
LONGi Green Energy: Comprehensive Vendor Assessment Report

Strategic Analysis of
Market Leadership,
Financial Health, and
Operational Risks (2024-
2026)

Created by:

CA Mahesh Lahoti

Kriyagni AI

ASSESSMENT DATE: APRIL 5, 2026

Executive Summary: Medium-High Risk with Significant Considerations

OVERALL ASSESSMENT

LONGi Green Energy is the world's largest manufacturer of monocrystalline silicon wafers. However, the company faces substantial headwinds that require careful evaluation for vendor assessment purposes.

Risk Level: MEDIUM-HIGH

KEY STRENGTHS

- **Industry Leadership:** AAA rating in PV-Tech's Q1 2025 PV ModuleTech Bankability Ratings for the 21st consecutive time.
- **Technology Innovation:** World record conversion efficiency of 27.81% for HIBC crystalline silicon solar cells (certified by ISFH).

Sources: PV-Tech, ISFH

CRITICAL CONCERNS

- **Financial Losses:** Warned of full-year 2025 net loss of 6-6.5 billion yuan (\$861 million).
- **Workforce Reductions:** Industry-wide cuts saw LONGi among five major companies shedding about 87,000 jobs in 2024.

Sources: Bloomberg, Longi Annual Reports

RECOMMENDATION

PROCEED WITH ENHANCED DUE DILIGENCE

Procurement decisions should incorporate robust contractual protections, diversified sourcing strategies, and ongoing financial monitoring.

Company Profile: Global Footprint and Leadership

Corporate Identity

LEGAL NAME

LONGi Green Energy Technology Co. Ltd.

STOCK EXCHANGE

Shanghai Stock Exchange (601012.SH)

FOUNDED

February 14, 2000

HEADQUARTERS

Xi'an, Shaanxi, China

Key Leadership

CHAIRMAN

Zhong Baoshen

FOUNDER & CTO

Li Zhenguo

CORE PORTFOLIO

Monocrystalline silicon wafers, solar cells, and high-efficiency modules (Hi-MO series).

Global Operations

MARKET REACH

Business covers more than 160 countries and regions worldwide.

MANUFACTURING BASES

15 manufacturing bases globally, including Mainland China, India, and Malaysia.

GLOBAL PRESENCE

More than 30 branches around the world.

Financial Performance: Revenue Decline and Profitability Concerns

REVENUE TRAJECTORY

Period	Revenue (USD)	Change
2023 Full Year	\$18.25 Billion	—
2024 Full Year	\$11.46 Billion	-37.2% YoY
TTM (Sep 2025)	\$10.70 Billion	Further Decline
H1 2025 (RMB)	32.81 Billion	-14.8% YoY

Sources: CompaniesMarketCap (2024), Longi Semi-Annual Report (Aug 2025)

PROFITABILITY CRISIS

RMB 8.6 Billion

2024 Full Year Net Loss

RMB 2.569 Billion

H1 2025 Net Loss

6.0 - 6.5 Billion Yuan

2025 Preliminary Full Year Net Loss (\$861M)

Sources: Longi Annual Report (Apr 2025), Bloomberg (Jan 2026)

Balance Sheet: Strong Liquidity Provides Short-Term Buffer

LIQUIDITY OVERVIEW

CASH POSITION

CNY 51.69B

Current Cash Reserves

TOTAL DEBT

CNY 32.44B

Interest-Bearing Liabilities

NET CASH

CNY 19.25B

Buffer for Market Volatility

KEY FINANCIAL RATIOS

Metric	Value
Interest-Bearing Debt Ratio (2024)	19.49%
Debt/Equity Ratio	0.56
Current Ratio	1.43
Asset-Liability Ratio (H1 2025)	60.72%

Sources: StockAnalysis, Longi 2024 Annual Report, Longi H1 2025 Interim Report

Market Position: Unmatched Scale and Technology Records

PRODUCTION SCALE

106 GW

Silicon Wafers Produced (2024)

70 GW

Solar Modules Produced (2024)

Product	2026/27 Target
Silicon Wafers	200 GW/year
Solar Modules	150 GW/year
BC Cells	100 GW/year

EFFICIENCY RECORDS

27.81% Efficiency

HIBC crystalline silicon solar cell (World Record).

Certified by ISFH, Germany

34.85% Efficiency

Crystalline silicon-perovskite tandem cell.

Certified by NREL

35.00% Efficiency

Two-terminal tandem cell efficiency.

Certified by ESTI

R&D & INVESTMENT

\$1.68B

R&D Allocation (2023)

Investment represents 5.96% of operating income, focusing on base metal replacement (silver-free) and 700W back-contact panels.

Bankability Status

AAA rating for 23rd consecutive quarter (Q3 2025).

Operational Risks: Overcapacity and Workforce Restructuring

Industry Overcapacity

Supply-Demand Imbalance

China produces twice as many solar panels annually as the world consumes. The industry lost an estimated \$60 billion in 2024.

Market Consolidation

Over 40 solar companies have gone bankrupt, delisted, or been acquired since early 2024.

"We are witnessing for the first time an entire industry operating at a loss for one and a half years."

— Alan Lau, Jefferies Analyst

Sources: Bloomberg, Jefferies

Workforce Restructuring

Major Headcount Reductions

Five major companies, including LONGi, collectively slashed 87,000 jobs in 2024, representing nearly one-third of their combined workforces.

Current LONGi Headcount

37,853 employees as of September 30, 2025. This is down significantly from the reported 2023 peak of approximately 80,000.

Risk Level: HIGH

Operational stress from major headcount reductions may impact product quality consistency and delivery timelines.

Sources: Bloomberg, LONGi Financial Filings

Legal & Regulatory: Trade Barriers and Compliance

EU INVESTIGATION TIMELINE

April 3, 2024

European Commission launched in-depth investigation under Foreign Subsidies Regulation involving LONGi Solar for a €375M Romanian solar tender.

May 13, 2024

LONGi withdrew from the tender. The European Commission subsequently closed the investigation.

Outcome

Allegations involved foreign subsidies enabling "unduly advantageous offers." Withdrawal avoids penalties but raises subsidy practice questions.

Sources: European Commission Official Disclosures

US TRADE & TARIFF ENVIRONMENT

Antidumping Duties

US Commerce set preliminary antidumping duties for Southeast Asian solar cells in December 2024, with final determinations expected April 2025.

Tariff Circumvention

In 2023, US Department of Commerce ruled that Vina Solar, a LONGi subsidiary, was circumventing tariffs for Chinese-made products.

Compliance Status

No evidence of criminal violations or major lawsuits found beyond trade investigations. Primary risks are geopolitical and trade-related.

Sources: US Department of Commerce, Bloomberg

ESG Performance: Strong Sustainability Credentials

ESG Recognition

BLOOMBERG GREEN WATCHLIST 2026

Included for "Leading ESG Project" and continuous breakthroughs in solar cell technology.

S&P GLOBAL SUSTAINABILITY YEARBOOK 2026

Ranked in **top 4%** of "Semiconductors and Semiconductor Equipment" industry.

INDUSTRY MOVER

Recognized for highest relative year-on-year CSA Score improvement.

Environmental Metrics

GREEN ELECTRICITY USAGE (2024)

Increased to **47.5%**, reducing carbon emissions by ~2.55 million tonnes.

EMISSIONS REDUCTION (YOY)

- Scope 1 & 2: **-37%**
- Scope 3: **-26%**

R&D FOCUS

Investment in energy-efficient products to drive sector recovery.

Strategic Ambition

NET-ZERO COMMITMENT

Strategic ambition to achieve **net-zero emissions** across the entire value chain by 2050.

INDUSTRY LEADERSHIP

Chairman Zhong Baoshen emphasizes R&D as the primary driver for solar efficiency and sector sustainability.

Risk Matrix: Financial and Supply Chain Pressures

RISK CATEGORY	LEVEL	TREND	TIMEFRAME	MITIGATION PRIORITY
Financial Stability	HIGH	↓ Negative	12-18 months	<u>CRITICAL</u>
Supply Chain	MEDIUM	↓ Negative	6-12 months	HIGH
Operational Capacity	MEDIUM	— Stable	6-12 months	HIGH
Regulatory/Compliance	MEDIUM	— Stable	Ongoing	MEDIUM
Quality/Technology	LOW	↑ Positive	Long-term	MEDIUM
Reputational	LOW	— Stable	Long-term	LOW

Vendor Recommendations: Protective Procurement Strategy

PRIORITY: HIGH

Contractual Protections

Financial Guarantees

Implement performance bonds or letters of credit (10-15% of contract value) and parent company guarantees.

Milestone Payments

Limit advance payments to maximum 30%. Tie remaining payments to verified delivery and testing milestones.

Rationale: 6-6.5B yuan projected losses in 2025 create significant counterparty risk.

PRIORITY: HIGH

Diversification & Quality

Portfolio Limits

Limit LONGi to maximum 40% of total solar procurement. Qualify 2-3 alternative AAA-rated suppliers.

Enhanced Inspection

Mandate third-party pre-shipment inspections at the factory and rigorous batch testing protocols.

Rationale: Workforce reductions and industry-wide bankruptcies (40+ companies) necessitate redundancy.

PRIORITY: MEDIUM

Monitoring & Exposure

Financial Watch

Establish quarterly monitoring of stock performance, credit ratings, and financial filings.

Exposure Caps

Implement tiered approval for contracts >\$2M. Cap single-year maximum exposure at \$15M.

Rationale: Continuous monitoring allows for immediate pivot if financial distress escalates.

Decision Framework: Suitability for Procurement

✓ PROCEED IF:

- Contract value is under \$5M annually.
- Milestone-based payment terms are accepted.
- Alternative suppliers are qualified and ready.
- Enhanced quality monitoring can be implemented.
- Performance bonds (10-15%) are secured.

⚠ PROCEED WITH CAUTION IF:

- Contract value is between \$5M - \$15M annually.
- Requires Executive-level approval.
- Escrow arrangements are required for large projects.
- Monthly financial monitoring is mandatory.
- Lead times prevent immediate diversification.

✗ DO NOT PROCEED IF:

- Contract value exceeds \$15M annually.
- Single-source dependency would be created.
- Protective contract terms cannot be implemented.
- Financial exposure exceeds risk tolerance.
- Long-term warranty obligations are mission-critical.

Conclusion: LONGi Green Energy remains technically capable, but operates in an industry experiencing unprecedented distress. The fundamental question is partner viability over the next 12-24 months. Active risk management is mandatory.

LONGi Green Energy Technology Co., Ltd.

Comprehensive Market Intelligence & Strategic
Analysis (2024-2026)

CREATED BY

CA Mahesh Lahoti

ORGANIZATION

Kriyagni AI

April 6, 2026 | Confidential - Market Intelligence Report

Executive Summary: A Strategic Pivot Amidst Industry Turbulence

LONGi is navigating a severe industry downturn by executing a high-stakes transition to **Back-Contact (BC) technology**. While facing record financial losses, the company is betting on technology differentiation to escape the TOPCon commodity trap and maintain its global leadership.

STRATEGIC ASSESSMENT

High-risk, high-reward technology pivot. Success depends on market acceptance of BC premium pricing and production yield stability.

FINANCIAL PRESSURE

Estimated net loss of **6.0–6.5 billion yuan** (\$861M) for 2025 following a record loss in 2024.

TECH LEADERSHIP

HPBC 2.0 mass production efficiency reaching **24.8%**, positioning LONGi ahead of TOPCon rivals.

MARKET STANDING

Maintained **2nd place** in global shipments (78 GW in 2024) despite intense competition.

EXTERNAL RISKS

Severe overcapacity in China and escalating US tariffs (up to **100%**) on solar cells.

Corporate Profile & Global Footprint

ENTITY OVERVIEW

Legal Name

LONGi Green Energy Technology Co., Ltd. (601012.SH)

Founded

2000

Headquarters

Xi'an, Shaanxi Province, China

Global Presence

Operations cover more than 160 countries and regions.

LEADERSHIP & GOVERNANCE

Founder & President

Li Zhenguo

Chairman

Zhong Baoshen

Accounting Lead

Liu Xuewen (Semi-Annual Report 2025)

CORE BUSINESS SEGMENTS

Solar Modules

Hi-MO series (Hi-MO 7, 9, X10)

Silicon Wafers

Tera, p-type, and n-type monocrystalline wafers

Hydrogen & BIPV

ALK-Hi1 hydrogen equipment and integrated building solutions

Market Position & Competitive Landscape

GLOBAL SHIPMENT RANKING

#2

Maintained second place globally with 78 GW shipped in 2024, up from 68 GW in 2023.

BANKABILITY RATING

AAA

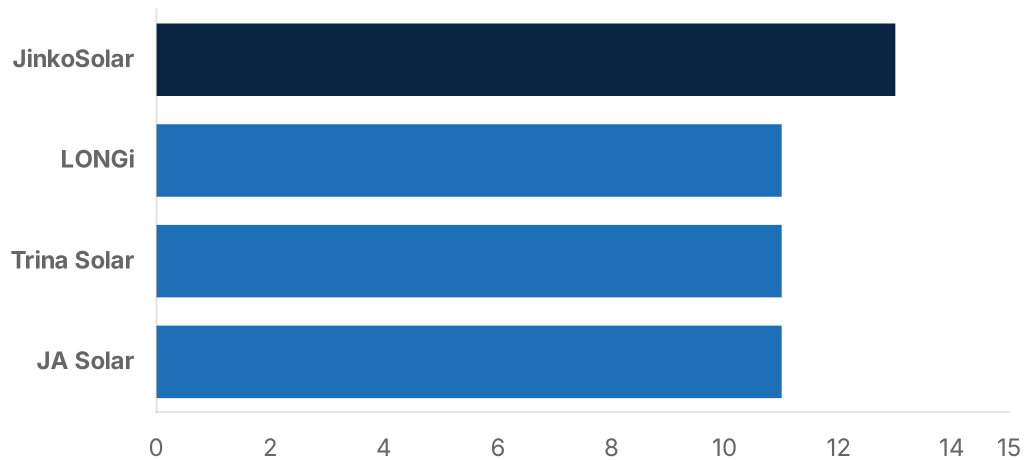
Highest rating in PV-Tech's assessment for 18 consecutive quarters as of early 2026.

MARKET CAPITALIZATION

~\$19.5B

Valued at ¥137.6 billion, remaining one of the largest panel producers by capacity.

MARKET SHARE COMPARISON (2024)



COMPETITIVE BENCHMARKING

Wood Mackenzie H1 2025 Ranking

5th

 (Score: 87.0)

Trailing JA Solar and Trina Solar (Joint 1st at 91.7).

Technology Strategy Divergence

Unlike competitors focusing on TOPCon, LONGi's pivot to BC technology has slowed short-term development pace but aims for long-term differentiation.

Financial Performance: Navigating the "Vicious Downturn"

FINANCIAL SNAPSHOT

2024 Net Loss

8.2 – 8.8 Billion Yuan

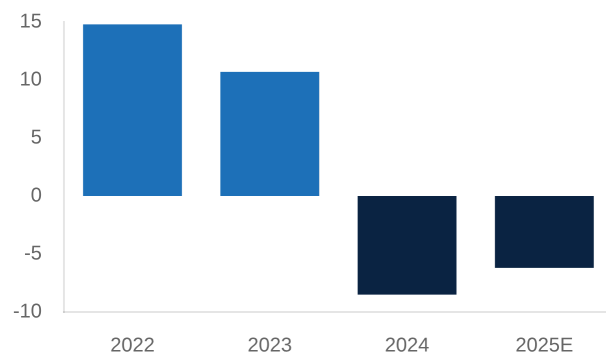
First annual loss since 2013

2025 Estimated Loss

~6.0 – 6.5 Billion Yuan

2025 Revenue

89.6 Billion CNY



KEY LOSS DRIVERS

Asset Impairment (2024)

RMB 6.1 Billion

Driven by rapid PERC technology obsolescence and capacity write-downs.

Price Compression

~50% Drop

Industry-wide module price collapse over 18 months due to overcapacity.

EBITDA margins for top firms fell from 12.4% to 4.7% in 2024.

OPERATIONAL GAINS

Selling Expense Reduction

37% YoY Decrease

Aggressive cost-cutting in H1 2025 to narrow operational losses.

Inventory Turnover

26-Day Reduction

Improved working capital management despite market volatility.

Admin Expense Reduction

23% YoY Decrease

Strategic Bet: BC Technology Leadership

HPBC 2.0 Roadmap & Capacity

PRODUCTION GOAL

50 GW Capacity

Targeting 50 GW cell and module capacity by end of 2025, representing 60% of total production.

R&D STRENGTH

3,342 Patents

Extensive IP portfolio including over 400 authorized patents specifically for BC cells and modules.

"BC technology is now about 80% mature, with major bottlenecks resolved. 2025 marks the ramp-up phase, but BC's true impact will emerge in 2026 and beyond."

— Li Zhenguo, Founder & President

Performance & Efficiency Gains

MASS PRODUCTION EFFICIENCY

24.8% Efficiency

HPBC 2.0 modules achieved power exceeding 700 W, making it the world's most efficient industrial PV product.

GENERATION ADVANTAGE

+1.21% to +3.92% Gain

Stable growth in watt-for-watt power generation worldwide compared to mainstream TOPCon modules.

OPERATIONAL YIELD

97% Yield Rate

HPBC 2.0 operational lines have achieved a stable yield rate of approximately 97% as of H1 2025.

Next-Gen Innovation: Perovskite-Silicon Tandems

EFFICIENCY MILESTONES

34.85%

World record efficiency for silicon-perovskite tandem cells (NREL certified, April 2025).

33.0%

Efficiency record for commercial-size (260.9 cm²) cells, confirmed June 2025.

STRATEGIC R&D & ROADMAP

National Key Laboratory

Jointly established with China Three Gorges Energy to conduct R&D on mass production processes and tandem cell integration.

Flexible Tandem Technology

Recognized as one of China's top 10 scientific advances in 2025; achieves 1.77 W/g power-to-weight ratio.

Commercialization Timeline

Meaningful mass-production capacity expected to emerge in the 2026–2027 timeframe.

Industry Risk: The Overcapacity & Price Crisis

The "Solar Winter" Context

- **Structural** China's annual manufacturing capacity reached 500 GW, **Imbalance:** vastly exceeding the 270 GW global demand in 2024.
- **Financial** The top four manufacturers (LONGi, Jinko, Trina, JA Solar) **Carnage:** reported combined losses of \$1.54 billion in H1 2025.
- **Margin** Average EBITDA margins for top firms plummeted from **Erosion:** 12.4% to just 4.7% within the current cycle.

Consolidation Indicators

FIRM EXITS

40+

Solar firms delisted, bankrupt, or sold since 2024.

WORKFORCE

-87,000

Employees shed in 2024 (approx. 1/3 of industry total).

PRICE DROP

~50%

Decline in solar module prices over just 18 months.

CAPACITY USE

40%

Low utilization rates for small and medium-sized firms.

Geopolitical & Trade Barriers

US TRADE RESTRICTIONS

Section 301 Tariffs

25% – 100%

Increased duties on semiconductors, solar cells, and related products (May 2024).

Reciprocal Tariffs

34%

China-specific rate effective April 2025, following a baseline 10% on all goods.

SOUTHEAST ASIA DUTIES

Anti-Dumping Duties

Final duties on cells and modules from Vietnam, Malaysia, Thailand, and Cambodia (April 2025).

Projected Escalation

Up to 49%

Scheduled increases for Vietnam (46%) and Cambodia (49%) by July 2025.

Stacks on top of existing 14% Section 201 tariffs.

MARKET IMPACT

LONGi US Shipments

1.6 GW

Significant decline in 2024 (9M) shipments, losing share in the high-profit US market.

European Pressure

Redirection of low-priced Chinese exports to the EU market is intensifying price pressure on local manufacturers.

~73% of EU clean tech imports originated in China by 2024.

ESG & Sustainability Leadership

GLOBAL RECOGNITION

Bloomberg Green Watchlist

Included in "Leading ESG Project" 2026 for continuous tech breakthroughs.

S&P Global Sustainability

Selected for the 3rd time in the Sustainability Yearbook (China Edition).

CARBON REDUCTION (2024)

Green Electricity Usage

Increased to 47.5%

Equivalent to reducing 2.55M tonnes of CO2.

Scope 1 & 2 Emissions

Decreased by 37%

Scope 3 Emissions

Decreased by 26%

CLIMATE COMMITMENTS

Net-Zero Ambition

Achieve net-zero emissions across the entire value chain by 2050.

COP30 White Paper

Released "2024-2025 Climate Action White Paper" outlining strategic decarbonization.

Strategic Outlook & Synthesis

COMPETITIVE THREAT ASSESSMENT

Short-term (6-12m)

Commodity TOPCon remains price leader; BC requires proven LCOE advantages to win market share.

Medium-term (12-24m)

BC technology likely to become industry standard by 2027 as efficiency advantages become undeniable.

Long-term (2028+)

Perovskite tandems will be the ultimate disruptor; LONGi's R&D leadership positions it as a frontrunner.

STRATEGIC IMPLICATIONS

For Customers

Early BC adoption provides a performance hedge against rising electricity prices despite 10-15% premium.

For Competitors

LONGi's strategy forces rivals to accelerate their own BC and Perovskite roadmaps to avoid obsolescence.

For Investors

Executing a high-risk, high-reward differentiation strategy. Success hinges on production ramp execution.

CRITICAL SUCCESS FACTORS

1. Market acceptance of BC premium pricing.

2. Successful ramp-up of HPBC 2.0 production yield (currently ~97%).

3. Stabilization of the global trade environment and US market access.

4. Industry consolidation timeline favoring top-tier survivors.

*"2025 marks the ramp-up phase, but BC's true impact will emerge in 2026 and beyond."
— Li Zhenguo*

Recommendations & Critical Actions

CRITICAL (IMMEDIATE)

Financial Stress Monitoring

Establish weekly monitoring of credit ratings, bond spreads, and liquidity indicators.

Rationale: Two consecutive years of multi-billion yuan losses create material financial stress.

CRITICAL (IMMEDIATE)

BC Field Performance Validation

Commission independent 3rd-party assessment of BC vs. TOPCon performance in field scenarios.

Rationale: LONGi claims ~4% gains; validation is critical for premium pricing sustainability.

HIGH (1-4 WEEKS)

Competitive Benchmarking

Map rival BC announcements (GCL, Trina, Tongwei) to assess differentiation durability.

Rationale: Multiple major manufacturers entered the BC market in 2024-2025.

HIGH (1-4 WEEKS)

Tariff Impact Scenario Planning

Model cost impacts of US/EU trade barriers on 2026-2027 shipment targets.

Rationale: Escalating trade fragmentation requires agile geographic manufacturing strategies.

LONGi Green Energy: M&A Due Diligence Report

Comprehensive Analysis & Strategic Assessment

April 2026

Created by:

CA Mahesh Lahoti

Kriyagni AI

Executive Summary: Strategic Assessment

OVERALL M&A DUE DILIGENCE FINDINGS

OVERALL ASSESSMENT

PROCEED WITH SIGNIFICANT CAUTION

LONGi Green Energy faces severe near-term financial distress despite its global leadership in monocrystalline silicon wafers. The company swung from a RMB 10.8B profit in 2023 to a RMB 8.6B net loss in 2024, driven by unprecedented industry overcapacity and price competition.

Critical Findings

■ Financial Distress

Revenue declined 36.23% YoY; projected continued losses of RMB 6-6.5B in 2025.

■ Industry Overcapacity

Global capacity (1,100+ GW) is more than 2x global demand (~500 GW).

■ Strategic Pivot

Aggressive transition to Back-Contact (BC) technology to escape commoditization.

■ Operational Restructuring

Significant workforce reduction (approx. 49.5%) and delayed expansion projects.

Entity Profile & Corporate Governance

LEGAL STRUCTURE AND LEADERSHIP OVERVIEW

Corporate Identity

Official Name

LONGi Green Energy Technology Co., Ltd.

Stock Code

SSE: 601012 (Shanghai Stock Exchange)

Market Capitalization

\$19.2 Billion (as of Sept 30, 2025)

Headquarters

Xi'an, Shaanxi Province, China

Global Presence

Operations in 150+ countries; Manufacturing in China, Malaysia, Vietnam, and USA.

Leadership & Governance

Strategic Shift (May 2025): Founder Li Zhenguo stepped down as President to focus on R&D as CTO.

Name	Position
Zhong Baoshen	Chairman & General Manager
Li Zhenguo	Founder, CTO & R&D President
Wenxue Li	Vice President

Core Business Segments

-  **Solar Modules (80% Rev)**
Hi-MO series, HPBC 2.0
-  **Silicon Wafers (10% Rev)**
Monocrystalline wafers
-  **Power Stations**
Project development & EPC
-  **Energy Storage**
New entry via PotisEdge
-  **Hydrogen Equipment**
ALK-Hi1 and ALK-G products

Financial Performance: A Year of Sharp Decline

COMPARATIVE ANALYSIS OF 2023-2024 RESULTS

Metric (RMB Billion)	2023 (Audited)	2024 (Audited)	YoY Change
Revenue	129.5	82.6	-36.2%
Net Profit / (Loss)	10.8	(8.6)	-180%
Wafer Shipments	125 GW	108 GW	-13.6%
Module Shipments	67 GW	70+ GW	+4.5%

2025 Strategic Outlook

- Projected net loss of **RMB 6.0 - 6.5 Billion** for FY 2025.
- Represents a **25-30% improvement** vs. 2024 through cost optimization.

Margin Compression Analysis

- Wafer gross margins hit **-14.3%** in 2024 due to oversupply.
- Solar wafer prices reached record lows of **\$0.153 per piece**.

Balance Sheet & Liquidity Assessment

LEVERAGE TRENDS AND CASH SUSTAINABILITY

Leverage & Debt Profile

Metric	2021	2022	2023	H1 2025
Asset-Liability Ratio	51.31%	55.39%	56.87%	60.72%
Interest-Bearing Debt	-	-	-	21.45%

CASH VS. DEBT (DEC 2024)

\$53.16B Cash / \$47.13B Debt

Maintained AAA bankability rating from PV Tech for 24 consecutive quarters.

Liquidity & Cost Control

- **Aggressive Cost-Cutting:** Significant reductions in raw material purchases, employee bonuses, and marketing expenses reported in H1 2025.
- **Working Capital Pressure:** Negative gross margins in core wafer segments (-14.3%) raise urgent concerns about operational cash burn.
- **Financing Trends:** Observed decrease in financing inflows (new loans) and increase in outflows for debt repayment.
- **Critical Risk:** Sustainability of "positive free cash flow" claims given massive operating losses and inventory normalization needs.

Market Position & Competitive Landscape

GLOBAL RANKINGS AND INDUSTRY CONSOLIDATION TRENDS

Global Market Standing

#1 Monocrystalline Silicon Wafers
World's largest manufacturer by production capacity and shipments.

#2 Solar Module Shipments
Maintained top-tier global position for six consecutive years.

20% Southeast Asia Market Share
Significant regional dominance in key manufacturing and sales hub.

Competitive Advantage: LONGi's vertical integration and early lead in Back-Contact (BC) technology provide a 1-2 year head start over major competitors.

Peer Performance Comparison (2024)

Company	Module Shipments	Net Profit/Loss	Debt Ratio
LONGi	70+ GW	(RMB 8.6B)	60.7%
Jinko Solar	75+ GW	Significant Loss	High
JA Solar	79.4 GW	(RMB 4.7B)	74.7%
Trina Solar	70+ GW	Loss	Medium

Industry Outlook:

- Top 5 PV firms projected combined losses of ~\$4.1-4.7B in 2025.
- Market rebalancing expected to continue through 2026-2027.
- Consolidation accelerating as smaller firms face bankruptcy.

Technology Leadership: The Back-Contact (BC) Pivot

DIFFERENTIATING THROUGH NEXT-GENERATION CELL ARCHITECTURE

Core Technology Roadmap

Technology	Cell Efficiency	Module Efficiency
HPBC 1.0 (2022)	25.5%	23.2%
HPBC 2.0 (2024)	26.6%	24.8%
HIBC (2025)	27.3%	25.9%
Tandem (R&D)	33.0%	TBD

Strategic Rationale

LONGi is migrating all domestic cell bases to BC products by end of 2026. This pivot aims to escape the "homogeneous competition" of TOPCon and PERC by offering superior efficiency and aesthetics.

Performance & Innovation

1.2% - 3.9%

POWER GENERATION GAIN VS. TOPCON

70 GW

TARGET BC CAPACITY BY END 2025

-0.24%/°C

BEST-IN-CLASS TEMP. COEFFICIENT

33.0%

NREL CERTIFIED TANDEM RECORD

Manufacturing Moat

Chairman Zhong Baoshen notes that BC manufacturing complexity creates significant barriers to entry. LONGi's HPBC 2.0 has already achieved a 97% production yield, indicating mature manufacturing capabilities.

Future Outlook

BC products are expected to represent >25% of 2025 shipments, with a target of >60% of total production capacity by the end of 2025.

Operational Risk: Workforce & Capacity Management

DISCREPANCY ANALYSIS AND UTILIZATION CHALLENGES

Workforce Reduction Discrepancy

Source	Reported Reduction
Official Company Statement	~5% of total employees
Bloomberg Report (March 2024)	~30% of workforce
Actual Headcount Change	49.5% Reduction

Credibility Risk

The massive discrepancy (5% vs 49.5%) raises serious concerns regarding management transparency and credibility.

Operational Disruption

A near 50% reduction in headcount (from 75k to 37k) indicates a scale of restructuring that likely impacts production stability.

Capacity & Asset Management

Capacity Utilization

Facility utilization rates have slipped below 80%, with some industry estimates suggesting rates as low as 50% for standard lines.

Expansion Delays

The 15 GW solar module factory in Wuhu, Anhui, has been postponed by 18 months (to June 2026) due to supply-demand imbalance.

Asset Impairment

Reported RMB 6.1B (\$859M) in asset value losses in 2024. Rapid technology cycles are turning PERC/TOPCon capacity into stranded assets.

Technology Migration Risk

Aggressive plan to migrate all domestic cell bases to BC products by end of 2026 creates significant execution and capital risk.

Legal & Regulatory: Trade Barriers & Compliance

NAVIGATING GLOBAL TRADE INVESTIGATIONS AND IP STRATEGY

Trade Investigations & Tariffs

EU Foreign Subsidies Investigation (2024)

European Commission probe into Romanian tender; LONGi withdrew from the bid in May 2024 to close the investigation, raising transparency concerns.

US Tariff Escalation (2025-2026)

Reciprocal tariffs on SE Asia (Malaysia 24%, Vietnam 46%); direct China-to-US exports near zero. Cost of overseas production for US market is rising.

Circumvention Ruling

2023 US Commerce ruling found Vina Solar (subsidiary) circumventing tariffs, establishing a precedent for heightened regulatory scrutiny.

IP Strategy & ESG Compliance

Intellectual Property Strategy

Active enforcement of patents; Feb 2025 lawsuit against Jinko Solar followed by a strategic cross-licensing agreement to mitigate mutual vulnerability.

ESG Recognition & Targets

Included in 2026 Bloomberg Green Watchlist; net-zero emissions target by 2050. Scope 1+2 emissions reduced by 37% in 2024.

China Domestic Policy Shift

Feb 2025: End of fixed-price guarantees for new projects; shift to market-rate sales increases revenue volatility for premium products.

Strategic Growth: Diversification & US Presence

EXPANSION INTO ENERGY STORAGE AND LOCALIZED MANUFACTURING

US Manufacturing

- **Ohio Facility:** 5 GW module factory (JV with Invenergy) operational since late 2024.
- **Georgia Project:** 2 GWh BESS facility planned for 2026 with NeoVolta/PotisEdge.

Market Premium

US prices remain ~3x higher than other markets, making local production a high-priority strategic hedge.

Energy Storage Entry

- **PotisEdge Acquisition:** Acquired 62% stake in Nov 2025 to enter the storage market.
- **LONGi ONE:** Integrated solar-plus-storage strategy to capture higher-margin segments.

Strategic Rationale

Diversifying beyond commoditized hardware into integrated energy solutions and services.

Global Strategy

- **"2830 Plan":** Targeting 30 localized service centers across major global markets by 2028.
- **APAC Growth:** 140%+ YoY growth in Asia-Pacific sales reported in H1 2024.

Localization

Shifting from a centralized export model to localized manufacturing and service hubs.

Critical Intelligence Gaps

HIGH-PRIORITY DATA REQUIREMENTS FOR M&A VALUATION

Financial Gaps

- **Cash Burn Rate**
Monthly operating cash consumption and liquidity runway.
- **AR Aging & DSO**
Detailed accounts receivable aging and bad debt exposure.
- **Covenant Compliance**
Debt agreement terms and current headroom analysis.
- **CapEx Commitments**
Remaining obligations on capacity expansion projects.

Operational Gaps

- **Utilization Rates**
Actual capacity utilization by facility and technology line.
- **Malaysia Status**
Confirmation of reported operational halts in SE Asia.
- **Production Costs**
Actual manufacturing cost per watt by technology generation.
- **Quality Metrics**
Warranty claims and field failure rates for BC products.

Commercial Gaps

- **Customer Concentration**
Top 10 customer revenue % and creditworthiness.
- **Backlog Visibility**
Contracted vs. spot revenue mix and order book depth.
- **M&A Pipeline**
Potential acquisitions or divestitures under consideration.
- **Partnership Terms**
Detailed terms of Invenergy JV and PotisEdge acquisition.

Conclusion & Recommendation

FINAL VERDICT AND STRATEGIC ROADMAP

FINAL M&A VERDICT

PROCEED WITH SIGNIFICANT CAUTION

LONGi's market leadership and technological edge in BC cells are offset by severe financial distress and industry-wide overcapacity. Any transaction must be structured with robust price protection and liquidity safeguards.

Valuation Note: Current market capitalization reflects significant distress; however, potential for long-term upside remains high if BC technology successfully dominates the next industry cycle.

Source: LONGI M&A Due Diligence Research Report, April 2026

Recommended Next Steps

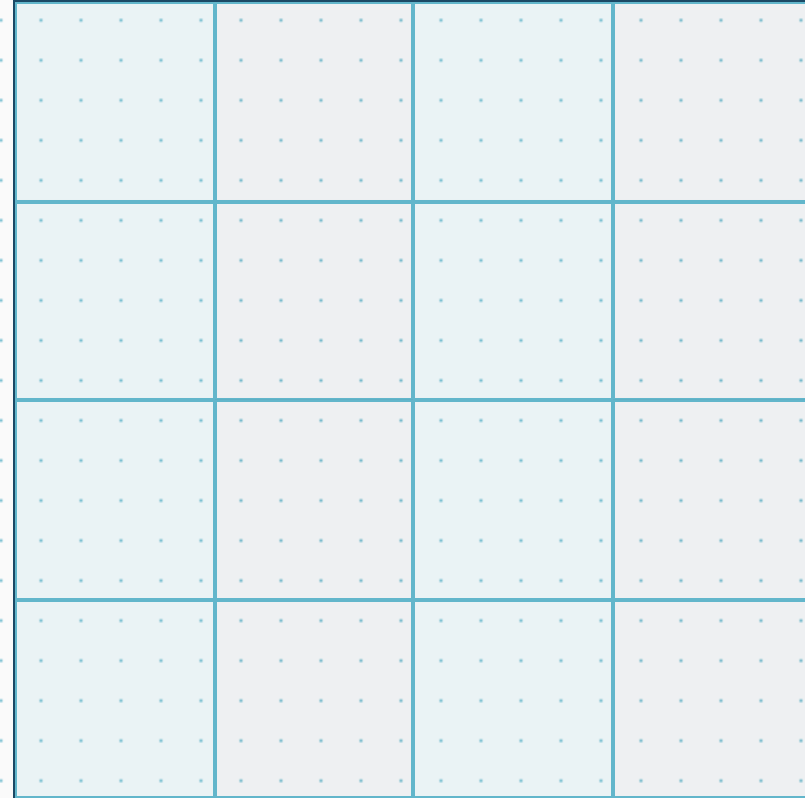
- 1 Management Interviews**
Conduct deep-dives with CFO, COO, and CTO on cash burn, utilization, and tech roadmap.
- 2 Site Visits & Verification**
Perform physical audits of Ohio and Malaysia facilities to assess operational status.
- 3 Independent Technology Audit**
Validate HPBC 2.0 efficiency and yield claims through third-party testing (e.g., NREL).
- 4 Regulatory & Legal Review**
Detailed review of US/EU regulatory correspondence and subsidiary documentation.

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LONGI GREEN ENERGY

Competitive Intelligence Report
Strategic Assessment & Market Outlook
2025 - 2026

CREATED BY
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April 6, 2026



A CRITICAL INFLECTION POINT

LONGi faces a defining moment, balancing technological leadership against severe financial headwinds. The company is navigating a brutal industry downcycle characterized by massive overcapacity and pricing below cost.

KEY FINDINGS & CRITICAL ATTENTION AREAS

CATEGORY

STRATEGIC INSIGHT

Financial Crisis

2024 net loss of RMB 8.618B (first since 2013); 2025 projected net loss of RMB 6-6.5B.

Tech Leadership

World record efficiency achievements: 27.81% for HIBC cells, 34.85% for perovskite-silicon tandem cells.

Strategic Pivot

Accelerating BC technology transition with HPBC 2.0 capacity expected to exceed 60% by end-2025.

Market Position

Declining from top position to 2nd-4th globally amid intense competition and trade barriers.

COMPANY PROFILE & GLOBAL FOOTPRINT

A global leader in monocrystalline technology with operations in 160+ countries. LONGi manufactures and sells photovoltaic products globally, including silicon wafers, cells, modules, and hydrogen equipment.

BUSINESS SEGMENTS & MANUFACTURING

CORE SEGMENTS

Monocrystalline silicon wafers and ingots; PV cells and modules (Hi-MO series).

EMERGING SEGMENTS

Energy storage (PotisEdge acquisition); Hydrogen energy equipment (ALK-Hi1, ALK-G).

MANUFACTURING FOOTPRINT

Facilities in China, Malaysia, and Vietnam; offices in 30+ countries.

GLOBAL REACH

Operates in over 160 countries and regions globally.

KEY LEADERSHIP

Zhong Baoshen (Chairman) | Li Zhenguo (Founder & President)

MARKET POSITION & COMPETITIVE LANDSCAPE

Intense competition and technology shifts have led to a realignment in global rankings. LONGi has transitioned from the undisputed leader to a key player in a highly contested Top 4 tier.

GLOBAL MODULE SHIPMENTS (2024)

RANK	MANUFACTURER	SHIPMENT (GW)	MARKET SHARE
01	JinkoSolar	93 GW	13%
02	LONGi Green Energy	78 GW	11%
03	Trina Solar	77 GW	11%
04	JA Solar	77 GW	11%

REGIONAL PERFORMANCE DYNAMICS

ASIA-PACIFIC

+140% YoY Growth

Significant surge in module sales during H1 2024.

MIDDLE EAST & AFRICA

+76% YoY Growth

Emerging as a high-growth strategic hub.

UNITED STATES

Underperformance in high-profit market due to trade barriers.

EUROPE

Impacted by subsidy reductions and low electricity tariffs.

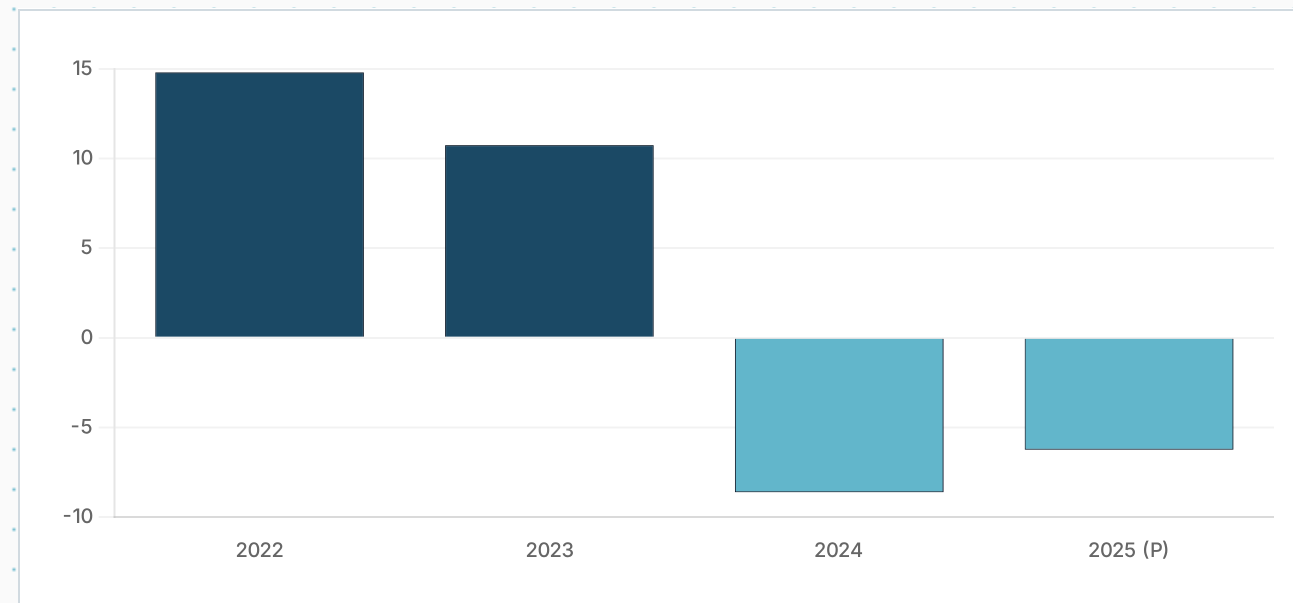
FINANCIAL PERFORMANCE: NAVIGATING THE DOWNCYCLE

ROOT CAUSES OF DECLINE

Supply-demand mismatch and irrational low-price competition have driven sharp margin declines across all sectors.

Asset impairment from rapid technology iteration and losses from polysilicon equity investments further strained the bottom line.

NET PROFIT/LOSS TREND (RMB BILLION)



Period	Revenue (RMB)	Net Profit/Loss (RMB)	Status
FY 2024	82.582 B	-8.618 B	First loss since 2013
H1 2025	32.813 B	-2.569 B	Improving (+2.66B YoY)
FY 2025 (Proj)	--	-6.0 to -6.5 B	Projected Headwinds

OPERATIONAL EFFICIENCY & RESILIENCE

Despite significant losses, LONGi's operational metrics show signs of stabilization. The company maintains a solid balance sheet with low net debt, providing the flexibility needed to weather the current industry downcycle.

EFFICIENCY GAINS (H1 2025)

-37%

SELLING EXPENSES YOY

-23%

ADMIN EXPENSES YOY

26 Days

INVENTORY TURNOVER REDUCTION

AAA

PV-TECH CREDIT RATING

FINANCIAL HEALTH & RELIABILITY

BloombergNEF Status

Named Tier 1 PV Module Manufacturer (Q1 2026)

Energy Storage List

Debuted on Tier 1 Energy Storage list in Q1 2026

Bankability

Maintains AAA rating for 18 consecutive periods

Balance Sheet

Solid position with low net debt and high liquidity

TECHNOLOGY LEADERSHIP: THE BC STRATEGIC BET

LONGi is betting its future on Back Contact (BC) technology to regain its competitive edge. By pivoting away from mainstream TOPCon, the company aims to establish a new efficiency moat through HPBC 2.0.

WORLD RECORD EFFICIENCY ACHIEVEMENTS (2025)

HIBC Cells

27.81%
CERTIFIED BY ISFH

BC Modules

26.0%+
CERTIFIED BY NREL

Perovskite-Silicon Tandem

34.85%
CERTIFIED BY NREL

HPBC 2.0 MASS PRODUCTION ROADMAP

PRODUCTION YIELD

Current mass production yield reached 97% with advanced laser graphics.

CAPACITY TARGET

50 GW cell and module capacity each expected by end-2025.

SHIPMENT MIX

BC products projected to exceed 25% of total shipments in 2025.

FUTURE GOAL

Targeting 28.5% cell efficiency and >26% module efficiency within 3-5 years.

PRODUCT INNOVATION: HI-MO 9 & NEXT-GEN

Superior power output and reliability define the new product portfolio. The Hi-MO 9 module represents the pinnacle of LONGi's current commercial technology, significantly outperforming mainstream alternatives.

HI-MO 9 TECHNICAL SPECIFICATIONS

CONVERSION EFFICIENCY

24.8%

Industry-leading commercial rate

POWER OUTPUT

670W

+40W vs. mainstream TOPCon

TECHNOLOGY

OBB

Zero Busbar for higher reliability

BIFACIALITY

>80%

Enhanced rear-side generation

INTELLECTUAL PROPERTY STRENGTH

Total Authorized Patents

3,500+

BC Technology Specific Patents

480+

2024 R&D Investment

RMB 5.014B

SUPPLY CHAIN & REGULATORY CHALLENGES

Trade barriers and supply chain shifts pose significant operational risks. LONGi must navigate a complex landscape of reciprocal tariffs and geopolitical tensions that materially impact its cost structure and market access.

TARIFF IMPACT ANALYSIS (APRIL 2025)

ORIGIN OF IMPORT	APPLIED DUTY RATE
China (Direct)	34%
Vietnam (Manufacturing Hub)	46%
Malaysia (Manufacturing Hub)	24%

SUPPLY CHAIN MITIGATION STRATEGY

GEOGRAPHIC DIVERSIFICATION

Evaluating MENA hub viability and local manufacturing economics to bypass U.S./EU restrictions.

COMPLIANCE MONITORING

Ongoing surveillance of US ITC and EU Commission policy changes and CBAM implementation.

POLYSILICON SECURITY

Mapping all suppliers and contract terms to mitigate losses from polysilicon equity investments.

LANDED COST MODELING

Detailed cost structure analysis by production location to maintain sustainable competitive position.

STRATEGIC RECOMMENDATIONS: IMMEDIATE ACTIONS

Critical focus on liquidity, technology adoption, and trade mitigation is required to stabilize the company's market position and financial health over the next 7 days.

PRIORITY ACTION PLAN (NEXT 7 DAYS)

PRIORITY	ACTION & RATIONALE
CRITICAL	Liquidity & Debt Covenant Monitoring Immediate oversight of cash reserves and compliance given consecutive multi-billion RMB losses.
CRITICAL	BC Technology Adoption Assessment Evaluate real-world adoption rates of HPBC 2.0 vs. industry-wide TOPCon momentum.
HIGH	Competitive BC Benchmarking Analyze positioning as rivals (Trina, GCL, Aiko) launch competing BC products.
HIGH	Q1 2026 Earnings Briefing Secure advance briefing on April earnings to analyze deficit reduction progress.

STRATEGIC RECOMMENDATIONS: MEDIUM-TERM & MONITORING

Long-term viability depends on supply chain security and market rationalization. Continuous surveillance of industry dynamics is essential to validate the current technology pivot and geographic expansion strategy.

MEDIUM-TERM ACTIONS (WITHIN 1 MONTH)

Supply Chain Security

Map all polysilicon suppliers and alternative sources to mitigate equity investment losses.

Geographic ROI

Model profitability of MENA expansion vs. core markets to justify the 76% sales growth.

IP Assessment

Independent legal assessment of patent strength and infringement risks amid industry "patent wars."

ONGOING SURVEILLANCE METRICS

PRICING ENVIRONMENT

Weekly module ASP tracking by technology (BC vs. TOPCon). Trigger: 10% movement.

TECH ADOPTION

Quarterly BC market share analysis. Trigger: BC penetration exceeding 30% in major markets.

TRADE POLICY

Monitor US/EU tariff announcements and CBAM implementation details for supply chain remodeling.

FINANCIAL HEALTH

Quarterly cash flow and debt-to-equity ratios. Trigger: Negative OCF for two consecutive quarters.

CONCLUSION: THE PATH FORWARD

Will LONGi's technological leadership in BC cells translate to commercial success before financial losses exhaust runway, or will the industry consolidate around mainstream TOPCon technology?

BULL CASE

Technological moat with record efficiencies

BC technology differentiation as industry matures

Successful cost reduction (-37% selling exp)

Strategic diversification into energy storage

BEAR CASE

Two consecutive years of multi-billion losses

Market share erosion (1st to 2nd/4th)

Severe US/EU trade barriers

Industry-wide overcapacity persists

MOST LIKELY SCENARIO

Continued near-term losses through 2026 as industry consolidates. LONGi survives given balance sheet strength but faces margin pressure. Recovery is strictly dependent on:

1. Industry capacity rationalization and exits
2. Global demand growth exceeding 500 GW/year
3. Successful BC commercialization at scale