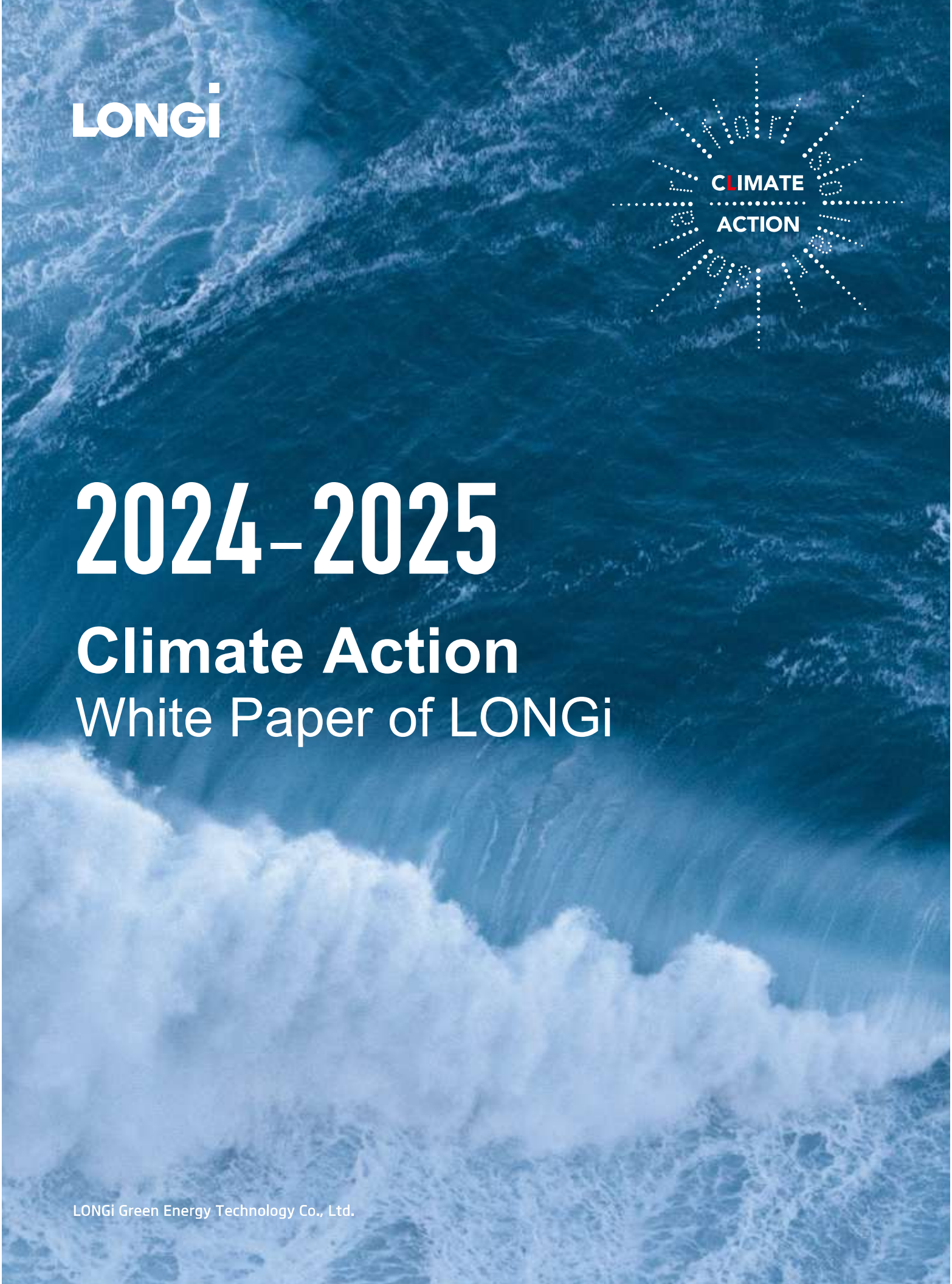


2024-2025

Climate Action

White Paper of LONGi

LONGi Green Energy Technology Co., Ltd.

CLIMATE
ACTION

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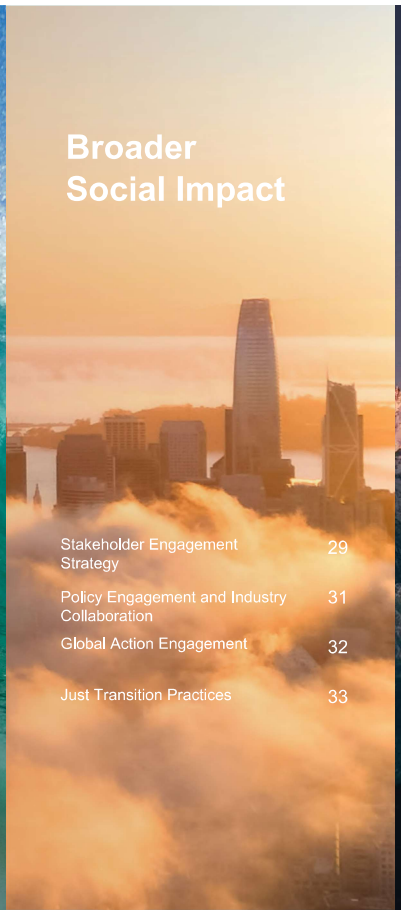


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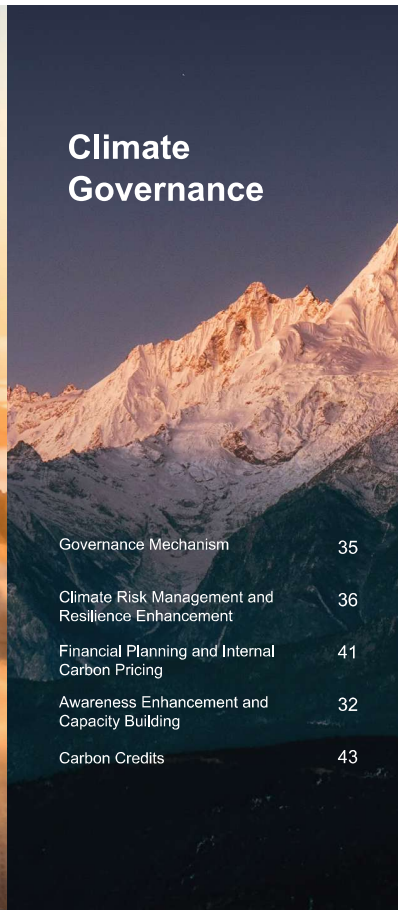
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CSO's Message

HaiMeng Zhang
Vice President, Chief Strategy and Sustainability Officer
LONGi Green Energy



Twenty-five years ago, LONGi embarked on its journey with the founding aspiration of "harnessing solar radiance for good"; today, two and a half decades later, we forge ahead with the mission of "building a net-zero future". By 2024, LONGi's cumulative PV product shipments have exceeded 500 GW, delivering an equivalent avoided carbon of over 1.2 billion tonnes of CO_2e. These are far more than mere cumulative figures—they represent the energy miracle of PV technology: "0.4 kWh of energy input results in the generation of 40 kWh of green electricity", and a resounding response from PV innovation to the climate crisis.

As a global leader in green energy technology, LONGi has always believed that PV is not merely a "weapon" to combat climate change, but a "key" to redefining the bond between human civilization and nature. With the release of our *2024-2025 Climate Action White Paper*, it is my privilege, on behalf of everyone at LONGi, to share our ambitions, actions, and reflections with all the partners who journey with us.

Decades of Dedication, Delivering Climate Ambition

In retrospect of our endeavors, climate action has long been embedded in LONGi's core ethos. In 2016, we pioneered the green production model of "clean energy powering clean energy manufacturing" in Yunnan (China) and Malaysia. In 2018, we proposed the "Solar for Solar" concept at the UN Climate Change Conference, publicly advocating the full-lifecycle green attributes of PV to the world for the first time. In 2020, we became China's first PV enterprise to be a member of RE100, EP100, EV100, and the SBTi. Since 2021, from launching our first *Climate Action White Paper* to being the first to get the SBTi validation, from initiating the "Supply Chain Green Partner Empowerment Program" to establishing the first "Lighthouse + Zero-Carbon" factory in the PV industry, we have consistently taken the lead in transforming climate commitments into actionable roadmaps. In anticipation of the journey ahead, we solemnly commit to achieving net-zero emissions across the entire value chain by 2050.

Science-based Framework, Pathway to Transition

The core of this White Paper lies in LONGi's first comprehensive alignment with the TPT (Transition Plan Taskforce Disclosure) Framework[1] and IFRS S2 (International Financial Reporting Standards Sustainability Disclosure Standard 2 – Climate-related Disclosures)[2], while integrating requirements from the Shanghai Stock Exchange and the Ministry of Finance of the People's Republic of China. We have developed a quantifiable, traceable, and verifiable climate roadmap across five key dimensions: Foundations, Implementation Strategy, Engagement Strategy, Metrics & Targets, and Governance. For the first time, the White Paper discloses our "full value chain emissions panorama". To address our own operational emissions, we will achieve an absolute reduction of 60% by 2030 through continuous energy conservation, renewable energy utilization, and lean management. In 2024, renewable electricity accounted for 47.5% of LONGi's total electricity consumption; through HPBC 2.0 technology, energy consumption for per GW module production has been further reduced by 18%. For Scope 3 emissions, which account for over 80% of our total footprint, we are driving collaborative emission reduction among core raw material and logistics suppliers through low-carbon raw material procurement, advocating the use of renewable electricity, and promoting raw material carbon footprint certification. To ensure the effective implementation of the transition pathway, we have built a climate governance architecture centered on the Board of Directors, with a Strategy and Sustainability Committee under it—endowing our emission reduction efforts with an "overarching governance blueprint". We also collaborate with stakeholders including international organizations, industry alliances, and value chain enterprises to jointly accelerate the global clean energy transition.

Technological Breakthroughs, Defining Energy's Future

Notably, LONGi has consistently expanded the boundaries of climate action with a "PV+" mindset. Our BC cell technology has pushed module efficiency beyond 25%, bringing the levelized cost of electricity (LCOE) below 0.1 RMB per kWh and making PV truly affordable and accessible energy for all. As global climate change intensifies, LONGi responds to future extreme weather with high-efficiency PV products and scenario-specific solutions: We supplied Hi-MO X6 modules with superior wind resistance to an aluminum profile factory in the Philippines; in regions like Egypt, we partnered to develop off-grid solar water pump systems to replace diesel generators, cutting irrigation costs and addressing agricultural water scarcity; on Koh Jik Island in Thailand, our PV + energy storage system has achieved full energy self-sufficiency, reducing electricity costs for residents. This stands as PV's dual contribution to both climate change mitigation and adaptation.

Sincere Collaboration, Toward a Net-Zero Pact

Climate action requires a united front. As we stated at the side event of COP29: "The mission of PV extends beyond replacing fossil fuels—it is about ensuring that no country, community, or individual is left behind in climate action." We are proud that over the past year, we built a "Zero-Carbon Village" in Shaanxi, China, to support rural revitalization; in partnership with the UNHCR, we constructed a 700kW PV power plant in Uzbekistan; in Pakistan, we are illuminating the future of refugee camps through "green power + skills training", fostering energy equity and a just transition.

This White Paper is more than a "chronicle" of our accomplishments — it is an "invitation" to co-create. We aim to collaborate with global partners to build a transparent, collaborative, and mutually prosperous net-zero ecosystem.

[1] Transition Plan Taskforce Disclosure Framework

[2] International Financial Reporting Standards Sustainability Disclosure Standard 2 – Climate-related Disclosures

Company Profile

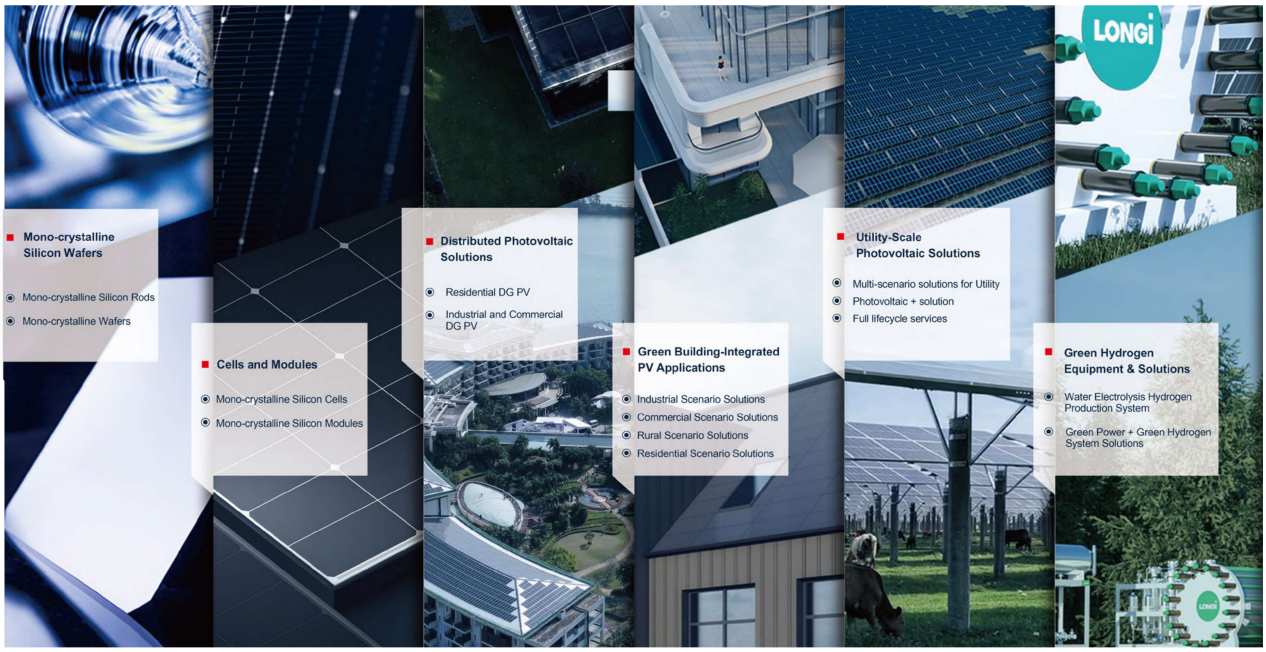
Founded in 2000, LONGi Green Energy Technology Co., Ltd. is headquartered in Xi'an, Shaanxi, and was listed on the Shanghai Stock Exchange in April 2012 (Stock Code: SH 601012). Guided by its vision to "be the most compelling solar technology company," LONGi is dedicated to creating affordable and accessible clean energy for the world.

Vision | To be the most compelling solar technology company by leading the world's transition to green energy

Mission | To make the best of solar energy to build a green world.

Values | Reliability
Value-add
Fulfillment

LONGi has built a diversified business portfolio, including monocrystalline silicon wafers, solar cells, and modules, distributed photovoltaic solutions, utilityscale photovoltaic solutions, green building-integrated photovoltaic applications, and green hydrogen equipment and solutions. The company has led the world in monocrystalline silicon wafer shipments for many years and has ranked among the top two globally for module shipments over the past six years. LONGi has also developed alkaline water electrolysis hydrogen equipment, successfully creating "Green Power + Green Hydrogen" products and solutions that support the global achievement of net-zero goals.



Climate Ambition and Strategy

In the face of increasingly frequent extreme weather events and an escalating global climate crisis, establishing climate ambitions and clear implementation strategy has become a cornerstone of corporate action to manage environmental risks and capitalize on green opportunities. For the PV industry, this is not only a demonstration of its commitment to environmental responsibility but also an imperative for driving technological advancement, enhancing international competitiveness, and achieving sustainable development.

LONGi is committed to leveraging technological innovation to continuously upgrade and optimize its products. By providing customers with more efficient, reliable, and cost-effective green energy products and solutions, the company accelerates the global energy transition, supports the response to climate change, and provides a robust industrial foundation for both China's "carbon neutrality" goal and the global net-zero transition.

At the 24th UN Climate Change Conference (COP24) in 2018, LONGi pioneered the "Solar for Solar" concept—Produce Clean Energy with Clean Energy. Since then, guided by international and domestic climate policies, standards, and the Science Based Targets initiative (SBTi), LONGi has steadily advanced its climate target-setting and emission reduction efforts, becoming the first Chinese PV company to have its targets approved by the SBTi. In 2024, LONGi initiated its **net-zero target** setting, **committing to achieve net-zero emissions across its entire value chain by 2050.**

Centered on this climate ambition, the company has formulated a net-zero transition plan to build a full-chain low-carbon system through technological decarbonization, operational decarbonization, and ecological synergy.

Targets

	Near-term Targets (2025-2030)	Long-term Targets (2030-2050)
ESG Sustainable Development Goal	Affordable clean energy for all	
Emission Reduction Targets	■ Reduce Scope 1 and 2 emissions by 60% by 2030, compared to a 2020 baseline ■ Reduce Scope 3 emission intensity per ton of purchased goods and services by 52% by 2030, compared to a 2020 baseline	**Achieve net-zero emissions across the entire value chain by 2050**
Energy Targets	■ Complete the deployment of the energy management system by 2025 and improve energy productivity by 35% from a 2015 baseline ■ Achieve 70% renewable electricity use by 2027 ■ Achieve 100% renewable electricity use by 2028 ■ Install charging facilities at 100% of all manufacturing sites by 2030	

Action Pathways

01.Operational Emission Reduction

- Energy-saving and Consumption-reduction
- Technological Upgrades
- Utilization of Renewable Energy
- Recovery of Natural Gas Tail Gas in Industrial Processes
- Lean management
- Carbon credits or offsets

02.Value Chain Emission Reduction

- Enhancing internal Scope 3 accounting capabilities
- Supply chain empowerment, management, and collaboration
- Advancing green logistics
- Exploring innovative technology solutions

03.Continuously Reducing Product Carbon Footprint

Monocrystalline Silicon Wafers:

- Increasing the proportion of low-carbon silicon from new technologies
- Improving silicon ingot utilization
- Use of renewable electricity
- Lean management

Cells and Modules:

- R&D and manufacturing of BC high-efficiency cells
- Lightweight design
- Steel frame
- Use of renewable electricity
- Lean management

Certifications:

- French and Korean carbon footprint certifications
- EPD certification
- ISO 14067 certification
- SJ/T11926-2024

04.Climate Mitigation and Adaptation Solutions

Full-chain climate mitigation solutions

- Monocrystalline Silicon Wafers: TaiRay silicon wafers, P-type wafers, and N-type silicon wafers
- Cells and Modules: HPBC 2.0, HIBC, Hi-MO 9, Hi-MO X10, EcoLife
- Hydrogen Equipment: ALK Hi1, ALK G Series
- Green Energy Solutions: PV+ (BIPV, LONGi eHome, Water Electrolysis Hydrogen Production System and Solutions, etc.)

Developing Climate-Adaptive Products

Develop products with high adaptability to extreme conditions (heat, humidity, strong winds, hail), such as Hi-MO 9, Hi-MO X10 and Hi ROOF S

05.Advancing a Just Transition

Formulating a climate transition plan and continuously reviewing the alignment of the just transition with corporate strategy

01

Transition Plan and Actions

- Accelerating Operational Emissions Reduction
- Advancing Value Chain Decarbonization

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Accelerating Operational Emissions Reduction

Scope 1 and Scope 2 Emissions

Since 2020, LONGi has developed annual greenhouse gas (GHG) inventories in accordance with *ISO 14064-1:2018 — Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals* — and *GHG Protocol: Corporate Accounting and Reporting Standard*.

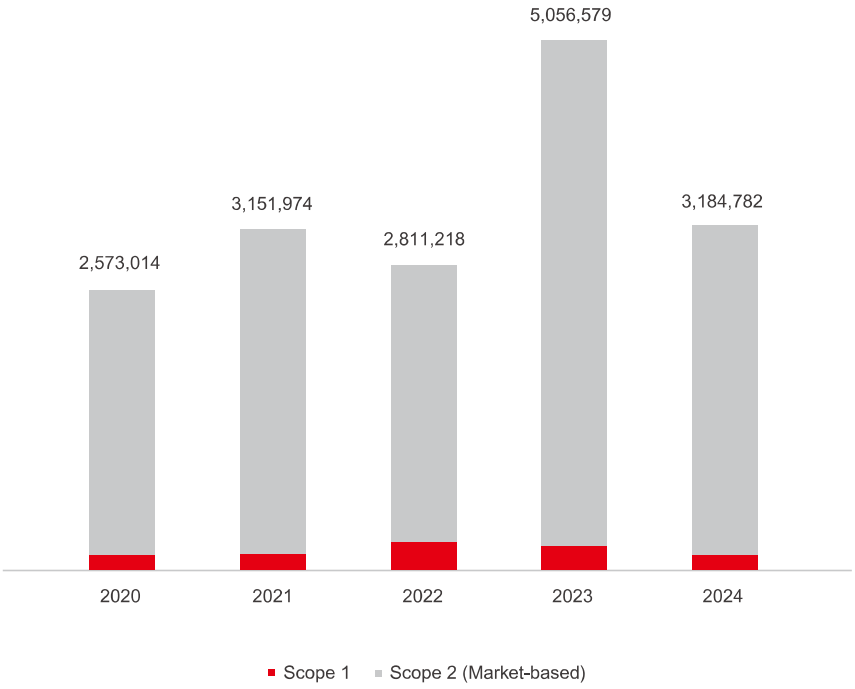
In 2024, LONGi's total Scope 1 and Scope 2 emissions reached 3,184,782 tCO_2e, representing an increase of 23.8% compared with the 2020 base year level. The change was mainly due to rapid business expansion. Between 2020 and 2024, LONGi's wafer and module shipments grew by 87% and 236%, respectively. LONGi's Scope 1 and Scope 2 emissions peaked in 2023 and declined by 37% in 2024 compared with the previous year. In 2024:

- **Scope 1:** 85,226 tCO_2e, accounting for 2.7% of total operational emissions, decreased by 8.0% from 2020 and by 37.2% from 2023.
- **Scope 2 (Market-based):** 3,099,556 tCO_2e, accounting for 97.3% of total operational emissions, increased by 25.0% from 2020 but decreased by 37.0% from 2023.

In 2023, LONGi's operational emissions increased sharply from the previous year, reaching a peak, driven by significant growth in wafer and module shipments — 47.4% and 44.4% higher than the previous year respectively — combined with a decline in percentage of electricity sourced from renewables within that year.

Operational (Scope 1 and Scope 2) Emissions, 2020–2024

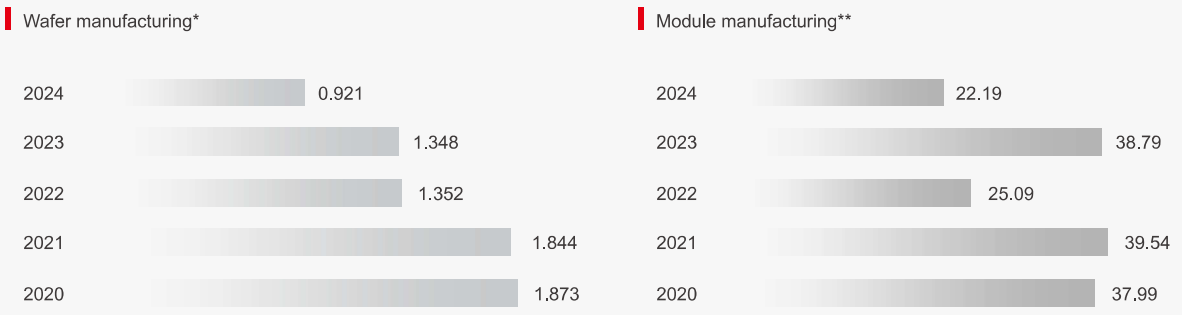
Unit: tCO_2e



From 2020 to 2024, emission per unit of photovoltaic (PV) product in manufacturing has shown an overall downward trend. For wafer manufacturing, 2024 emission intensity decreased by 50.8% compared with 2020; while for module manufacturing, emission intensity decreased by 41.6% compared with 2020. The reductions were mainly driven by increased use of renewable electricity and the implementation of energy efficiency projects.

Emission Intensity (per unit product in manufacturing), 2020–2024

Unit: tCO_2e per 10,000 units of wafers; tCO_2e per MW of modules

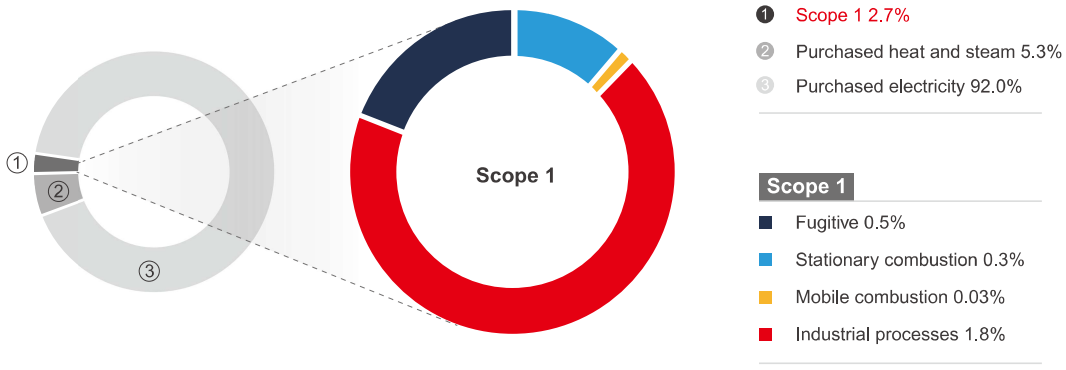


* Emissions per 10,000 units of wafers produced in ingot and wafer manufacturing processes

** Emissions per MW of modules produced in cell and module manufacturing processes

In LONGi's operational emissions, purchased electricity is the highest contributing emission source — accounting for 92.0% of total Scope 1 and 2 emissions in 2024 — followed by purchased heat and steam (5.3%). Within Scope 1, industrial process emissions are the main contributor (1.8%), followed by fugitive emissions (0.5%) and stationary combustion (0.3%).

2024 Operational Emissions by Source

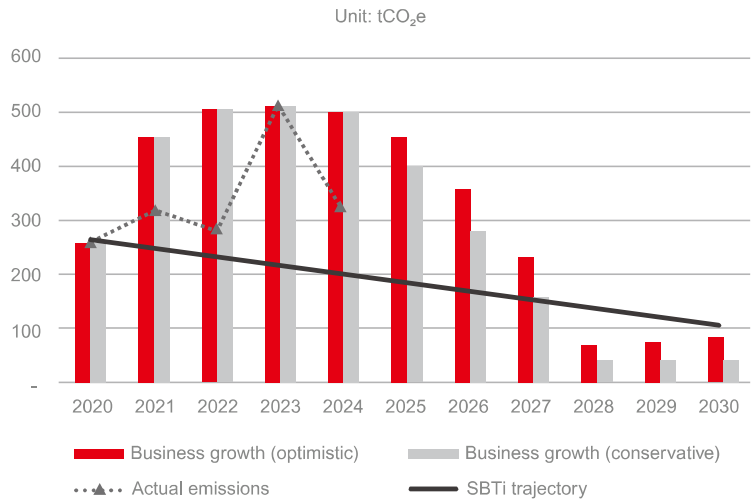


Decarbonization Pathway for Scope 1 and Scope 2

LONGi's science-based targets (SBTs) were approved by the Science Based Targets initiative (SBTi) in 2023 – Under this commitment, LONGi aims to reduce absolute Scope 1 and 2 GHG emissions 60% by 2030 from a 2020 base year. Building on this, LONGi further announced in 2025 the commitment to achieve net-zero emissions by 2050, and plans to seek SBTi validation for the net-zero target within the next two years. To achieve reduction targets and finally reach net-zero, LONGi also joined initiatives including RE100, EP100, and EV100, setting up targets to enhance energy management, improve energy efficiency, and expand use of renewable electricity.

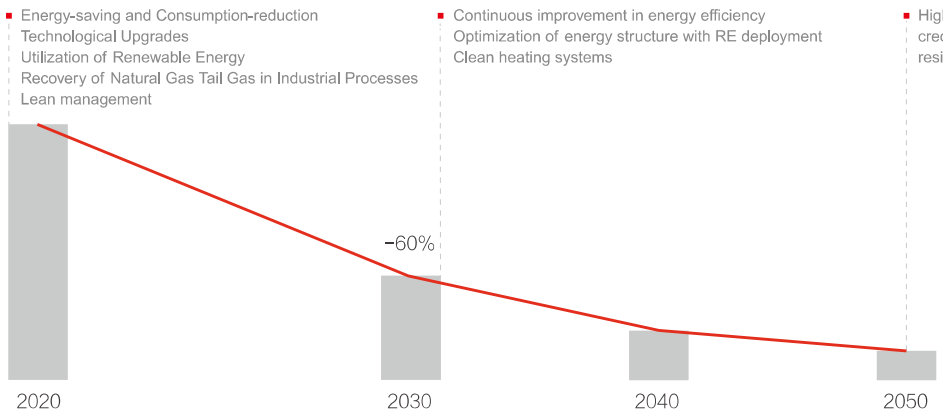
Based on SBTi requirements and considering the company's business growth, LONGi developed the following decarbonization pathway, assuming the RE100 target can be achieved by 2028. As nearly 95% of operational emissions are attributed to electricity consumption, LONGi will maintain its focus on reducing Scope 1 and 2 emissions through increased use of renewable electricity and ongoing decreases in electricity consumption per unit of product manufactured.

LONGi's Decarbonization Pathway for Operational Emissions



LONGi further commits to achieve net-zero emissions by 2050. In the medium- to long-term, LONGi will continue to enhance energy efficiency, optimize its energy mix, advance electrification, achieve 100% renewable electricity use, and drive innovation in low-carbon technologies.

LONGi's Net-Zero Pathway for Operational Emissions

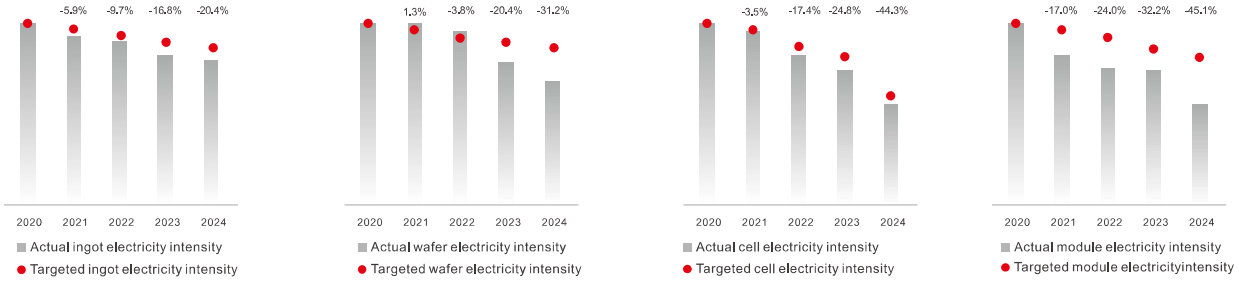


Key Measures for Scope 1 and 2 Emission Reduction

Enhancing Energy Conservation and Efficiency Improvement

Since 2020, LONGi has actively implemented energy-saving and emission-reduction measures across the entire manufacturing process — namely, ingot, wafer, cell, and module manufacturing — to enhance energy efficiency. LONGi establishes annual electricity intensity reduction targets for each production unit. With ongoing energy management efforts and energy-saving technological improvements, all units have demonstrated a sustained decline in electricity intensity. In 2024, LONGi achieved a 10.7% reduction in electricity consumption per unit of production compared with 2023, exceeding the annual target of 9.14%.

Electricity Intensity by Production Unit (2020-2024)



The numbers represent the actual reduction rate of electricity intensity compared with 2020.

In 2024, LONGI implemented 477 energy-saving technological improvement projects, resulting in estimated annual savings of 426 GWh, equivalent to nearly 250,000 tCO_2e emissions avoided.

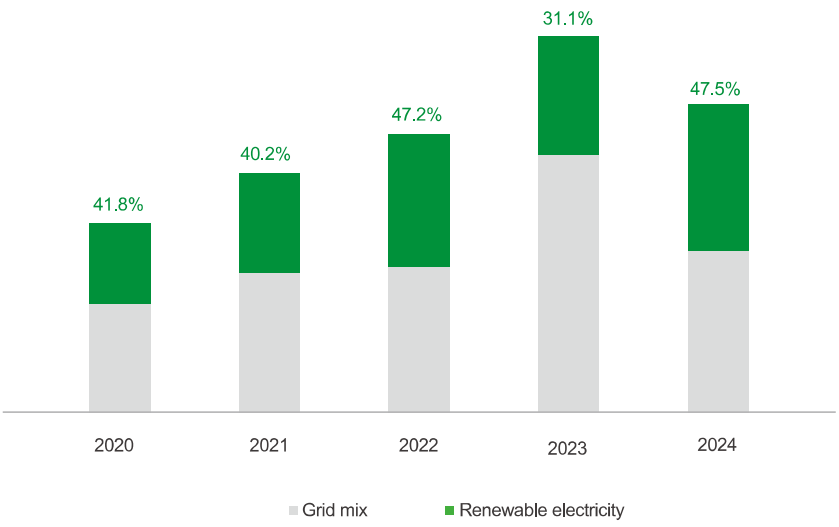
Production Unit	Type	Energy Efficiency Initiatives	Achievements
Ingot manufacturing	Process Improvement	**Crystal-pulling power benchmark management:** LONGi optimized startup power based on centralized monitoring through the wafer BI system.	73 projects in total from ingot and wafer production units, saving 235 GWh annually.
Wafer manufacturing	Power Optimization	**Refrigeration system efficiency enhancement:** LONGi enhanced refrigeration system efficiency through demand-side analysis and system adjustments.	
Cell Manufacturing	Power Optimization	**Process equipment nitrogen consumption reduction:** Through assessing the energy-saving potential of equipment and processes, LONGi optimized nitrogen supply systems to reduce air-separation equipment load.	173 projects in total, saving 137 GWh annually.
Module Manufacturing	Process Improvement	**Lamination cycle improvement:** By conducting internal benchmarking and coordinating across departments, LONGi improved the standard lamination cycle, significantly enhancing the energy efficiency of laminators.	231 projects in total, saving 54 GWh annually.

LONGi plans to update the electricity intensity reduction targets for the next three years by 2026 and pursue further for energy-saving retrofit opportunities. LONGi also aims to promote energy-efficiency leadership by offering company-wide energy conservation training and specialized programs for management team.

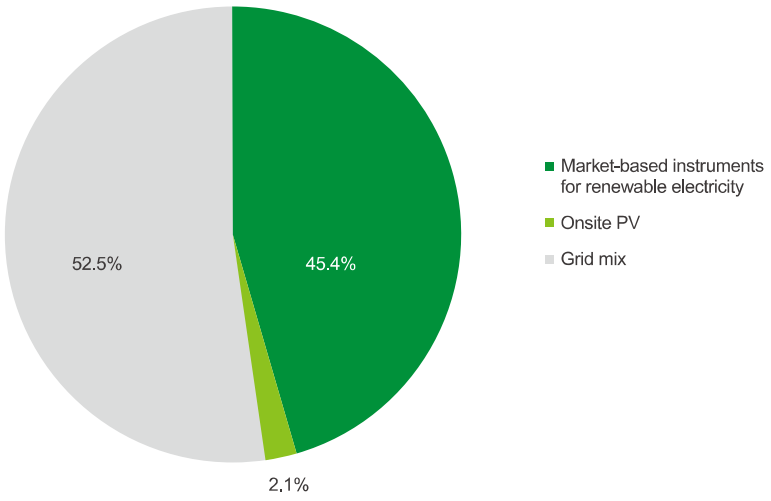
Expanding Use of Renewable Energy

Between 2020 and 2024, LONGi made continuous improvements to its energy structure and substantially expanded the use of renewable electricity. In 2024, LONGi consumed 4,746 GWh of renewable electricity, accounting for 47.5% of its total electricity consumption — an 86% absolute increase from 2020, and a 5.7-percentage-point rise in renewable share. Over 95% of renewable electricity consumed in 2024 was sourced through market instruments such as green power trading and green electricity certificates (GECs).

Electricity Consumption and Renewable Electricity Proportion (2020–2024)

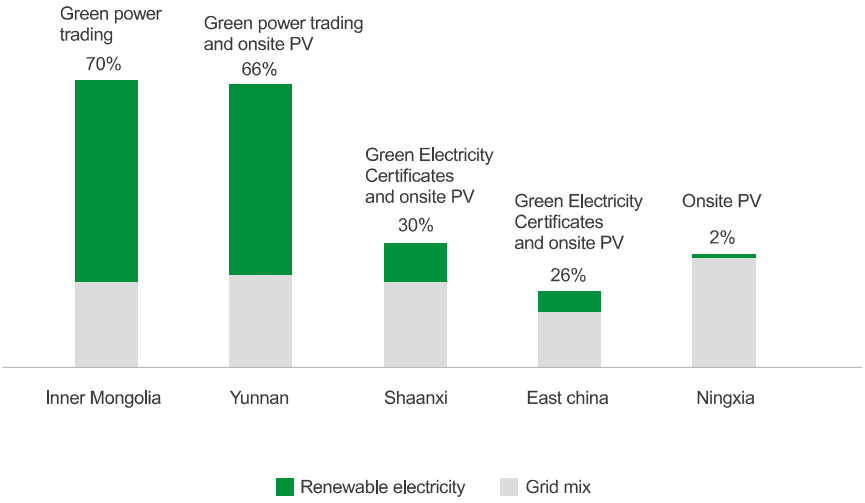


Sources of Total Electricity and Renewable Electricity, 2024



In 2024, LONGi's facilities in Inner Mongolia and Yunnan recorded the highest consumption in renewable electricity within LONGi's operations, both in absolute and as a share of total electricity use — enabled by local resource advantages: abundant hydropower in Yunnan and strong wind and solar resources in Inner Mongolia. Renewable electricity in these regions was mainly sourced via green power trading.

Renewable Electricity Proportion and Source, by region, 2024



LONGi has committed to achieving 70% renewable electricity use by 2027 and 100% by 2028. Our renewable electricity sourcing strategy considers regional resource availability, additionality, and cost efficiency for deployment. We prioritize on-site solar PV installations, leveraging our own rooftop spaces and product advantages. By end of 2024, LONGi had installed 290.53 MW of rooftop PV across our facilities. However, as on-site solar generation alone is insufficient to meet renewable electricity demand, LONGi sources additional “bundled” renewable electricity through green power trading and supplements with REC purchases, where necessary.

As a manufacturer and provider of PV products, LONGi also co-develops renewable energy projects with partners to create environmental and social impacts. In 2024, the 50 MW Minle Agrivoltaic Project in Jinggu County, Pu'er City, Yunnan Province — developed by China Energy Group — was fully commissioned, featuring LONGi Hi-MO 7 PV modules. The project is expected to generate 97.91 GWh annually, creating industrial output of 30.89 million in RMB. Through an innovative "tea-solar complementarity" model that integrates PV generation with tea cultivation, the project maximizes land use efficiency and economic value, achieving a win-win outcome for both PV development and local tea farming.

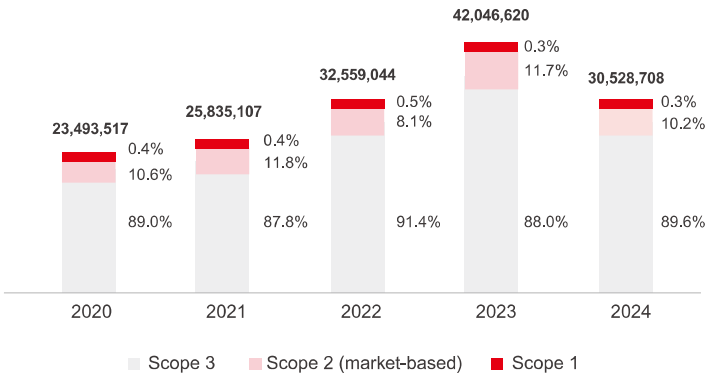


Advancing Value Chain Decarbonization

Scope 3 Emissions Overview

In 2024, LONGI's Scope 3 emissions totaled 27,343,926 tCO_2e, accounting for 89.6% of the total value chain emissions (Scopes 1, 2, and 3 combined). Compared with 2020, Scope 3 emissions increased by 30.7%, primarily due to substantial growth in PV product shipments and an expanded coverage of Scope 3 inventory that includes more categories.

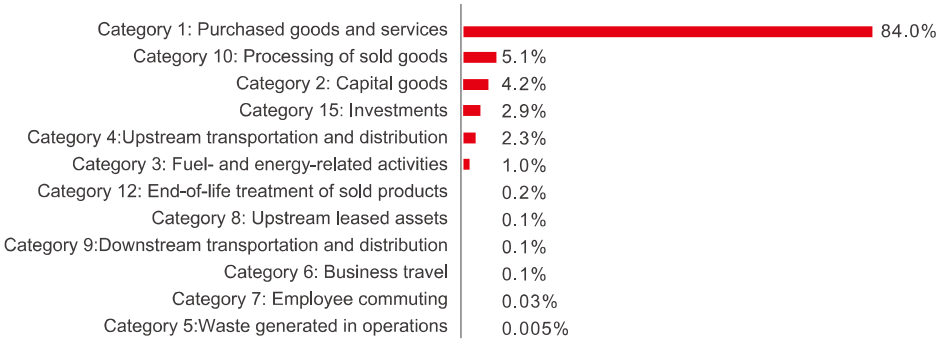
Value Chain (Scope 1, 2, and 3) Emissions, 2020–2024*



*Note: Scope 3 categories covered in 2020 are Categories 1, 3, 4, 5, 9, 12. Later added categories are Category 6–7 (2021–2024), Category 8 (2022–2024), and Category 2, 10, 15 (2024)

Within Scope 3, Category 1: Purchased Goods and Services was the dominant source, accounting for approximately 84% of total Scope 3 emissions in 2024. This category captures emissions from upstream emissions of key raw materials such as polysilicon, glass, and aluminum frames. Other major contributors included Category 10: Processing of Sold Products, Category 2: Capital Goods, and Category 15: Investments – together representing over 96% of total Scope 3 emissions.

Scope 3 Emissions by Category, 2024



Within Category 1: Purchased Goods and Services, polysilicon, aluminum frames, and glass were the top three contributors, jointly accounting for 87.7% of Category 1 emissions and 73.6% of total Scope 3 emissions.

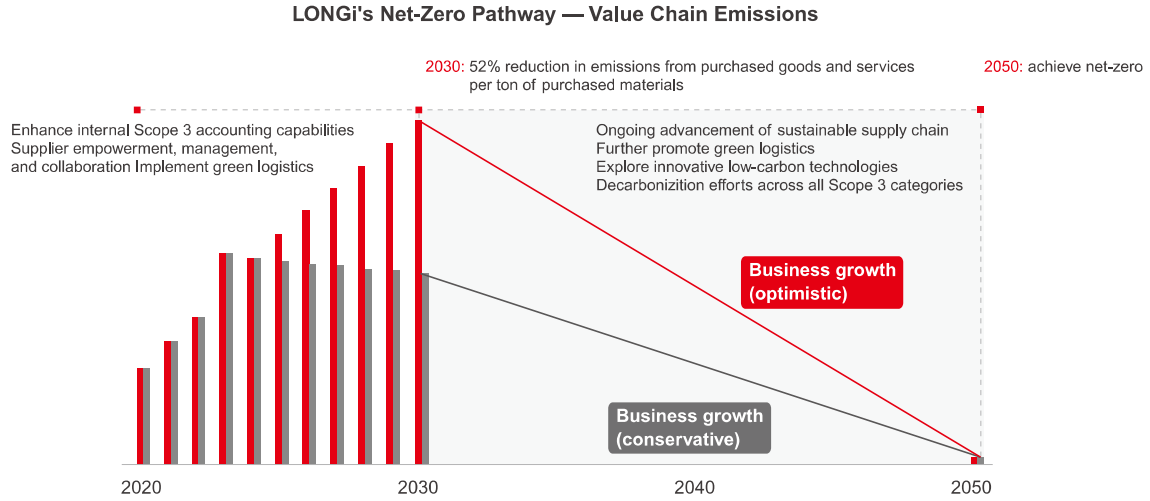


Scope 3 Decarbonization Pathway

LONGi has set Science-based Targets for Scope 3 emissions – to reduce Scope 3 emissions from purchased goods and services 52% per ton of purchased materials by 2030 from a 2020 base year.

Furthermore, LONGi commits to achieving net-zero in value chain emissions by 2050 – by further exploring reduction potentials, and we aim to get SBTi validation for the net-zero target within the next two years.

By 2030, LONGi aims to reduce emissions from purchased materials through use of low-carbon and recycled materials, enhanced supplier engagement and capacity building, and the development of green logistics solutions. Beyond 2030, LONGi will further deepen supply chain collaboration, broaden low-carbon logistics practices, pursue innovative technologies, and extend decarbonization efforts to all Scope 3 categories. Concurrently, LONGi will work to enhance its Scope 3 accounting practices to ensure greater accuracy and consistency in emissions data.



Key Measures for Scope 3 Emission Reduction

Enhancing Scope 3 Accounting Capabilities

Since 2020, LONGi has made ongoing improvements to its Scope 3 accounting capabilities, aiming to ensure greater accuracy, completeness, and consistency in emission data. Specifically, Category 6: Business Travel and Category 7: Employee Commuting were included in the Scope 3 inventory in 2021, and Categories 2: Capital Goods, Category 10: Processing of Sold Products, and Category 15: Investments were further included in 2024, thereby achieving complete Scope 3 coverage. LONGi further refined its methodologies by leveraging more granular procurement data to better match specific emission factors, substituting industry averages with supplier-provided data when available, and integrating locally applicable emission factors.

Looking ahead, LONGi plans to broaden the use of supplier-specific product carbon footprint (PCF) data, periodically assess the impact of methodological changes and emission factor updates, and recalculate base year emissions as necessary to ensure data integrity.

Supplier Chain Empowerment, Management, and Collaboration

Supplier Empowerment and Capacity Building

LONGi is dedicated to building a transparent, responsible, and mutually beneficial supply chain through integrating sustainability principles into procurement and partnership processes. Since 2020, LONGi has progressively deepened supplier engagement:

- 2021: Launched the *LONGi Green Supply Chain Decarbonization Initiative* with 150 suppliers and conducted environmental self-assessments with 27 of them;
- 2022: Launched the "Supply Chain Green Partner Empowerment Program", offering carbon management training to support suppliers in implementing energy-saving and emission-reduction initiatives;
- 2023: Completed the first round of the empowerment program, engaging over 120 supplier representatives in the concluding training session;
- 2024: Supported 50 supply chain partners in completing carbon accounting with four suppliers voluntarily disclosing carbon emissions on the IPE platform; collaborated with four suppliers to deploy 1,098 MW of rooftop solar PV, jointly contributing to emissions reduction. In addition, LONGi launched SBTi training to encourage suppliers to set science-based targets.

Among key suppliers of polysilicon, glass, and aluminum frames, over 50% use renewable electricity through on-site PV or green power trading, approximately 25% are certified as Green Factories, and around 50% have obtained ISO 50001 Energy Management System Certification.

LONGi has developed the 2024-2028 Supplier ESG Capacity Building Plan, aiming to progressively increase the share of critical Tier-1 suppliers participating in capacity-building programs from 73% in 2024 to 95% by 2028. Through "Longi e-Learning Supplier Platform", we plan to continue providing systematic sustainability training and technical support to strengthen suppliers' ESG management capabilities.

Collaborative Innovation for Lightweight Design and Low-Carbon Materials

In line with the *LONGi Sustainable Product Policy*, LONGi integrates green and low-carbon principles into raw material sourcing. Through the "Four New Value Creation" platform, LONGi collaborates with suppliers to optimize product design and expand green procurement. Efforts include driving lightweight design to reduce overall material use, increasing the procurement of low-carbon silicon products, reducing the weight of plastic-containing products and promoting the use of recycled or low-carbon aluminum.

Case Study | **Promote lightweight design to reduce carbon footprint of aluminum frames**

Since 2022, LONGi has collaborated with suppliers to develop lightweight frame designs for various module models, reducing the use of carbon-intensive materials at the source.

For instance, through supply chain collaboration and design optimization, the dual-glass frame of the Hi-MO 9 module was made approximately 0.2 kg lighter per unit. This reduction translates to a savings of about 200 tonnes of aluminum per million modules produced, directly avoiding an estimated 2,400 to 3,600 tCO_2e emissions (based on an emission factor of 12–18 tCO_2e per ton of aluminum).

In addition, the lighter and thinner modules improve load efficiency and reduce transport weight, thereby lowering emissions during transportation. During installation, the reduced weight can also decrease the structural strength required for mounting systems, further cutting emissions associated with installation.

Looking ahead, LONGi will continue to position sustainable supply chain management as a key focus area for Scope 3 reduction. LONGi will strengthen ESG risk control across its supply chain by implementing supplier admission assessments, annual evaluations, and exit mechanisms, while closely monitoring suppliers' energy and climate performance. Through empowerment and training initiatives, LONGi will enhance suppliers' environmental management and climate action capabilities. Concurrently, through collaborative innovation, LONGi aims to increase the proportion of green product procurement and expand the use of low-carbon or recycled materials across the value chain.

Supplier Management	▪ Progressively optimize supplier admission assessments, applying environmental standards in the selection of new suppliers, and gradually incorporating product carbon footprint and emissions into evaluation criteria. ▪ Strengthen monitoring of suppliers' environmental performance and encourage disclosure of environmental and climate data via third-party platforms.
Supplier Empowerment	▪ Continue implementing supplier training programs to enhance suppliers' capabilities for carbon accounting and emission reduction. ▪ Expand the scope and depth of supplier empowerment and training initiatives. ▪ Explore additional incentive and management mechanisms to motivate suppliers to set and implement emission reduction targets.
Supplier Collaboration	▪ Foster multi-dimensional collaborative innovation with value chain partners to jointly develop new technologies, materials, processes, and business models, thereby introducing more low-carbon and recycled materials as well as innovative decarbonization solutions. ▪ Leverage LONGi's renewable energy solutions to promote the adoption of clean energy and net-zero technologies across the upstream and downstream value chain.

Promoting Green Logistics

A green logistics system is essential to sustainable supply chain development, and transportation and distribution represent significant sources of LONGi's Scope 3 emissions. LONGi aims to build an efficient, collaborative low-carbon logistics network by enhancing carbon data management, advancing green logistics systems, and promoting smart logistics technologies:

Carbon data management	LONGi has established an internal carbon data management system to conduct regular carbon accounting, disclose calculation results, and continuously assess the sources and applicability of emission factors to refine its methodology and improve data quality. At the same time, LONGi plans to develop a carbon accounting framework for logistics to quantify the emission reduction achieved through green logistics initiatives and to provide a robust data foundation for future low-carbon logistics planning.
Green logistics system	LONGi's green logistics system encompasses key stages including transportation, packaging, and warehousing. In transportation, LONGi focuses on building a multimodal logistics network that integrates international port operations with domestic trunk lines, prioritizing suppliers that offer green and low-carbon transport solutions. In packaging, LONGi has fully promoted the use of high-strength PP reusable containers and plastic pallets to replace traditional cardboard boxes and wooden pallets, thereby increasing the reuse rate of individual containers. In warehousing, through intelligent storage algorithms and automated equipment, LONGi achieves seamless connection between vehicles and cargo, while deploying electric forklifts and other clean energy equipment to establish green warehouses.
Smart logistics technologies	LONGi enhances the intelligence and efficiency of its logistics operations through a suite of digital management tools, including the Transportation Management System (TMS), Warehouse Management System (WMS), smart logistics planning system, driver scheduling app, and end-to-end transport visibility platform. Collectively, these tools strengthen decision-making, optimize resource utilization, and reduce carbon emissions across the entire logistics process.

In 2024, LONGi increased the share of multimodal transportation through land-to-water, sea-rail intermodal, and river-sea intermodal logistics strategies. Internationally, the Company prioritized rail and barge transport systems, while domestically emphasizing rail and inland waterway transportation to reduce dependency on carbon-intensive road freight. Through this integrated approach to low-carbon logistics, transportation-related environmental pollution was substantially minimized. In 2024, low-carbon transport modes (including sea, rail, and inland river shipping) accounted for 93% of LONGi's outbound transportation — an increase of 20 percentage points compared with 2023.

International Port Operations	Increased the share of multimodal transport for export shipments from 10% to 73% in 2024, and piloted last-mile multimodal delivery for customers in Europe, reducing carbon emissions of approximately 19,000 tonnes and demonstrating significant transport efficiency optimization.
International Distribution	Through rail and barge transportation methods, 502 containers were transported in 2024, generating cost savings of approximately RMB 2.7 million and reducing carbon emissions of approximately 1,500 tonnes.
Domestic Transportation	By prioritizing rail and inland waterway transportation to minimize road transport dependency, domestic multimodal transport utilization reached approximately 20% in 2024, reducing carbon emissions of approximately 2,300 tonnes.

LONGi has also initiated green logistics pilot projects at key manufacturing bases. Pilot sites have established short-, medium-, and long-term targets for sustainable logistics procurement management, with clearly defined departmental responsibilities and performance assessments to ensure effective implementation.

Case Study | **LONGi Chuzhou Green Logistics Pilot**

Project name	Project type	Objective	Outcomes
International Port Multimodal Transport & Domestic Trunk "Road-to-Rail/Water" Network	**Green Transportation**	To establish a low-carbon transport system integrating international port multimodal transport and domestic trunkline "road-to-rail/water" logistics, optimizing transport structure and reducing trunk-line carbon emissions.	By January–May 2025, the share of multimodal transport reached 33%, achieving an accumulated reduction of approximately 18,277 tCO_2e.
Automated Smart Warehouse Energy-Saving Project	**Green Warehousing**	To enhance warehouse space utilization and promote the transition to cleaner-energy equipment, achieving energy conservation and emission reduction in warehousing operations.	Land use reduced by around 75%; energy consumption per storage unit decreased by 21%; expected annual savings of 380,000 kWh, equivalent to approximately 300 tCO_2e reduced.
Full Electrification of Forklifts for Zero-Emission Warehouse Operations	**Green Warehousing**	To fully replace fuel-powered forklifts with electric ones, achieving zero-emission warehouse operations while improving air quality and reducing noise pollution.	Achieved 100% electrification of warehouse operations, reducing annual diesel consumption by approximately 1.46 million liters and avoiding approximately 3,920 tCO_2e emissions.
"Vehicle–Cargo Coordination": Digital Scheduling to Improve Loading Efficiency	**Smart Logistics Technology**	To minimize idle waiting through digital scheduling – ensuring "no more people waiting for trucks or trucks waiting for goods", thereby saving fuel and reducing emissions, and contributing to green and low-carbon warehousing and transport operations.	Vehicle idling time reduced by 80%; fuel savings of approximately 150,000 liters, avoiding approximately 400 tCO_2e emissions.



02

CLIMATE ACTION

In addressing global climate change and advancing the energy transition, LONGi has always stood at the forefront of technological innovation. By continuously upgrading its products and services, the company delivers low-carbon, high-efficiency, and reliable green energy solutions to the global market.

- Product Lifecycle Carbon Footprint Management
- Climate Mitigation Solutions
- Enhancing Product Climate Adaptability

Product Lifecycle Carbon Footprint Management

Against the backdrop of the global response to climate change, there is growing attention from downstream customers on the full lifecycle carbon emissions of PV modules. Countries such as France, Italy, and Germany have successively adopted product carbon footprint certification as a key reference for market access, and they continue to promote dynamic updates to relevant standards. France's latest energy policy, PPE2, for example, has further strengthened the requirements for the carbon footprint of PV products.

LONGi actively responds to market demands by comprehensively considering the environmental impact of its products throughout their entire lifecycle and implementing emission reduction actions at every stage to continuously reduce the carbon footprint of its PV products:

Lifecycle Stage	Key Initiatives
Design and Material Use	• Follow a design philosophy of minimizing the product's environmental impact, taking into account effects across the entire lifecycle • Increase the proportion of recyclable components in modules to improve the material recycling rate of the products
Raw Material Procurement	• Increase the utilization rate of recycled materials • Introduce silicon material suppliers with a lower carbon footprint • Increase the proportion of low-carbon silicon from new technologies • Procure aluminum made from recycled or green electrolytic aluminum
Manufacturing	• Enhance energy efficiency and continuously reduce electricity consumption per unit in the manufacturing process • Carry out energy-saving and emission-reduction initiatives, such as methane recovery projects • Install PV power stations at our own production bases and procure renewable electricity through market-based approaches to continuously increase the proportion of renewable energy • Continuously improve material utilization rates while ensuring product reliability
Transportation	• Logistics: Accelerate the development of a low-carbon transportation network centered on a dual-dimensional multimodal transport system combining: international pre-port and domestic trunk lines. • Packaging: Promote the use of eco-friendly carriers to replace traditional cardboard boxes and wooden pallets • Warehousing: Create green warehousing through smart warehousing and new energy equipment • Smart Logistics: Optimize transportation routes and enhance logistics and warehousing management levels through intelligent and digital methods
Use	• Extend the product warranty period and service life, thereby enhancing the economic and environmental benefits of the products • Innovate and introduce high-efficiency cell technology to increase the power generation efficiency per unit of raw material and reduce the carbon footprint per watt
End-of-Life Treatment	• Reduce the use of hazardous chemical substances to minimize the environmental impact of PV modules at the scrapping and end-of-life stages

In 2024, LONGi obtained 53 carbon footprint certifications globally for its silicon wafer, module, and hydrogen products. This achievement not only demonstrates the company's high regard for environmental responsibility but also sets a new benchmark for the green transition of the global PV industry.

Silicon Wafer Products

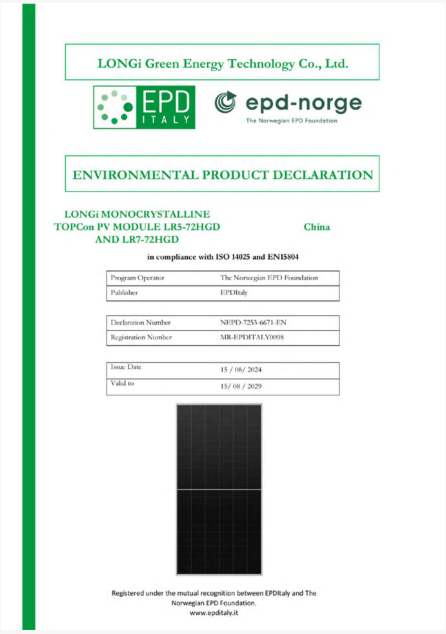
A total of 13 French carbon footprint certifications

Hydrogen Products

3 carbon footprint certifications from domestic and international authorities

Module Products

- 24 French carbon footprint certifications
- 5 Korean carbon footprint certificates
- 4 International Environmental Product Declaration (EPD) certifications, including Italian EPD, Norwegian EPD, and Swedish International EPD
- 1 ISO 14067 product carbon footprint certificate
- 3 PCCC product carbon footprint certificates



LONGi Green Energy Technology Co., Ltd.

EPD ITALY

epd-norge
The Norwegian EPD Foundation

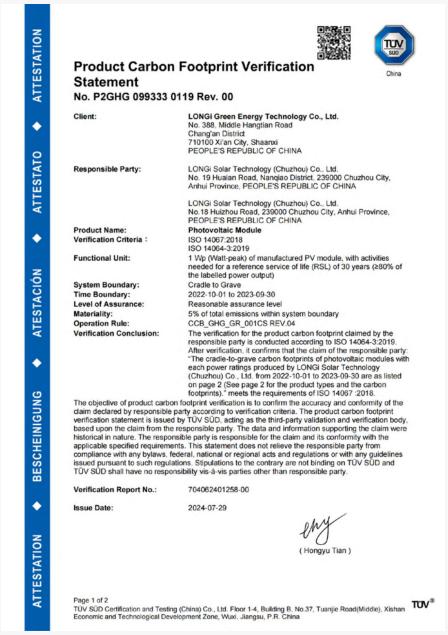
ENVIRONMENTAL PRODUCT DECLARATION

LONGi MONOCRYSTALLINE TOPCon PV MODULE LR5-72HGD AND LR7-72HGD — China

in compliance with ISO 14025 and EN15804

Program Operator	The Norwegian EPD Foundation
Publisher	EPDItaly
Declaration Number	NEPD-7253-6671-EN
Registration Number	MR-EPDITALY0008
Issue Date	15 / 08 / 2024
Valid to	15 / 08 / 2029

Registered under the mutual recognition between EPDItaly and The Norwegian EPD Foundation.
www.epditaly.it



ATTESTATION ◆ ATTESTATO ◆ ATTESTACIÓN ◆ BESCHEINIGUNG ◆ ATTESTATION

Product Carbon Footprint Verification Statement
No. P2GHG 099333 0119 Rev. 00

China

Client: LONGi Green Energy Technology Co., Ltd.
No. 388, Middle Hangtian Road
Chang'an District
710100 Xi'an City, Shaanxi
PEOPLE'S REPUBLIC OF CHINA

Responsible Party: LONGi Solar Technology (Chuzhou) Co., Ltd.
No. 19 Huaian Road, Nanqiao District, 239000 Chuzhou City, Anhui Province, PEOPLE'S REPUBLIC OF CHINA

LONGi Solar Technology (Chuzhou) Co., Ltd.
No.18 Huizhou Road, 239000 Chuzhou City, Anhui Province, PEOPLE'S REPUBLIC OF CHINA

Product Name: Photovoltaic Module
Verification Criteria : ISO 14067:2018, ISO 14064-3:2019
Functional Unit: 1 Wp (Watt-peak) of manufactured PV module, with activities needed for a reference service of life (RSL) of 30 years (±60% of the labelled power output)
System Boundary: Cradle to Grave
Time Boundary: 2022-10-01 to 2023-09-30
Level of Assurance: Reasonable assurance level
Materiality: 5% of total emissions within system boundary
Operation Rule: CCB_GHG_GR_001CS REV.04
Verification Conclusion: The verification for the product carbon footprint claimed by the responsible party is conducted according to ISO 14064-3:2019. After verification, it confirms that the claim of the responsible party: "The cradle-to-grave carbon footprints of photovoltaic modules with each power ratings produced by LONGi Solar Technology (Chuzhou) Co., Ltd. from 2022-10-01 to 2023-09-30 are as listed on page 2 (See page 2 for the product types and the carbon footprints)." meets the requirements of ISO 14067 :2018.

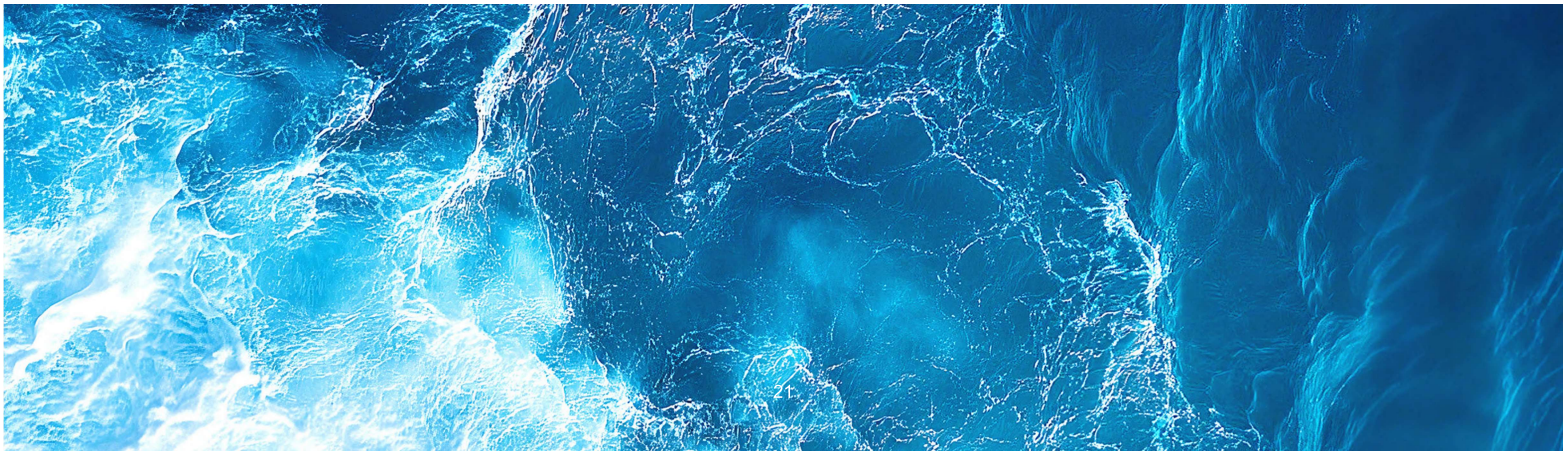
The objective of product carbon footprint verification is to confirm the accuracy and conformity of the claim declared by responsible party according to verification criteria. The product carbon footprint verification statement is issued by TÜV SÜD, acting as the third-party validation and verification body, based upon the claim from the responsible party. The data and information supporting the claim were historical in nature. The responsible party is responsible for the claim and its conformity with the applicable specified requirements. This statement does not relieve the responsible party from compliance with any bylaws, federal, national or regional acts and regulations or with any guidelines issued pursuant to such regulations. Stipulations to the contrary are not binding on TÜV SÜD and TÜV SÜD shall have no responsibility vis-à-vis parties other than responsible party.

Verification Report No.: 704062401258-00
Issue Date: 2024-07-29

(Hongyu Tian)

Page 1 of 2
TÜV SÜD Certification and Testing (China) Co., Ltd. Floor 1-4, Building B, No.37, Tuanjie Road(Middle), Xishan Economic and Technological Development Zone, Wuxi, Jiangsu, P.R. China

In 2025, the carbon footprint of LONGi's Hi-MO 9 module, featuring its second-generation BC technology, received third-party certification. This certification is based on the latest industry standard, *SJ/T 11926-2024, Product Carbon Footprint Product Category Rules Part 1: Photovoltaic Module*, issued by the Ministry of Industry and Information Technology. The certification strictly adheres to a "cradle-to-grave" boundary, with the assessment period covering the full 25-year lifecycle. It innovatively employed localized databases that better reflects the actual conditions in China. The results show that the carbon footprint of LONGi Hi-MO 9 module product has been reduced to below 350 $kgCO_2e/kW$.

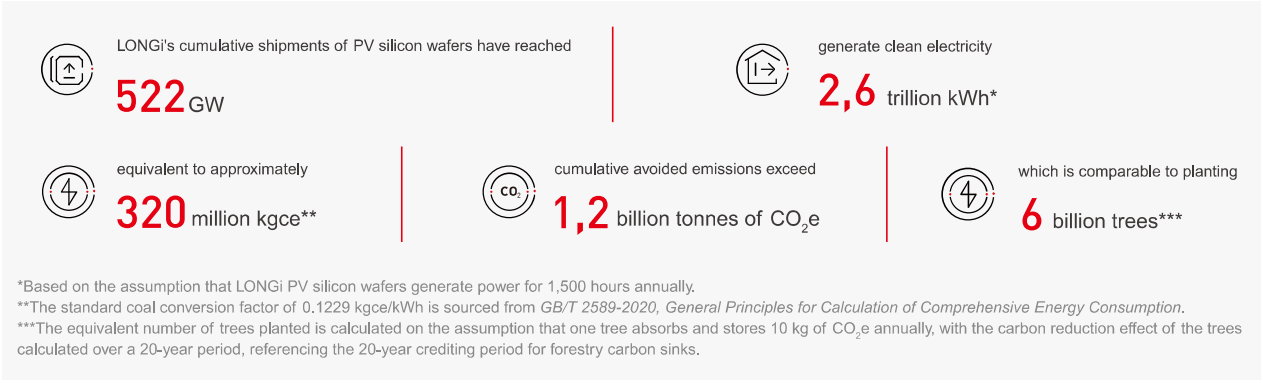


Climate Mitigation Solutions

LONGi is dedicated to creating affordable and accessible clean energy for the world. Through innovative and high-efficiency products, green energy solutions, and our "Green Power + Green Hydrogen" business model, we are forging comprehensive climate mitigation solutions.

High-Efficiency Products: Technological Innovation Accelerates the Zero-Carbon Transition of Energy Systems

Since its listing in 2012, LONGi's cumulative shipments of PV silicon wafers have reached 522 GW by 2024. This can generate over 2.6 trillion kWh* of clean electricity, equivalent to approximately 320 million kgce**. The cumulative avoided emissions exceed 1.2 billion tonnes of CO2e, which is comparable to planting about 6 billion trees***.



*Based on the assumption that LONGi PV silicon wafers generate power for 1,500 hours annually.
**The standard coal conversion factor of 0.1229 kgce/kWh is sourced from *GB/T 2589-2020, General Principles for Calculation of Comprehensive Energy Consumption*.
***The equivalent number of trees planted is calculated on the assumption that one tree absorbs and stores 10 kg of CO_2e annually, with the carbon reduction effect of the trees calculated over a 20-year period, referencing the 20-year crediting period for forestry carbon sinks.

As the foundation of the PV value chain, even minor advancements in silicon wafer technology can lead to significant efficiency improvements and cost optimizations for the downstream value chain.

Case Study | **LONGi's "TaiRay" Silicon Wafer Achieves a Platform Technology Breakthrough**

In 2024, LONGi launched its new TaiRay silicon wafer series. As a platform technology breakthrough, the product features high resistivity concentration and excellent gettering capability, which comprehensively enhances the wafer's overall performance and lays a solid foundation for efficiency advancements in downstream cells and modules.

The "TaiRay" wafer offers broad technological compatibility and is adaptable to mainstream high-efficiency cell technologies such as HBC, TBC, HJT, and TOPCon. Its core breakthrough lies in achieving a highly uniform axial resistance distribution. For the same ingot length, it reduces the resistivity ratio between the head and tail from the common industry level of 3 times to within 1.5 times. This breakthrough leads to a more concentrated efficiency distribution in the resulting cells and effectively mitigates the issue of light and dark variations at the module level, thereby improving the product's overall performance and appearance consistency. Simultaneously, the wafer demonstrates an excellent gettering effect, allowing metal impurities to be more easily removed and opening up further room for cell efficiency improvements.

In terms of mass production value, the "TaiRay" wafer can increase the efficiency of mainstream platform cell technologies by approximately 0.1%. Notably, this technology does not require the replacement of existing monocrystalline furnace equipment; production can be achieved through upgrades and retrofitting of the production line. This significantly reduces technology iteration costs and provides the industrial chain with an efficient and economical upgrade path.

In the cell and module segment, LONGi is driving the advancement of the BC (Back Contact) technology route. The company not only views this as key to breaking through conversion efficiency bottlenecks and shaping future competitiveness, but is also committed to leveraging technological innovation to comprehensively enhance the adaptability and reliability of PV systems under complex climate conditions.

LONGi's self-developed monocrystalline silicon cells achieved a conversion efficiency of 27.81%, the perovskite-on-silicon tandem solar cells have achieved a conversion efficiency of 35%, both of which broke world records and cemented our leadership in these two realms. Furthermore, the Hi-MO X10 modules, equipped with HPBC 2.0 technology, achieved a mass-production efficiency of up to 24.8%, setting a new global benchmark for module mass production efficiency.

Green Energy Solutions: Deep Integration Across Multiple Scenarios to Build Safe and Efficient BIPV

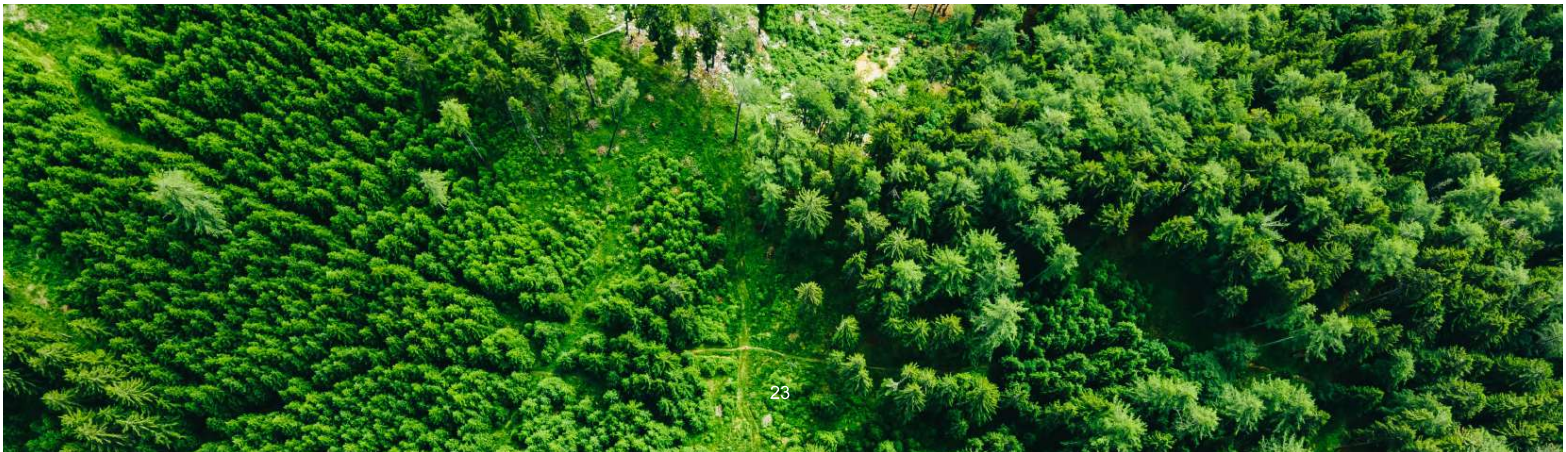
As a key entry point for expanding green energy applications and reducing carbon emissions in the building sector, LONGi leverages Building Integrated PV (BIPV) to continuously explore the deep integration of "PV+" across multiple scenarios. This approach allows us to build a comprehensive clean energy system covering diverse sectors, delivering innovative and reliable clean energy solutions to customers worldwide.

Case Study | **Uzbekistan Asian Games City BIPV Project—A New Benchmark for Green Buildings**

Seizing the cooperation opportunities of the "Belt and Road" Initiative, LONGi provided a comprehensive BIPV solution for the Uzbekistan Asian Games City project. The project adopts LONGi's high-performance BIPV roof products, with a total installed capacity of 24 MW and an estimated annual power generation of 61.18 million kWh. The roof system integrates superior performance, including leak prevention, corrosion resistance, and typhoon resistance. By enabling the building to generate its own green energy, the project also sets a new benchmark for green building development in Central Asia.

Building on our strong foundation in BIPV, LONGi continues to advance "PV+" multi-scenario integration. In the industrial sector, LONGi is collaborating with the Federal Government of Nigeria on a green hydrogen project with an annual output of 1.2 million tonnes, supported by a 200 MW PV power station, creating a full "PV-to-hydrogen + chemical conversion" industrial chain. In transportation, we have partnered with NIO to build integrated stations for PV, storage, charging, and swapping, promoting the clean energy transition in transport. In agriculture, LONGi has provided PV irrigation systems in Egypt's Eastern Province, where a 500 KW installation saves over 50,000 RMB in electricity costs per month. This Agri-voltaics solution achieves efficient resource utilization by combining PV power generation with agricultural cultivation.

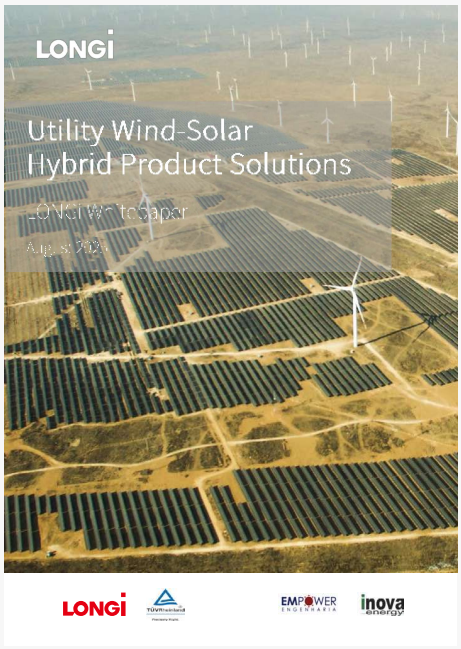
Through the continuous expansion of BIPV and "PV+" diverse scenarios, LONGi is building a comprehensive clean energy alternative system in key sectors such as construction, industry, transportation, and agriculture, providing localized low-carbon solutions for global customers.



Case Study | **Leading the Energy Transition by Addressing the Challenges of Wind-Solar Hybrid Power**

As the pace of the global energy transition accelerates, solar and wind energy are receiving increasing attention. It is projected that solar and wind will account for one-third of the global electricity mix by 2030, and expected to replace fossil fuels as the primary foundation of the global energy system by 2050. Wind-solar hybrid product solutions stand out for their ability to provide higher system efficiency, more balanced investment returns, and advantages in cost and performance compared to single-energy sources. In August 2025, LONGi released a new white paper, Utility Wind-Solar Hybrid Product Solutions, to help the industry address the challenges and opportunities of co-located wind and solar projects.

LONGi's centralized wind-solar hybrid solution builds a highly efficient and synergistic green energy system through the scientific integration of PV and wind power. Centered on the Hi-MO 9 module (boasting a conversion efficiency of up to 24.8%) and underpinned by BC technology, the solution delivers exceptional performance in anti-shading capabilities and under extreme wind load conditions. By fully leveraging the temporal complementarity of wind and solar generation, it significantly enhances power supply stability and overall system efficiency, thereby laying a reliable pathway for the large-scale grid integration of clean energy.





Hydrogen Equipment: Unlocking Deep Decarbonization with "Green Power + Green Hydrogen" Systems

To address the intermittency of PV power and expand the applications of clean energy, LONGi is actively advancing the hydrogen equipment business. Through our "Green Power + Green Hydrogen" solutions, we are committed to providing an effective pathway for deep decarbonization in hard-to-abate industrial sectors, such as steel and chemicals, that are difficult to electrify directly.

Case Study | The Sinopec Kuqa Green Hydrogen Project

In Sinopec's 20,000-tonne-scale Green Hydrogen Pilot Project in Kuqa, LONGi utilizes the region's abundant solar resources to integrate hydrogen production, transportation, storage, and utilization, addressing the hydrogen demand for petrochemical refining.

As the core equipment supplier, LONGi Hydrogen has adopted a "4-to-1" system design and completed the delivery and commissioning of 15 sets of 1000Nm3/h alkaline electrolyzers. Since its commissioning in 2023, the project has operated safely and stably for over 700 days. Through the substitution of green hydrogen for grey hydrogen in petrochemical refining, the project is estimated to achieve an annual CO_2e reduction of 485,000 tonnes.



Sinopec's 20,000-tonne-scale Green Hydrogen Pilot Project

Case Study | The Da'an Wind and Solar Green Hydrogen Synthesis Ammonia Integration Demonstration Project

To address the decarbonization needs of the synthetic ammonia from chemical sub-sector, LONGi Hydrogen has participated in the world's largest green synthetic ammonia demonstration project. Under this project, LONGi supplied 16 sets of 1000Nm3/h alkaline electrolyzers, which were successfully delivered in May 2024. The project is estimated to achieve an annual CO_2 emission reduction of 650,000 tonnes. The smooth progress of this project demonstrates the feasibility and reliability of LONGi Hydrogen's technologies and equipment in enabling the clean replacement of chemical feedstocks such as synthetic ammonia, laying a solid foundation for hydrogen-driven chemical industry transformation.



The Da'an Wind and Solar Green Hydrogen Synthesis Ammonia Integration Demonstration Project

Case Study | **Collaborating with the Steel Industry on Decarbonization**

LONGi Hydrogen's ALK G Series 3000 Nm3/h electrolyzers are powering the "300,000 m3/d Green Electricity Water Electrolysis for Hydrogen Production - Hydrogen Storage - 450m3 Blast Furnace Hydrogen-Rich Smelting" industrial demonstration project at Hebei Changli Xingguo Casting. This initiative is supported by two sets of Longi's single-stack 3000 Nm3/h ALK G series large-scale alkaline water electrolysis hydrogen production systems and their supporting facilities, which comprehensively cover the power supply, electrolyzers, gas-liquid separation, control systems, power distribution, and auxiliary systems. This project is not only the largest-capacity alkaline electrolyzer system by single-stack output currently in operation in China but also the first industrial demonstration to achieve full-chain integration of the entire "green hydrogen production - hydrogen storage - H2-enriched smelting" process. It has achieved a hydrogen injection rate of 136 Nm3 per ton of iron, with an hourly pure hydrogen injection volume of 11,360 cubic meters, and a solid fuel replacement ratio of 0.36–1.0 kg/Nm3, leading to a 7% to 16% reduction in carbon emissions from blast furnace ironmaking. Consequently, it provides a scalable and replicable technological model for the low-carbon transformation of the steel industry.



LONGi Hydrogen's single-unit 3000 Nm^3/h ALK G series

LONGi's "Green Power + Green Hydrogen" system solution reliably addresses the challenges of variable power sources like PV and wind by leveraging a proprietary EMS (Energy Management System) smart platform and an optimized electrolyzer system. This approach resolves common industry pain points in green hydrogen projects, including difficulties in assessment, selection, adaptation, and operation. Furthermore, the solution integrates expertise from multiple disciplines—including new energy, power electronics, energy storage, chemical engineering, and automatic control—to provide full lifecycle services. These services include the design of safe and reliable green hydrogen projects with a low LCOH, full lifecycle economic assessments, steady-state and transient simulation verification, and the supply of efficient products across the entire chain.

Through comprehensive innovation, from core equipment to integrated system solutions, LONGi has established a "Green Power + Green Hydrogen" service framework that covers the entire project lifecycle. This provides a reliable technological pathway and a proven business model for achieving deep decarbonization in the industrial sector.

Enhancing Product Climate Adaptability

As climate change increases the frequency of extreme weather events, harsh conditions pose a direct threat to PV modules, leading to performance degradation and mechanical damage. These impacts can compromise a power plant's generation efficiency, operational safety, and investment returns. In response, LONGi continuously drives material innovation, explores novel technology routes, and develops cutting-edge products and solutions to help build a new, climate-resilient power system.

To enhance climate adaptability, LONGi has established an "All-Scenario Product Matrix" designed for a diverse range of extreme scenarios. This system includes specialized solutions such as the Edge (Tai'a) series for high-load desert and Gobi scenarios, which adopts a high-strength frame and dustproof glass to effectively improve module load capacity, boost power generation and reduce its product carbon footprint; the Sea-Shield (Longyuan) series for coastal environments, which boasts the highest IP68 protection rating and Grade 8 salt mist resistance to withstand humid and corrosive conditions; the Ice-Shield (Panshi) series, designed for extreme weather, which can resist the impact of hailstones over 45 mm in diameter and has a mechanical load capacity of ±5400Pa to ensure continuous system operation after disasters and reduce power generation losses; and the Hydro-Clear (Zaoxue) series for dusty and snowy regions, which adopts a borderless design combined with glass dustproof technology to significantly inhibit dust and snow accumulation, thereby increasing power generation revenue and reducing O&M costs.

Case Study | **Consistently Exceeding Generation Targets in Extreme Climates**

LONGi's Hi-MO series modules have demonstrated stable operation and consistently exceeded their expected power generation in multiple regions with extreme climates, proving their exceptional performance and reliability in harsh environments such as high temperature and humidity, strong winds and high salt mist, and high-heat desert conditions.

01 **High Temperature & Humidity · Mongla, Bangladesh**

- **Climate Profile:** Maximum temperature of 42.5°C, relative humidity up to 96%, and 1,600 annual sunshine hours.
- **Stringent Testing:** The Damp Heat (DH) test was extended from the IEC standard of 1,000 hours to 2,000 hours to ensure long-term reliability.
- **Project Outcome:** Achieved a generation surplus of 1.73%, adding an average of 3.08 million kWh of electricity annually and increasing revenue by an average of 2.09 million RMB per year over the project's lifecycle.

02 **High Temperature & Reflectivity · Bom Nome, Brazil**

- **Climate Profile:** Over 2,000 annual sunshine hours, maximum temperature of 42.5°C, and high ground surface reflectivity.
- **Stringent Testing:** The Thermal Cycling test was extended from the IEC standard of 200 cycles to 600 cycles (from -40°C to 85°C) to ensure structural stability under thermal expansion and contraction.
- **Project Outcome:** Achieved a generation surplus of 7.75%, adding an average of 15.4 million kWh of electricity annually and increasing efficiency gains by 6.16 million RMB per year over the project's lifecycle.

03 **Strong Winds & High Salt Mist · Xiangshan, Zhejiang, China**

- **Climate Profile:** Coastal mudflats with high salt mist and strong typhoons, with maximum wind forces reaching Grade 15 (over 50 m/s).
- **Stringent Testing:** The wind load test was intensified from the industry standard of 45 m/s to 60 m/s to simulate extreme typhoon conditions.
- **Project Outcome:** Remained stable through eight major typhoons (including "In-fa" and "Muifa"), achieving a generation surplus of 2.39%. This added an average of 8.36 million kWh of electricity annually, increasing revenue by an average of 3.47 million RMB per year over the project's lifecycle.

Field data indicates that LONGi's Hi-MO 5 series modules maintain high-efficiency, stable power generation in extreme environments—including high temperature, high humidity, strong winds, high salt mist, and high reflectivity—delivering sustained, excess generation revenue and reliable performance for customers throughout the product lifecycle.

Case Study | **Hi-MO 9 Module Wind Tunnel and Hail Impact Tests**

LONGi has elevated its reliability verification for BC technology products from conventional laboratory standard tests to "beyond-standard" simulations of extreme disaster conditions.

In 2024, TÜV SÜD conducted an extreme wind tunnel test on the advanced Hi-MO 9 module at Shanghai Jiao Tong University. The module's structure remained fully intact after being subjected to a frontal impact from wind speeds reaching 64.4 m/s—a speed that exceeds the highest value on the national wind scale—setting a new industry record for wind tunnel testing. Additionally, specialized hail impact testing by TÜV Rheinland's Yangtze River Delta Operation Center showed that the Hi-MO 9 module can withstand impacts from giant hailstones with a diameter of over 45 mm (double the IEC standard). Post-test, the module showed no microcracks, no significant power degradation, and passed all insulation and wet leakage tests. This ensures that power plants can continue operating after severe hail events, effectively reducing generation interruptions and insurance losses caused by the disaster.

03

Broader Social Impact

- Stakeholder Engagement Strategy
- Policy Engagement and Industry Collaboration
- Global Action Engagement
- Just Transition Practices

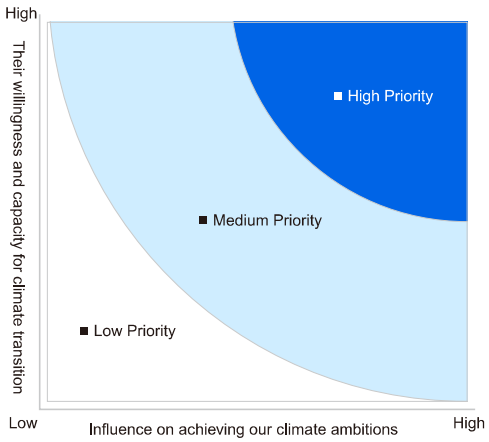


Stakeholder Engagement Strategy

LONGi deeply recognizes that achieving its climate transition target cannot be accomplished alone. This requires collaboration with key stakeholders across the value chain to jointly build a low-carbon and resilient business ecosystem. To this end, the company has developed a Stakeholder Engagement Strategy designed to systematically guide and manage interactions with its key stakeholders.

Stakeholder Groups	Key Subjects	Core Objectives	Main Engagement Methods	Expected Contribution
 Suppliers	Key raw material suppliers, high-emission suppliers, and logistics service providers	1. Collect emissions data to enhance the accuracy of Scope 3 accounting. 2. Promote supplier target-setting for emission reduction. 3. Improve suppliers' carbon management capabilities and build a green supply chain.	• Jointly issue green initiatives with suppliers • Promote supplier self-assessment • Platform monitoring • Supplier empowerment training • Supplier due diligence questionnaire	Through supplier data collection, capacity building, and emission reduction actions, LONGi aims to enhance the accuracy of its Scope 3 emissions calculations, translating indirect emissions into actions that are measurable and manageable.
 Customers	Large corporate customers, customers with explicit sustainability requirements	1.Understand customer demand for low-carbon products and solutions. 2.Showcase the carbon footprint advantages of our products to bolster our green credentials and market competitiveness. 3.Collaborate on developing low-carbon application scenarios and exploring new markets.	• Customer technical seminars, new product launches • Industry exhibitions • Communication on customized low-carbon product solutions • Product carbon footprint data disclosure and verification • Jointly conduct low-carbon technology pilot projects	Successful customer engagement not only meets existing customer demand but also attracts new customers, ensuring our low-carbon investments receive market returns and create a virtuous cycle.Successful customer engagement not only meets existing customer demand but also attracts new customers, ensuring our low-carbon investments receive market returns and create a virtuous cycle.
 Investors	Equity investors, debt investors, ESG rating agencies	1. Clearly communicate climate transition strategy and opportunities to ensure financial stability. 2. Disclose climate transition progress to attract green investment. 3. Respond to investor demands for ESG information disclosure, enhance ESG ratings.	• Earnings briefings, investor hotline, roadshows, conference calls • Shareholders' meetings, regular reports, ad-hoc announcements, and on-site research visits	Clear communication can reduce investors' perception of risk and secure their support for long-term strategies, ensuring stable financial backing for substantial investments in low-carbon technologies and energy efficiency improvements.
 Government and International Organizations	Central and local policy-making institutions and regulatory bodies, and international organizations such as the UN	1. Proactively engage in and contribute to the development of relevant policies and standards. 2. Monitor policy trends to enable proactive deployment and strategic responses.	• Participate in government seminars and exchanges, and provide advisory input • Jointly carry out public welfare projects	By championing a policy environment favorable to achieving climate objectives and proactively aligning with evolving policy dynamics, LONGi is enabled to devise forward-looking strategies and magnify the influence of its initiatives.
 Industry Associations and NGOs	International organizations, NGOs and industry associations	1.Benchmark corporate climate action against leading international initiatives and practices. 2. Expand corporate social impact.	• Join international initiatives and make public commitments • Jointly conduct public welfare projects • Share insights at conferences	Aligns LONGi's climate action with leading international practices, drives continuous improvement, and enhances our leadership role within the industry.
 Communities and Employees	Local communities at our manufacturing sites, and all employees	1.Manage the social impacts of the transition process (e.g., skill transformation). 2.Enhance employee understanding of and engagement in climate action. 3. Create shared value through local projects.	• Proactively communicating with communities and participating in project collaborations • Charitable donations and activities to empower local communities	Effective communication mitigates operational risks, enhances internal and external climate awareness and engagement, promotes a just transition, and strengthens corporate resilience and social reputation.

To maximize the contribution of our stakeholders toward achieving our climate ambitions, we prioritize engagement activities across the value chain.



High Priority

- Key Parties: High-emission key suppliers, major customers with strong low-carbon demand.
- Strategy: Engage in deep and frequent interaction, including customized support, joint target-setting, and strategic partnerships. The objective is to transform them into core partners for achieving our climate goals.

Medium Priority

- Key Parties: Suppliers with moderate emissions, the majority of investors, and customers and communities with general sustainability concerns.
- Strategy: Implement standardized communication and management, such as annual surveys, general training, and periodic reporting. The objective is to maintain good relations and foster their progressive improvement in performance.

Low Priority

- Key Parties: Suppliers with minor emissions, the general public, etc.
- Strategy: Primarily communicate through broad public disclosures (e.g., official website, reports). The objective is to ensure transparency and compliance.

Case Study | **Supplier Engagement and Empowerment of Green Partners**

LONGi believes that supplier emission reductions are a direct contribution to reducing the company's Scope 3 emissions and represent the most critical component in achieving its net-zero target across the entire value chain. The company prioritizes suppliers based on their emissions contribution percentage within Scope 3 Category 1: Purchased Goods and Services, classifying those exceeding 10% as having a significant impact on the company's carbon management. Concurrently, through stringent admission processes, continuous evaluation, and in-depth empowerment, the company is committed to establishing systematic collaborative actions with its suppliers.

LONGi has established a three-tier supplier governance structure consisting of "Decision-making, Leadership, and Execution Levels" to ensure that climate change factors are deeply integrated into the entire supplier management process. To ensure the quality of new suppliers, the company conducts admission screening, requiring them to complete an ESG due diligence questionnaire and incorporating their ESG performance, such as climate transition plans, into a "scorecard" for comprehensive review. Additionally, the company utilizes third-party tools, such as the Institute of Public and Environmental Affairs (IPE), to screen suppliers for major environmental violation records. For suppliers that fail the audit, measures such as admission prohibition, high-risk management, or red-line management are implemented as appropriate to control ESG risks at the source. In 2024, environmental and social selection criteria have been applied to 100% of our new suppliers.

To deeply empower our suppliers, LONGi launched the supply chain “Green Partner Empowerment Program" in April 2022. The program aims to assist suppliers with energy use analysis and carbon accounting, share experiences from energy-saving technical renovation projects, encourage and support them in setting their own emissions reduction targets to jointly build a low-carbon ecosystem. To date, we have collaborated with 50 suppliers to conduct carbon audits, launched emission reduction initiatives with over 150 suppliers, and partnered with four suppliers to implement green energy solutions.

Policy Engagement and Industry Collaboration

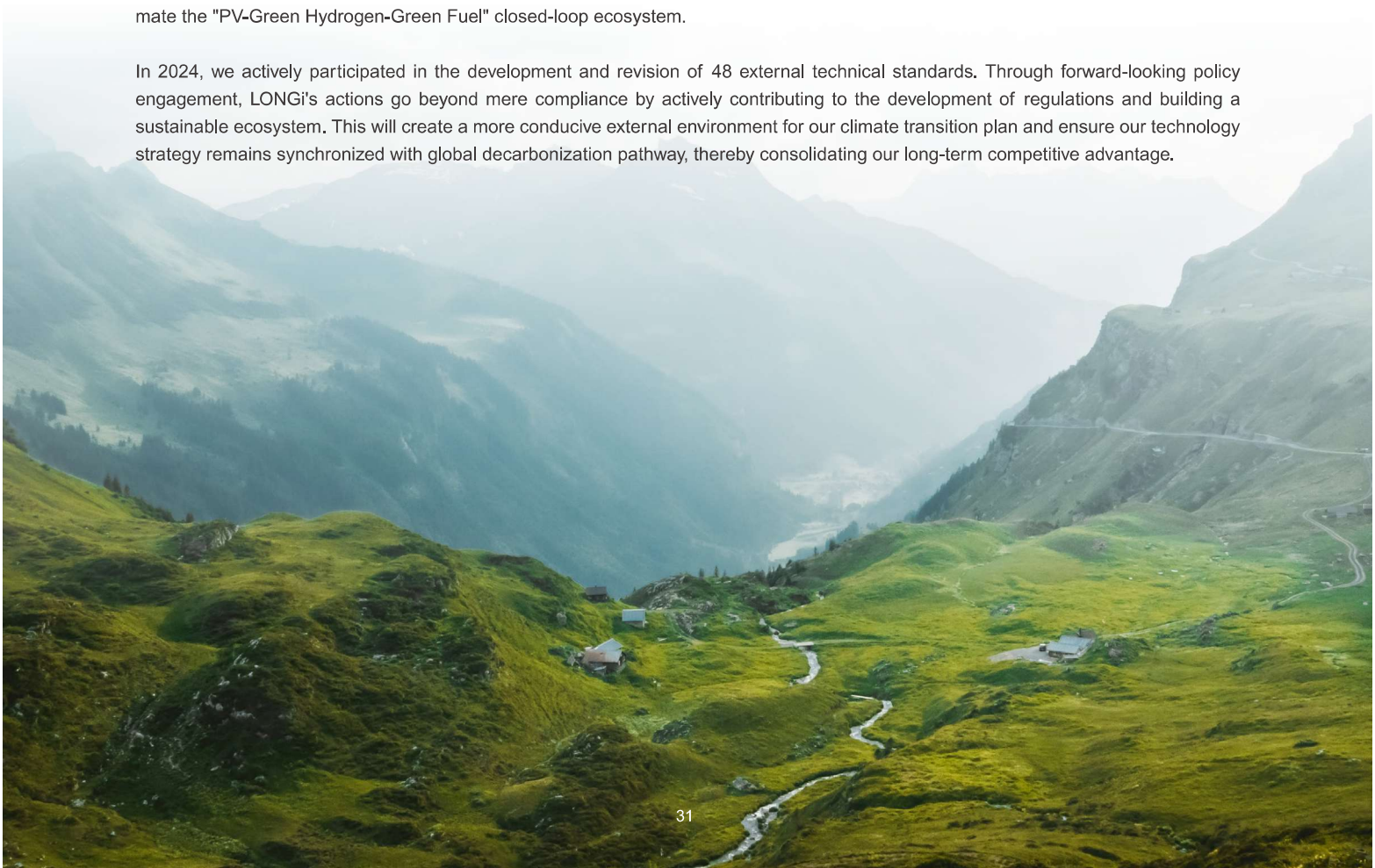
To systematically advance our climate transition plan, LONGi actively participates in the development of industry policies and technical standards. Our actions extend complying with existing regulations; they aim to proactively foster a policy and institutional environment conducive to the promotion of green technologies and the establishment of a circular economy, thereby maximizing the contribution of our corporate climate action to global decarbonization. LONGi plans our policy engagement activities focusing on two key dimensions: "contribution to climate transition" and "contribution to long-term technology strategy."

Currently, our policy engagement is highly focused on two main areas: product lifecycle management and emerging green technologies, with a commitment to addressing climate transition barriers at their source.

LONGi promotes and participates in the development of standards related to the decommissioning, recycling, and reuse of PV modules, and has formulated the *General Specification for the Graded Utilization of Decommissioned PV Modules*. By establishing unified rules for recycling and carbon footprint accounting, we aim not only to ensure that the environmental impact at the end of a product's life is manageable, but also to drive material innovation and process optimization from the design stage, thereby systematically reducing the carbon intensity of the entire value chain. LONGi also participates in the development of key standards such as *Greenhouse Gases—Product Carbon Footprint Quantitative Methods and Requirements—PV Modules*, promoting the accurate assessment and management of carbon emissions from PV modules.

Simultaneously, we are actively developing the green hydrogen industry chain, participating in the formulation of technical specifications such as the *Performance Test and Evaluation of Electrodes for Water Electrolysis Hydrogen Production*, laying the foundation for the synergistic development of "PV + Hydrogen." In the future, as we continue to deepen our policy engagement, LONGi plans to expand its participation to include the standard-setting for derivative energy carriers like green ammonia and green methanol, in order to consummate the "PV-Green Hydrogen-Green Fuel" closed-loop ecosystem.

In 2024, we actively participated in the development and revision of 48 external technical standards. Through forward-looking policy engagement, LONGi's actions go beyond mere compliance by actively contributing to the development of regulations and building a sustainable ecosystem. This will create a more conducive external environment for our climate transition plan and ensure our technology strategy remains synchronized with global decarbonization pathway, thereby consolidating our long-term competitive advantage.



Global Action Engagement

To achieve its climate transition target, LONGi actively engages in global action, collaborating with international institutions, industry alliances, and value chain partners through strategic partnerships and initiatives to jointly shape a sustainable future.

As a key member of RE100, the Science Based Targets initiative (SBTi), and the United Nations Global Compact (UNGC), LONGi not only integrates stringent renewable energy and emission reduction commitments into our own operations but is also dedicated to setting industry benchmarks and driving collective action.

LONGi has proactively set agendas on global governance platforms for climate and biodiversity, such as COP29 and COP16. LONGi also partnered with the International Union for Conservation of Nature (IUCN) to launch an initiative to integrate climate and biodiversity, exemplifying solutions for the synergy between PV and nature. Meanwhile, LONGi's three-year partnership with the United Nations High Commissioner for Refugees (UNHCR) has expanded from constructing solar power plants and providing skills training in Uzbekistan to the green upgrade of global emergency logistics hubs. This collaboration aims to extend the application of green energy into the humanitarian sector and validate innovative business models.

In our engagement with global initiatives, we focus on two key areas: initiatives directly related to our own net-zero transition, and those that foster energy industry collaboration and shape a sustainable policy environment. In 2025, LONGi, along with industry chain partners including JA Solar, Jinko Solar, and Tongwei, jointly launched *the Global Solar Sustainable Alliance* (GSSA), dedicated to advancing the overall performance of the PV industry in Environmental, Social, and Governance (ESG). Furthermore, LONGi is also actively advancing module recycling initiatives in Latin America hand in hand with value chain partners to jointly promote the infrastructure development of PV module recycling systems and explore the synergy between PV and the circular economy. For instance, it has established cooperation with Rafiqui, a renowned PV module recycling organization in Mexico, and obtained PVCycle certification, the first of its kind in the PV recycling industry in Brazil.

To ensure our external engagements are strategically aligned, we have established a rigorous monitoring and alignment mechanism. We periodically review the public positions and activities of the associations we are part of, assessing their alignment with the goals of the *Paris Agreement*. This ensures that our industry participation remains a powerful driver for our climate transition.

Examples of engagement in international organizations, initiatives and alliances:

Global Compact Network Singapore Join the UNGC, fully support the United Nations Sustainable Development Goals, and integrate these goals with the business value chain	SOLAR STEWARDSHIP INITIATIVE Member Organization of the Solar stewardship Initiative	IUCN Jointly launched the Initiative of Advancing Climate Action and Biodiversity Conservation with Photovoltaic with IUCN	GLOBAL SOLAR COUNCIL Member Organization of the Global Solar Council (GSC)
SCIENCE BASED TARGETS Set science-based targets in line with the SBTi standard, becoming the first PV company that validated by SBTi in China	GLOBAL SOLAR SUSTAINABLE ALLIANCE Jointly launched the *Global Solar Sustainable Alliance* (GSSA)	CLIMATE GROUP RE100 Join the RE100 initiative and commit to achieving 100% renewable electricity use	中国绿色供应链联盟 China Green Supply Chain Alliance Vice Chairman Unit of the Photovoltaic Professional Committee under the China Green Supply Chain Alliance
CLIMATE GROUP EV100 Join the EV100 initiative, committing to promote the adoption of electric vehicles by installing charging facilities	PV CYCLE Member Organization of the PV CYCLE	CLIMATE GROUP EP100 Join the EP100 initiative, committing to improving energy efficiency	Partnered with Rafiqui to advance PV module recycling in Mexico

Just Transition Practices

LONGi firmly believes that the low-carbon transition is not merely an environmental mission but also a social responsibility. We are committed to integrating just transition principles into our climate strategy, ensuring that employees, communities, and vulnerable groups have fair development opportunities and share in the benefits of the green transition.

Leveraging our PV technology, we are advancing energy equity and social inclusion on a global scale. In China, we support the national rural revitalization strategy by advocating for enhanced PV standards for rural architecture, while pioneering and scaling "Zero-Carbon Village" practices in Shaanxi. Our partnership with the UNHCR in Uzbekistan involves constructing PV power plants and providing skills training, reinforcing our advocacy for renewable energy adoption and climate action. Furthermore, in Pakistan, we provide educational support for refugee children and deliver solar-powered medical solutions to hospitals that host refugee populations. Detailed information will be disclosed in our sustainability report annually.

Going forward, LONGi remains steadfast in our commitment to taking concrete action, thereby establishing clean energy as a pivotal force for advancing social equity and building an inclusive future.

04

Climate Governance



- Governance Mechanism
- Climate Risk Management and Resilience Enhancement
- Financial Planning and Internal Carbon Pricing
- Awareness Enhancement and Capacity Building
- Carbon Credits

CLIMATE ACTION

Governance Mechanism

In the effective promotion and implementation of the climate transition plan, the governance mechanism serves as the core pillar ensuring that goals and strategies are realized.

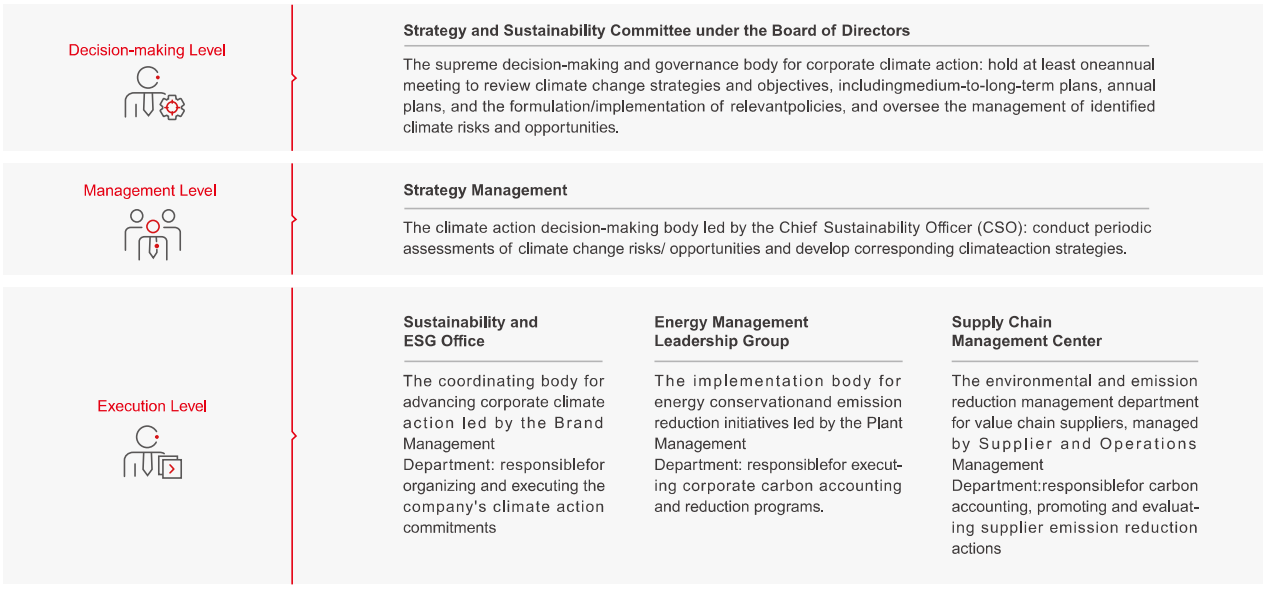
LONGi has established a climate change governance framework centered on the Board of Directors, which conducts the ultimate review and approval of the transition plan and climate ambitions. At the Board level, LONGi has established a Strategy and Sustainability Committee, which acts as the decision-making and supervisory body for the management and execution of climate-related matters. Specifically, LONGi includes the annual sustainability report (including environmental topics such as the climate transition plan) on the Board's standing agenda, ensuring at least one meeting is held annually to review and approve the company's climate targets and transition plan. Furthermore, the Board oversees any changes, updates, and report releases related to the climate transition plan to ensure its alignment with the company's overall strategic direction. To ensure clarity of duties, responsibilities related to the transition plan have been formally incorporated into the terms of reference applicable to the Strategy and Sustainability Committee via official documents.

The management level plays a key role in defining the strategic ambitions of the transition plan and setting specific targets. At this level, LONGi has established a Strategy Management Committee, with the Chief Sustainability Officer (CSO) overseeing the implementation of the transition plan. Its responsibilities include: periodically assessing the risks and opportunities presented by climate change, formulating and advancing the climate transition plan, designing employee incentive measures linked to environmental performance, coordinating cross-departmental collaboration, and reporting progress to the Board of Directors on a regular basis. While the Board of Directors is responsible for supervising and guiding the formulation of the transition plan, the Strategy Management Committee leads the development of detailed implementation plans, monitors the progress of various action plans, and periodically analyzes target achievement to ensure company's strategic ambitions are realized.

To ensure the transparency and timeliness of information, the management regularly reports on the progress of the company's transition plan via the Board's standing agenda. Concurrently, LONGi continuously solicits feedback on its climate action commitments from shareholders and other stakeholders through public channels. Furthermore, when deliberating on the company's long-term strategy, approving major capital expenditures and M&A transactions, and assessing the overall risk appetite, we incorporate the impacts of the transition plan as a key consideration. This ensures that strategic decisions are aligned with the realization of the transition as planned.

Regarding management performance evaluation and incentives, LONGi links operational performance evaluation with sustainability performance evaluation. It includes EHS and other responsibility targets in annual evaluations to rigorously assess management's effectiveness in managing climate transition-related areas (e.g., emissions reduction). For management compensation, LONGi uses a mix of short-term and long-term incentives, linking climate transition-related performance indicators to compensation. This motivates relevant personnel to meet climate response assessment metrics and drives the implementation of sustainable development initiatives and the climate transition plan.

At the execution level, the Sustainability and Climate Action Office and the Energy Management Committee jointly coordinate and advance related initiatives, with periodic progress reporting. In compliance with environmental protection laws and regulations, LONGi has formulated the *LONGi Environmental Management Policy* to guide efforts related to energy conservation and GHG emission reduction. Aligned with management performance incentives, LONGi has also established a group-wide climate-related financial incentive mechanism, leveraging special incentive funds to drive the implementation of the climate transition plan. This comprehensive governance framework ensures the climate transition plan garners full attention and is effectively executed across all levels of the company.



Climate Risk Management and Resilience Enhancement

Amid a global landscape characterized by an increasing frequency of extreme weather events, the reinforcement of national climate targets and policies, and escalating market demand for a low-carbon transition, LONGi is acutely aware of the challenges that climate risks pose to our operations. At the same time, LONGi recognizes the significant opportunities inherent in our role as a clean energy solutions provider amid the global energy transition.

To enhance internal understanding of climate risks and opportunities and strengthen corresponding management capabilities, LONGi conducts an annual identification and assessment process. In the analysis of climate risks and opportunities, LONGi evaluates the likelihood, velocity, and financial impact of these risks and opportunities to establish priorities for management actions. By incorporating parameters and financial data under different climate scenarios, LONGi has quantified the financial impacts of climate risks, which enables the prioritization of those with significant financial implications. This quantification process assesses risks and opportunities across three time horizons: short-term (0–2 years), medium-term (3–5 years), and long-term (6–10 years). The updated list of identified climate risks is submitted to the Board of Directors for annual review. For material climate risks and opportunities, LONGi has conducted scenario analysis using parameters primarily sourced from mainstream international climate model databases, including the IPCC, WRI, NGFS, and IEA (as shown in the figure below). When analyzing transition risks and opportunities, LONGi uses the current policy scenario as the baseline and selects the accelerated transition scenario to evaluate the potential impacts of more stringent policies, technological shifts, and changes in market and consumer preferences within a low-carbon policy and economic environment. When analyzing physical risks, LONGi selects the RCP4.5 and RCP8.5 scenarios to simulate the potential impacts of increased acute and chronic physical risks under high-temperature-rise scenarios.

Climate Scenarios Used in LONGi's Climate Risk and Opportunity Identification and Assessment Process

	Accelerated transition scenario (<2°C/1.5°C)	Current policy scenario (baseline)	High-temperature-rise scenario (>4°C)
Transition risks and opportunities	Net Zero 2050 (NGFS) Net Zero Emissions Scenario (IEA) 1.5°C Scenario (IRENA)	Current Policy Scenario (NGFS) Stated Policies Scenario (IEA-WEO) Planned Energy Scenario (IRENA)	
Physical risks		Intermediate Stabilization Scenario, RCP 4.5 (CIE & IPCC) Baseline (Optimistic) Scenario, SSP2, RCP4.5 (WRI)	High-Emission Scenario, RCP 8.5 (CIE) Business-as-Usual Scenario, RCP 8.5 (IPCC) Pessimistic Scenario, SSP3, RCP 8.5 (WRI)

Risk/Opportunity Type	Risk Factor	Risk Description	Value Chain Impact	Time Horizon	Financial Impact Mechanism	Financial Impact	Key Response Measures
Physical Risk							
Acute physical risk	Floods	Increasingly frequent flooding may damage buildings, factories, facilities and equipment at major production sites, including Yunnan, Zhejiang, Jiangsu provinces in China and Bắc Giang in Vietnam, resulting in asset losses.	Operation	Medium term	Asset	High	Investing in flood control equipment and preparing a comprehensive flood control emergency plan; strengthening inspections of buildings, production equipment, and circuit cables.
Chronic physical risk	Changes in precipitation patterns	Increasing rainstorm frequency may lead to downtime and loss of production capacity, resulting in lower revenues.	Operation	Short term	Revenue	Medium	Improving operational resilience to minimize the impact of extreme weather on production and delivery, such as enhancing the flexible logistics scheduling capability of overseas finished goods warehouses, establishing an emergency management organization, and preparing a climate change emergency response plan.
	Water scarcity	Water resource constraints at major production sites (including Shaanxi, Ningxia, Jiangsu and Zhejiang) may lead to an increase in municipal water supply prices, increasing the cost of water.	Operation	Short term	Cost	Low	Implementing water conservation initiatives, conducting water saving renovation projects, and continuously exploring alternative water sources.
Transition risk							
Technology risk	Transition to low-emission technologies and products	Downstream customers are increasingly concerned about the lifecycle carbon emissions of PV module products. If LONGi fails to meet the downstream market's requirements for product carbon footprint certification, the company may face the loss of sales channels in specific markets, leading to potential revenue decline and limited growth.	Downstream	Medium term	Revenue	Medium	To meet customer demands for product carbon footprint certification, LONGi is accelerating the advancement of its product carbon footprint management system and certification work.
Policy and legal risk	Carbon market and carbon pricing	The inclusion of the power sector in the domestic carbon trading market might increase electricity prices.	Upstream	Short term	Cost	Medium	Strengthening energy management, improving energy efficiency, and reducing electricity intensity per unit of product; scaling up renewable electricity use to achieve 100% coverage by 2028.
Market risk	Changes in resource prices	Higher fuel prices leading to an increase in transport costs (marine and road transport), thus raising global distribution costs.	Downstream	Long term	Cost	Medium	Optimizing scheduling to increase transport load factors; continuously monitoring and adjusting transport mode selection, with future consideration for adopting marine transport vessels powered by cleaner fuels.

Risk/Opportunity Type	Risk Factor	Risk Description	Value Chain Impact	Time Horizon	Financial Impact Mechanism	Financial Impact	Key Response Measures
Reputation risk	Stakeholder expectations	Increasingly stringent environmental performance disclosure requirements have raised LONGi's associated compliance costs for maintaining or enhancing its reputation.	Operation	Short term	Cost	Low	Monitoring regulatory and disclosure requirements across various markets and carrying out compliance work; conducting product carbon footprint measurement and certification.
Climate opportunity							
Product and service opportunity	Iterative innovation in PV products	LONGi's leadership in BC (Back Contact) cell technology and BIPV (Building Integrated Photovoltaic) products increases business opportunities.	Downstream	Short term	Revenue	High	Leading the way in battery conversion efficiency records to achieve technological breakthroughs in BC mass production; optimizing BIPV solutions and residential PV solutions and enhancing digital intelligence capabilities.
	Expansion into new business segments	The "Green Power + Green Hydrogen" solution has created new business growth drivers for LONGi.	Downstream	Short term	Revenue	High	Continuously expanding application scenarios and exploring cross-industry solutions; increasing R&D investment in hydrogen.
Market opportunity	Electrification	The ongoing electrification across industries and the rising demand for green power are driving greater demand for renewable energy equipment and integrated solutions.	Downstream	Short term	Revenue	High	Closely tracking market demand trends, aligning production capacity and strengthening R&D investment in renewable energy solutions to better meet evolving customer and industry needs.

LONGi undertakes dedicated work on climate-related risks, integrating the identification and assessment of risks and opportunities across short-, medium-, and long-term time horizons into its overall corporate risk management system. LONGi also further established a comprehensive mechanism that encompasses environmental risk identification, assessment and prioritization, and risk response.

LONGi's Risk Identification, Assessment, and Management Process	
Climate Risk Identification	Through value chain analysis, climate risk screening based on database and industry research, LONGi identifies and analyzes segments of the value chain vulnerable to climate risks and potential opportunities, assessing their short-, medium-, and long-term impacts on the company's operations.
Climate Risk Assessment	LONGi conducts an in-depth assessment of the identified Climate-related Risks and Opportunities (CROs) based on key indicators such as likelihood, velocity, and financial materiality to prioritize risks that may have a material financial impact on the business. The Risk Management Team leads the evaluation and scoring of the climate risk long list, and submits the prioritized short list to the Board of Directors for annual review.
Climate Risk Response Mechanism	Following the Board's review of the climate risk list, the Sustainability and Climate Action Office organizes relevant functional and operational departments to address climate-related risks. This includes developing comprehensive control measures for climate transition risks, an emergency management system, and initiatives to enhance climate resilience.

Through a systematic process of climate risk identification, assessment, and management, LONGi continuously enhances its adaptability to the impacts of climate change and strengthens its operational resilience.

At the strategic level, we effectively manage climate transition risks by formulating proactive emission reduction targets and action plans. Concurrently, we seize the opportunities presented by the energy revolution, robustly developing a low-carbon product portfolio centered on PV to transform challenges into drivers for growth. At the operational level, we have constructed a multi-tiered defense system against physical risks such as extreme weather events. This includes establishing a dedicated emergency management organization, developing and refining climate emergency response plans; reinforcing key infrastructure like manufacturing plants and warehouses against floods and high winds; and conducting regular, specialized inspections of production equipment and power lines. Simultaneously, by enhancing the flexibility of our supply chain logistics and conducting emergency response training for our employees, we comprehensively strengthen the organization's overall climate resilience.

Furthermore, LONGi actively engages in the global dialogue on climate resilience, exploring at the 29th UN Climate Change Conference (COP29) how to help bolster the climate resilience of climate-vulnerable regions. We also place high importance on the synergies between climate action and ecological well-being. We plan to systematically identify the links between our operations and natural ecosystems, integrating biodiversity management into our corporate strategy and daily environmental practices. In line with this, we plan to join the Taskforce on Nature-related Financial Disclosures (TNFD).

Case Study | **LONGi's Physical Climate Risk Management**

In our climate risk assessment, we identified that water scarcity driven by climate change could increase production costs in processes such as silicon wafer cleaning. While water costs currently account for a small proportion of the company's total operating costs, LONGi continues to proactively mitigate this long-term physical risk through water conservation target management and technological optimization.

LONGi continuously improves water use efficiency and systematically advances water-saving practices. Guided by the principles of "environmental compliance, water conservation prioritization, economical discharge, and scientific management" in our water resource management strategy, LONGi has formulated detailed water-saving policies and implementation plans that clarify targets, responsible departments, and execution pathways to ensure effective implementation of all measures. With clear water resource management policies and conservation requirements in place, LONGi has effectively reduced wastewater generation and discharge by promoting initiatives including grey water utilization, centralized water recycling systems, and rainwater harvesting. In 2024, we invested a total of 20 million RMB in water-saving projects, implementing nearly 100 initiatives across the Group. These efforts achieved annual water savings of approximately 11.88 million tonnes, with overall water consumption intensity decreasing by 13.8% compared to 2023, delivering significant water conservation results.

Taking the Ordos factory as an example, the region is categorized as an area of "extremely high" water stress by the World Resources Institute's Aqueduct Water Risk Atlas—making water conservation critical to the local ecology, business operations, and community well-being. To ensure industrial water security and support regional water balance, LONGi is actively advancing the development of a "zero wastewater discharge" initiative within the factory. Leveraging the industrial wastewater treatment and reclaimed water project at the Mengsu Zero-Carbon Industrial Park, the factory has established a closed-loop water circulation model of "drainage-collection-treatment-reclamation-reuse", achieving zero wastewater discharge.

Case Study **LONGi Hydrogen Conducts TCFD Analysis, Focusing on Climate Risks and Opportunities in the Hydrogen Sector**

As the company's business portfolio evolves, LONGi Hydrogen has conducted its first systematic assessment of climate-related risks and opportunities to strengthen its management of these factors. Through value chain analysis, industry research, and quantitative scenario analysis, LONGi Hydrogen identified and analyzed climate-sensitive risk points and potential opportunities within its value chain, resulting in the identification of 11 key items.

Regarding transition risks, LONGi Hydrogen performed a quantitative analysis based on the International Energy Agency's (IEA) scenario models, incorporating carbon price data from the Stated Policies Scenario (STEPS, 2.4°C), the Announced Pledges Scenario (APS, 1.7°C), and the Net Zero Emissions by 2050 Scenario (NZE, 1.5°C). The results indicate that, given relatively low Scope 1 and 2 emissions for LONGi Hydrogen, the carbon price risk is manageable. The associated operating costs are projected to be only USD 42,300 per annum by 2030 and will be reduced to zero after achieving net-zero emissions by 2050, demonstrating resilience to policy changes. For physical risks, modeling was conducted using the Intergovernmental Panel on Climate Change (IPCC) Shared Socioeconomic Pathways SSP2-4.5 and SSP5-8.5 to assess key production bases. The findings show that LONGi Hydrogen faces a medium-to-high level of physical risks and is most susceptible to water stress and extreme heat. Notably, the Wuxi facility is identified as being vulnerable to flooding, but its long-term asset value is expected to be only minimally affected.

This systematic analysis of climate-related risks and opportunities has not only strengthened LONGi Hydrogen's ability to address climate risks, but has also laid a solid foundation for seizing opportunities and advancing sustainable development within the hydrogen industry.



Financial Planning and Internal Carbon Pricing

Establish a robust governance system for climate finance planning

LONGi fully integrates its climate strategy into its financial planning system and allocates the necessary financial resources to achieve its climate goals. To ensure the deep integration of its climate and financial strategies, LONGi's Chief Financial Officer, as a member of the Board's Strategy and Sustainability Committee, directly participates in major climate-related decision-making and oversees implementation, ensuring alignment between the two at the organizational level.

In 2024, LONGi conducted its first double materiality assessment of ESG topics. By constructing and implementing a "Five-Step" assessment process[1], we collaborated with internal and external stakeholders to systematically identify and analyze the short-, medium-, and long-term financial impacts of ESG topics on the company, as well as LONGi's external impacts on the economy, society, and the environment, ultimately forming a materiality matrix. The assessment results show that "Climate Change Response and Clean Technology Development" and "Energy Management" rank highest in terms of financial materiality and are key topics of high impact and financial materiality. This assessment outcome provides a clear basis for the company's subsequent action planning and resource allocation.

Progressively Increasing Investment in Emission Reduction and Innovation

To achieve its climate goals, LONGi continuously invests resources to advance carbon reduction initiatives, focusing on energy-saving retrofits and the application of renewable electricity at its production bases to systematically reduce its operational emissions. In 2024, the company implemented 477 energy-saving and emission-reduction projects, with an estimated annual electricity saving of approximately 426 GWh.

LONGi actively seizes the opportunities of the low-carbon transition, continuously increasing R&D and capital investment. LONGi is committed to reducing the cost of the global clean energy transition through green energy technology innovation. For example, we are channeling resources toward upgrading production capacity for HPBC 2.0 battery and modules, progressively establishing supporting production bases, and accelerating the industry-scale deployment of BC technology. Other efforts include optimizing the overseas business layout to enhance supply chain resilience; expediting product carbon footprint certifications; and continuously promoting the reduction of product carbon footprints to drive the industry's green transition.

To incentivize each business unit to actively implement emission reduction actions, LONGi has established special incentive funds to support energy-saving and emission-reduction projects, such as energy efficiency retrofits. In the future, LONGi aims to further refine its incentive mechanisms to ensure that climate targets are cascaded and effectively implemented.

Exploring the Adoption of an Internal Carbon Pricing Mechanism

An Internal Carbon Price (ICP) is a monetary value assigned to GHG emissions within a company. It is used to guide the company in integrating climate factors into operational and management decisions and to support the implementation of its low-carbon transition strategy. To effectively advance the implementation of climate targets and net-zero commitments, LONGi is exploring the adoption of an ICP mechanism as a management tool. By quantifying the financial impact of GHG emissions, this tool can enhance the scientific rigor and forward-looking nature of related decisions.

This mechanism will be governed by the company's Strategy and Sustainability Committee, with the Energy Management Department responsible for its implementation. In the initial stage, we will adopt a shadow carbon price model, piloting its applications in the assessment and investment decisions of key energy-saving projects to drive emissions reduction at the organizational level. As conditions mature, LONGi plans to gradually expand the application scope for its internal carbon price. LONGi will also review and refine the pricing methodology and framework annually to continuously strengthen its role in supporting science-based decision-making and advancing climate action.

[1] LONGi's "Five-Step" double materiality assessment process: Mapping business activities and relationships - Stakeholder communication - Establishing a list of topics - Assessing topic materiality - Reviewing and validating topics

Awareness Enhancement and Capacity Building

To ensure the effective implementation of the company's climate transition plan, LONGi deeply integrates climate action into its corporate culture, systematically enhancing the awareness and capabilities of all employees. LONGi adheres to its "LIGHT" sustainability philosophy, which comprises the five core elements of "Lead, Innovative, Green, Harmonious, and Trustworthy" and is guided by the vision of "affordable clean energy for all". This is actualized through a sustainable development model of "green manufacturing, low-carbon products, a responsible ecosystem, and global sharing," which conveys a clear message to internal and external stakeholders: climate transition is a key factor that runs through all our business decisions, product innovation, and daily operations.

LONGi continuously conducts climate awareness enhancement and capacity building initiatives that cover all levels, from the Board of Directors to frontline employees, by establishing a comprehensive, multi-level, and regular communication mechanism. Through the internal training platform, LONGi develops ESG and climate-related training courses and periodically conducts skills enhancement and transition adaptation training programs. These initiatives help employees master the professional skills required to navigate the transition, reduce potential career risks from the industry's low-carbon transformation, while enhancing job stability and growth opportunities, thereby building human capital foundation essential for sustainable business operations.

LONGi has also established a dedicated platform for employee feedbacks on climate-related topics, and maintains open communication and grievance mechanisms. These channels – including telephone and emails – allow employees, suppliers, partners, customers, and other stakeholders to provide input and submit suggestions on the company's climate transition plan.

Case Study | **Empowering Individual and Organizational Growth by Supporting Employee Participation in Advanced International Training**

To enhance employees' understanding of the climate transition and their professional capabilities, LONGi continues to enhance its internal training system while also actively building learning platforms that enable employees to participate in international training programs, such as the United Nations Development Programme (UNDP) “Climate Ambition Accelerator.” This supports employees in obtaining certifications and strengthens their professional expertise in ESG and climate action. This initiative aims to introduce global cutting-edge concepts and practices into the company, thereby empowering individual and organizational growth.

Through such training, employees have enhanced their sense of responsibility and capacity for action in addressing climate change. One participant shared that integrating what they learned into their daily work and promoting green concepts has effectively stimulated widespread employee engagement. This aligns individual growth with the company's climate strategy, laying a solid talent and cultural foundation for the advancement of the transition plan.

Effective governance by the Board of Directors and executive management is key to ensuring the integrity and credibility of the transition plan. Leveraging their extensive experience accumulated over many years in the PV and energy sectors, LONGi's Board members possess the capability to identify and manage climate transition risks and seize relevant opportunities. LONGi also continuously strengthens the Board's oversight and review capabilities as well as decision-making effectiveness regarding the transition plan through multiple mechanisms. These include incorporating climate-related expertise into Board nomination considerations, providing regular climate training, establishing internal standing expert working groups, and engaging external experts for consultation.

Carbon Credits

Over the short and medium term, LONGi will focus the key resources and efforts on advancing the most material emission reduction actions, including those across direct operations, the upstream and downstream value chain, and product-level carbon reductions. Carbon credits will only be used as a last resort to offset emissions that are unavoidable due to technological or economic constraints, and their use will be governed by a principle of strict responsibility and prudence.

Over the long term, we aim to align with the Net Zero Standard of the Science Based Targets initiative (SBTi), with a vision to achieve net-zero emissions by 2050. Before reaching this milestone, we will continually reduce material Scope 1, 2, and 3 emissions. The limited residual emissions that are technically unfeasible to abate or would impose disproportionate costs on consumers will be neutralized through the purchase of high-quality carbon credits.

We recognize the significant value of high-quality carbon offset projects in advancing global decarbonization, preserving ecosystem, and supporting the development of cutting-edge carbon removal technologies. Therefore, when the use of carbon offsets is necessary, we will apply rigorous selection criteria, giving preference to projects certified by recognized standards that hold high environmental and social responsibility. Where feasible, we will support high-quality projects within our operational or supply chain footprint that generate additional environmental and social co-benefits. Through these actions, we aim to contribute positively to climate actions beyond our own value chain.



Appendix 1: Environmental Metrics and Target Achievement Progress

LONGi's energy consumption, 2020-2024

Energy type	Unit	2024	2023	2022	2021	2020
Electricity	MWh	9,995,865	12,267,985	9,068,091	7,702,405	6,114,251
▪ Renewable Electricity	MWh	4,746,070	3,815,373	4,278,675	3,095,858	2,557,833
▪ Renewable Electricity %	%	47.5%	31.1%	47.2%	40.2%	41.8%
Heat and steam	GJ	1,534,652	911,648	277,978	78,362	65,612
Natural gas	Nm^3	4,030,118	5,536,753	5,743,577	5,296,479	9,529,365
Diesel	Ton	232	295	300	372	291
Petrol	Ton	69	179	195	179	177
LNG	Ton	-	-	0.6	4.6	-
LPG	Ton	-	50	63	78	-
Acetylene	Ton	216.8	0.002	-	0.1	-
Ethanol	Ton	-	-	-	-	16
Biofuel	Ton	-	-	-	-	107

LONGi's Scope 1 and 2 emissions, by emission source, 2020-2024

	2024 Emissions (tCO_2e)	Percentage of Scope 1 and 2 emissions (%)	2023 Emissions (tCO_2e)	Percentage of Scope 1 and 2 emissions (%)	2022 Emissions (tCO_2e)	Percentage of Scope 1 and 2 emissions (%)	2021 Emissions (tCO_2e)	Percentage of Scope 1 and 2 emissions (%)	2020 Emissions (tCO_2e)	Percentage of Scope 1 and 2 emissions (%)
Scope 1	**85,226**	**2.7%**	**135,747**	**2.7%**	**158,202**	**5.6%**	**94,750**	**3.0%**	**92,665**	**3.6%**
Stationary combustion	9,601	0.3%	12,511	0.2%	13,211	0.5%	12,173	0.4%	39,361	1.5%
Mobile combustion	837	0.0%	1,132	0.0%	1,119	0.0%	1,514	0.0%	556	0.0%
Industrial processes	58,492	1.8%	93,319	1.8%	118,460	4.2%	42,279	1.3%	-	-
Fugitive: Refrigerant leakage	5,203	0.2%	23,057	0.5%	227	0.0%	38,784	1.2%	52,747	2.1%
Fugitive: Leakage from fire suppression systems	8,114	0.3%	1,911	0.0%	21,705	0.8%	-	-	-	-
Fugitive: Wastewater treatment for septic systems	2,979	0.1%	3,817	0.1%	3,480	0.1%	-	-	-	-
Scope 2 (market-based)	**3,099,556**	**97.3%**	**4,920,831**	**97.3%**	**2,653,016**	**94.4%**	**3,057,224**	**97.0%**	**2,480,349**	**96.4%**
Purchased electricity	2,930,744	92.0%	4,820,550	95.3%	2,622,438	93.3%	3,048,604	96.7%	2,473,132	96.1%
Purchased heat and steam	168,812	5.3%	100,281	2.0%	30,578	1.1%	8,620	0.3%	7,217	0.3%

LONGi's Scope 3 emissions, by key category, 2020-2024

	2024 Emissions (tCO_2e)	Percentage of Scope 3 emissions (%)	2023 Emissions (tCO_2e)	Percentage of Scope 3 emissions (%)	2022 Emissions (tCO_2e)	Percentage of Scope 3 emissions (%)	2021 Emissions (tCO_2e)	Percentage of Scope 3 emissions (%)	2020 Emissions (tCO_2e)	Percentage of Scope 3 emissions (%)
Scope 3	**27,343,926**		**36,990,042**		**29,747,826**		**22,683,132**		**20,920,503**	
Category 1: Purchased goods and services	22,961,776	84.0%	36,076,900	97.5%	28,258,564	95.0%	21,619,240	95.3%	20,314,408	97.1%
Category 4: Upstream transportation and distribution	633,061	2.3%	302,511	0.8%	297,530	1.0%	317,096	1.4%	353,089	1.7%
Category 9: Downstream transportation and distribution	29,618	0.1%	490,323	1.3%	780,092	2.6%	316,722	1.4%	163,437	0.8%

Progress on LONGi's Energy and Climate Targets

Target Category	Performance Indicator	Target Description	2024 Progress	Status
Climate Target	Scope 1, 2, and 3 emissions	Achieve net-zero emissions across the entire value chain by 2050	/	In progress
	Scope 1, 2 emissions	Reduce Scope 1 & 2 emissions by 60% by 2030 from a 2020 base year	▲ 23.8% *	In progress
	Scope 3 emissions	Reduce Scope 3 emission intensity per ton of purchased goods and services by 52% by 2030 from a 2020 base year	▼ 41.2%	In progress
Energy Target	Renewable Electricity Usage Ratio	Achieve 70% renewable electricity use by 2027 and 100% by 2028	47.5%	In progress
	Energy Efficiency	Complete the deployment of the energy management system by 2025	59%	In progress
		Improve energy productivity by 35% by 2025, from a 2015 base year	▲ 31.2% **	In progress
	Charging Facility Coverage Rate	Install charging facilities at 100% coverage of manufacturing sites by 2030	68.6%	In progress
	Reduction rate of electricity consumption per unit	Reduce the Group's overall electricity intensity per unit of product by 9.14% in 2024 compared to 2023	▼ 10.7%	Achieved
		Reduce electricity intensity per unit of product in 2024 for each production unit compared to 2023:		
		Ingot: 3.0%	▼ Ingot: 4.27%	
		Wafer: 3.5%	▼ Wafer: 13.6%	Achieved
		Cell: 20.0%	▼ Cell: 26.0%	
		Module: 4.0%	▼ Module: 19.1%	

* Scope 1 and 2 emissions in 2024 increased compared to 2020, primarily due to a significant increase in LONGi's PV product shipments. Compared to the previous year, LONGi's Scope 1 and 2 emissions decreased by 37.0%.

** 2023 data. This is LONGi's EP100 target. Energy productivity refers to the ratio of corporate revenue to energy consumption.

Appendix 2: Main Assumptions and External Factors

LONGi's short-, medium-, and long-term climate targets are aligned with the temperature goals of the Paris Agreement and China's national climate ambitions. LONGi's targets are formulated with reference to the frameworks of international initiatives such as the Science Based Targets initiative (SBTi) and RE100. LONGi has established a systematic climate strategy and implementation pathways and is well positioned to progressively achieve its targets under current policy, technological, and market conditions. However, LONGi's transition relies on the support and synergy of the broader socio-economic low-carbon transformation. The following external factors will have a significant impact on the achievement of LONGi's climate targets:

Stable Global Climate Governance Landscape

The international community has widely recognized the severity of the climate crisis, and the *Paris Agreement* provides a framework for collective action to limit the global temperature increase to 1.5°C by the end of this century. The proactive actions of governments, corporations, and social organizations have created vast market opportunities for clean energy companies like LONGi, while also entrusting us with the responsibility to participate in global climate governance. However, policy reversals and uncertainties in some countries pose challenges to global collaborative action, potentially affecting the advancement of our related climate initiatives. This requires our continuous attention and proactive risk mitigation planning.

Steady Implementation of China's Climate Policy Goals

China's "30·60" dual carbon targets and its "1+N" policy framework are comprehensively driving the low-carbon transition of the economy and society. A phased targets for 2035 was introduced in the 2025 UN Climate Change Conference: a 7%-10% reduction in the net GHG emissions economy-wide from the peak; the proportion of non-fossil energy consumption to exceed 30%; installed capacity of wind and solar power to reach more than six times the 2020 level; new energy vehicles to become the mainstream of sales; the national carbon market to cover major emission-intensive industries; and a climate-adaptive society to be largely established. LONGi upholds the mission of contributing to the national climate goals, leveraging the momentum of the transformation in energy structure to realize its own sustainable development and fulfill its corporate climate commitments.

Stable Market and Industry Expectations

To support the achievement of LONGi's climate targets, we assume that the global PV industry will maintain a healthy and orderly development trend. Specifically, overall market demand is expected to show stable growth, price fluctuations across all segments of the industrial chain will remain within a reasonable range, and the industry's competitive landscape will become increasingly rational. This favorable development trend will effectively prevent adverse impacts on LONGi's technological R&D, production capacity layout, and profitability that could arise from vicious price competition, overcapacity, or severe market volatility, thereby laying the solid market foundation and favorable industrial environment for LONGi to continuously invest in technological innovation and advance its low-carbon transition.

Breakthroughs in Low-Carbon Technology and Collaborative Value Chain Transition

Under existing technological pathways and market mechanisms, LONGi is well positioned to achieve its near-term emission reduction targets. However, achieving net-zero emissions across the value chain by 2050 remains challenging, especially in the raw materials segment (such as polysilicon, aluminum, glass, etc.), which contributes a significant share of Scope 3 emissions. This will depend on suppliers' breakthroughs in low-carbon technologies and their decarbonization actions to increase the availability of economically viable low-carbon raw materials. At the same time, the market adoption of low-carbon products will be influenced by downstream customers' preference for green products and their willingness to accept a certain green premium. LONGi will continue to increase R&D investment to drive down product carbon footprints and will work collaboratively with upstream and downstream partners to advance a zero-carbon transition across the entire value chain.

Manageability of Climate Physical Risks

We assume that the physical risks posed by climate change will remain within a manageable range in the short term. In terms of operational security, we assume that the frequency and intensity of extreme weather events (such as heavy rainfall, typhoons, and heatwaves) will not cause systemic or sustained disruptions to the company's production and manufacturing facilities, logistics network, or supply chain in the foreseeable future. In terms of power generation reliability, we assume that solar resources in LONG's main operational regions will remain generally stable, ensuring continuous and efficient operation of PV systems. To date, no systemic decline in solar irradiance levels has been observed that would significantly affect the power generation efficiency of PV products due to changing climate conditions. LONGi will continue to strengthen its climate adaptation management, enhancing the power generation reliability and operational resilience of its PV assets in a changing climate through meteorological monitoring, system optimization, and technological upgrades.

We are fully aware that the aforementioned assumptions and factors are subject to uncertainties. If one or more of the factors fail to develop as anticipated—for instance, in the event of global policy setbacks, a lack of breakthrough technologies, prolonged supply chain disruptions, or frequent extreme climate events—the implementation of this transition plan may be delayed. However, our determination to achieve our goals remains unchanged. LONGi will dynamically assess and proactively respond to these external challenges by increasing investment in resources and R&D, strengthening supply chain management and cooperation, actively participating in policy dialogue, and enhancing our climate risk management system to ensure continued progress in the company's low-carbon transition under complex scenarios.

Appendix 3: TPT Framework Index

TPT Framework			Corresponding Report Section
Ambition	1. Foundations	1.1 Strategic Ambition	0.3 Climate Ambition and Strategy
		1.2 Business model and value chain	0.2 Company Profile 0.3 Climate Ambition and Strategy 2.1 Product Lifecycle Carbon Footprint Management 2.2 Climate Mitigation Solutions 2.3 Enhancing Product Climate Adaptability
		1.3 Key assumptions and external factors	Appendix 2: Main Assumptions and External Factors
Action	2. Implementation Strategy	2.1 Business operations	1.1 Accelerating Operational Emissions Reduction
		2.2 Products and services	2.1 Product Lifecycle Carbon Footprint Management 2.2 Climate Mitigation Solutions 2.3 Enhancing Product Climate Adaptability
		2.3 Policies and conditions	1.1 Accelerating Operational Emissions Reduction 1.2 Advancing Value Chain Decarbonization 4.1 Governance Mechanism
		2.4 Financial planning	4.1 Governance Mechanism 4.2 Climate Risk Management and Resilience Enhancement 4.3 Financial Planning and Internal Carbon Pricing
	3. Engagement Strategy	3.1 Engagement with value chain	1.2 Advancing Value Chain Decarbonization 3.1 Stakeholder Engagement Strategy
		3.2 Engagement with industry	3.2 Policy Engagement and Industry Collaboration 3.3 Global Action Engagement
		3.3 Engagement with government public sector, communities, and civil society	3.2 Policy Engagement and Industry Collaboration 3.3 Global Action Engagement 3.4 Just Transition Practice
Accountability	4. Metrics & Targets	4.1 Governance, engagement, business and operational metrics and targets	0.3 Climate Ambition and Strategy Appendix 1: Environmental Metrics and Target Achievement Progress
		4.2 Financial metrics and targets	4.3 Financial Planning and Internal Carbon Pricing
		4.3 GHG metrics and targets	Appendix 1: Environmental Metrics and Target Achievement Progress 1.1 Accelerating Operational Emissions Reduction 1.2 Advancing Value Chain Decarbonization
		4.4 Carbon credits	4.5 Carbon Credits
	5. Governance	5.1 Board oversight and reporting	4.1 Governance Mechanism
		5.2 Management roles, responsibility and accountability	4.1 Governance Mechanism
		5.3 Culture	4.4 Awareness Enhancement and Capacity Building
		5.4 Incentives and remuneration	4.1 Governance Mechanism
		5.5 Skills, competencies and training	4.4 Awareness Enhancement and Capacity Building

Appendix 4: IFRS S2 Index

Framework	Disclosure Element	Standard Paragraph	Corresponding Report Section
Governance	The governance processes, controls, and procedures used to monitor, manage, and oversee climate-related risks and opportunities	5-7	4.1 Governance Mechanism 4.4 Awareness Enhancement and Capacity Building
Strategy	Climate-related risks and opportunities	8, 9a, 10-12	4.2 Climate Risk Management and Resilience Enhancement
	Business model and value chain	8, 9b, 13	1. Transition Plan and Actions 2. Driving Toward a Net-Zero Future
	Strategy and decision-making	8, 9c, 14	0.3 Climate Ambition and Strategy 1. Transition Plan and Actions 2. Driving Toward a Net-Zero Future Appendix 2: Main Assumptions and External Factors
	Financial position, financial performance and cash flows	8, 9d, 15-21	4.2 Climate Risk Management and Resilience Enhancement 4.3 Financial Planning and Internal Carbon Pricing
	Climate resilience	8, 9d, 22-23	2.3 Enhancing Product Climate Adaptability 4.2 Climate Risk Management and Resilience Enhancement
Risk Management	The processes for identifying, assessing, prioritizing, and monitoring climate-related risks and opportunities	24-26	4.2 Climate Risk Management and Resilience Enhancement
Metrics and Targets	Climate-related metrics	27, 28a-b, 29-32	1.1 Accelerating Operational Emissions Reduction 1.2 Advancing Value Chain Decarbonization Appendix 1: Environmental Metrics and Target Achievement Progress
	Climate-related metrics	27, 28c, 33-37	0.3 Climate Ambition and Strategy 4.5 Carbon Credits