, and track energy-saving benefits.
- 稳步提升低碳电力使用比例，结合可获得性、成本和合规要求优化绿色电力组合。
Steadily increase the proportion of low-carbon electricity and optimize the green electricity portfolio based on availability, cost, and compliance requirements.
- 完善排放因子、活动数据和计算底稿管理，提升碳数据的可追溯性、一致性和准确性。
Improve the management of emission factors, activity data, and calculation workpapers to enhance the traceability, consistency, and accuracy of carbon data.
- 逐步加强供应链碳数据收集与能力建设，为范围三排放识别、产品碳足迹管理和价值链协同减排奠定基础。
Gradually strengthen supply chain carbon data collection and capacity building to support Scope 3 emissions identification, product carbon footprint management, and collaborative emissions reduction across the value chain.
- 根据技术发展、政策变化和经营实际，定期评估 2030 年目标路径及重点减排项目。
Periodically assess the pathway toward the 2030 targets and priority emissions-reduction projects in light of technological developments, policy changes, and operating conditions.

六、结语

VI. Conclusion

2025 年，公司三项单位产品温室气体排放强度指标均优于年度目标，年度减排目标顺利达成。相关进展体现了能源效率提升、清洁能源利用、过程管理优化和碳数据治理的综合作用。面向未来，高景太阳能将持续推进减排项目识别与实施，强化目标分解、过程跟踪和绩效复盘，稳步向 2030 年中期目标迈进，并不断提升气候信息披露的完整性与透明度。

In 2025, all three of the Company's greenhouse gas emissions intensity indicators per unit of product outperformed their annual targets, and the annual emissions-reduction targets were successfully achieved. This progress reflects the combined effects of improved energy efficiency, clean energy use, optimized process management, and stronger carbon data governance. Looking ahead, Gokin Solar will continue to identify and implement emissions-reduction projects, strengthen target cascading, process tracking, and performance reviews, steadily advance toward the 2030 medium-term targets, and further improve the completeness and transparency of climate-related disclosures.