



KunLun Energy Company Limited

昆侖能源有限公司

(於百慕達註冊之有限公司)

(股份代號：00135.HK)

2024

Environmental, Social and Governance Report



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About This Report

Report Purpose

Kunlun Energy Company Limited 2024 Environmental, Social, and Governance Report ("this Report" or "the Report") is the ninth Environmental, Social and Governance Report (ESG Report) published by Kunlun Energy Company Limited ("Kunlun Energy," "the Company," or "We"). This Report aims to transparently disclose Kunlun Energy's performance in environmental, social, and governance (referred to as "ESG") aspects during the 2024 fiscal year, authentically reflecting the Company's strategic practices and achievements in sustainable development, as well as addressing key issues of concern to stakeholders through research and responses.

Reporting Period

This is an annual report covering the period from January 1, 2024, to December 31, 2024 (the "current year"), and some contents have been extended to previous and subsequent years to enhance the Report's comparability, foresight and continuity.

Scope of the Report

The Report covers the Company's environmental, social, and corporate governance objectives, commitments, management systems, key projects and initiatives, as well as activities related to the Company's operations, disclosed for the Company and our subsidiaries. A complete list of the subsidiaries covered is available in the "Principal Subsidiaries" of the consolidated financial statements in the Company's 2024 Annual Report.

Report Framework

This Report is prepared in accordance with Appendix C2 Environmental, Social and Governance Reporting Code (the "ESG Code") in Listing Rules of the Stock Exchange of Hong Kong Limited (the HKEX),and regarding the GRI Sustainability Reporting Standards ("GRI Standards") issued by the Global Reporting Initiative ("GRI"), as well as the IFRS S2 Climate-related Disclosures ("IFRS S2") issued by the International Sustainability Standards Board ("ISSB") under the IFRS Foundation ("IFRS Foundation"). It is also referred to the Reference Indicators System for ESG Special Reports of Listed Companies Controlled by Central State-own Enterprises ("Indicator System") issued by the State-owned Assets Supervision and Administration Commission of the State Council ("SASAC") and compiled in conjunction with the information disclosure requirements of ESG rating agencies for enterprises.

Disclosure Principles

This Report adheres to the reporting principles of Materiality, Quantitative, Balance, and Consistency as stipulated in Environmental, Social, and Governance Reporting Code of HKEX and fulfills the disclosure obligations under the "Mandatory Disclosures" and "Comply or Explain" provisions.

Materiality	Through a materiality assessment, we have identified the extent to which ESG-related issues affect various stakeholders and prioritize disclosure and responses to high-materiality issues.
Quantitative	Present the key performance indicators (KPIs) of ESG in a measurable manner and disclose the calculation basis and statistical scope.
Balance	This Report objectively reflects facts, disclosing both positive and negative metrics to provide an unbiased presentation of the Company's ESG performance.
Consistency	Unless otherwise stated, the disclosure and statistical methodologies align with previous reports to ensure the comparability and continuity of ESG data across historical and future periods. Any changes in the statistical scope will be annotated.

Information Sources

All information disclosed in this Report is derived from the Company's internal documents, aggregation of statistical data, and aggregation and statistics on the performance of subsidiaries. This Report was prepared by the Company's ESG Management and Reporting Working Group, reviewed by the management team, approved and supervised by the Sustainability Committee and the Board. Unless otherwise stated, all amounts disclosed in this Report were measured using Chinese Yuan.

Independent Assurance Statement

Hong Kong Quality Assurance Agency (HKQAA) has been commissioned by Kunlun Energy to conduct an independent third-party verification of the company's 2024 Environmental, Social, and Governance (ESG) Report in full compliance with Appendix C2 Environmental, Social and Governance Reporting Code in Listing Rules of the Stock Exchange of Hong Kong Limited (the HKEX).

The primary objectives are:

- 1.To verify the reliability of the information disclosed in the Report;
- 2.To assess the Report's content in accordance with defining principles, including stakeholder inclusiveness, sustainability context, materiality, and completeness;
- 3.In accordance with the principles defining reporting quality, this verification assesses the Report's adherence to the fundamental tenets of balance, comparability, accuracy, timeliness, clarity, and reliability.

Contact & Feedback

We sincerely look forward to your valuable comments and suggestions for the continuous improvement of our sustainability performance and the enhancement of our environmental, social, and governance capabilities and standards. If you have any questions about this Report or require a hard copy, please get in touch with us via:

Email: info@kunlun.com.hk

Tel: +852 2522 2282



Message from the Chairman



The year 2024 represents a critical phase for Kunlun Energy to further and deeply promote the implementation of our 14th Five-Year Plan. Anchored in our corporate values pursuit of "Green Development, Energy Dedication: Driving Customer Growth and Empowering People's Happiness," we forged ahead with determination, focusing on core business, promoting green development, strengthening corporate governance, building a solid safety defense line, and actively balancing the expectations of diverse stakeholders. We have taken practical actions to implement various sustainable development goals and achieved remarkable results.

Focus on the main business and fulfill the mission and responsibilities.

By optimizing resource allocation and enhancing supply chain resilience, Kunlun Energy effectively ensures national energy security. In 2024, the Company leveraged the integrated industry chain synergies and delivered high-quality supply guarantees for key regions, critical periods, and vital industries, solidifying our role as the "Backbone of Energy Supply Security" to ensure stable operations during peak demand. Aligned with China's national Carbon Peaking and Carbon Neutrality ("Dual Carbon") goals, Kunlun Energy advanced the deployment of clean energy projects to optimize the energy structure. In 2024, the Company commissioned 33 distributed photovoltaic projects and obtained approval for six equity-participated gas-fired power projects. We optimized our marketing systems and elevated service quality to further expand our market share, prioritizing market expansion and customer retention. In 2024, the Company achieved a natural gas sales volume of 54.17 billion cubic meters, representing a 9.9% year-on-year increase, and our total natural gas customers covered 31 provinces, autonomous regions and municipalities, reached 16.45 million households.

Strengthen governance and enhance management efficiency. We have been continuously deepening reforms and accelerating the establishment of a governance system that is in line with the goal of being a world-class international energy company. By improving governance structure, refining governance processes, standardizing governance mechanisms, and enhancing the overall level of governance, we have comprehensively

promoted the efficacy of ESG management. We have actively communicated with stakeholders and carried out special initiatives in key areas such as anti-corruption, anti-monopoly, and board diversity. We have enhanced the level of compliant operation and established a dynamic risk monitoring and alarming system to strengthen information sharing and risk prevention and strictly control risks. We have ensured information security and customer privacy, and there were no incidents of information leakage throughout the year. We have established a "1+N+X" disclosure system to enhance the transparency of information disclosure. We have newly been shortlisted in four indices, such as the "Hang Seng Mainland China Companies High Dividend Yield Index" and the "Hang Seng SCHK China Central State-owned Enterprises (SOEs) ESG 40 Index", fully demonstrating our outstanding performance in corporate governance.

Our green transition strategy has gained further momentum. Under the guidance of the "dual carbon" goals, Kunlun Energy is unwaveringly committed to the path of green development. We have set clear "Carbon Peaking and Carbon Neutrality" targets: we are committed to achieving peak carbon dioxide emissions by 2030, with methane emissions intensity reduced by 20% compared to 2020; by 2050, carbon emissions will be significantly reduced, and "Net Zero" emissions will be achieved through the application of carbon-negative technologies. In 2024, we formally released White Paper on Climate Action (2024 Edition) and Action Plan Towards Carbon Peaking and Carbon Neutrality (2024 Edition). By increasing the utilization of clean energy, promoting energy conservation, carbon reduction, and green operations, we have tapped into the potential for emission reduction, demonstrating our determination and commitment in addressing climate change. Biodiversity conservation has made tangible progress through the "Wenfeng Egret Habitat" pilot project, in which we established four ecological corridors to restore wildlife habitats and foster harmonious coexistence between human activities and natural ecosystems.

Safety and operational integrity are non-negotiable priorities. Kunlun Energy has always adhered to the QHSE philosophy of "Putting People First, Pursuing Quality Excellence, Prioritizing Safety, and Protecting the Environment," and pursued the strategic goals of "Zero Harm, Zero Pollution, Zero Accidents, Zero Defects, and Reduced Energy Consumption." In 2024, the Company launched rectification of old urban gas pipelines, conducted a large-scale inspection of gas meters for metering management, with a 100% passing rate of sampling inspection. The fire safety systems of LNG terminal were fully upgraded to meet regulatory standards. We promoted the application of intelligent facilities, gradually transformed risk prevention and control from "human defense" and "physical defense" to "technical defense", and progressed from "human management" to "intelligent management", as well as strengthened the safety control of LPG terminal operation. In 2024, the intelligent management system for bottled LPG was fully launched, and the digital transformation pilot project of the Shandong branch passed the acceptance inspection.

Balancing multiple interests for a better tomorrow. Recognizing that sustainable success requires collaborative engagement, we have strengthened our dialogue with investors, customers, employees, and communities. Beyond delivering reliable energy services to customers and creating outstanding values, we actively contribute to social welfare through targeted philanthropic programs, reinforcing our commitment to corporate citizenship.

Reflecting on a journey traversed through myriad challenges, Kunlun Energy gazes forward to a future flourishing with renewed vitality. By fully integrating ESG governance principles into corporate strategy and daily operations, Kunlun Energy remains steadfast in advancing sustainable development objectives. Upholding our founding mission, we are committed to becoming a globally recognized, domestically leading integrated green energy supplier. Through innovative solutions and responsible practices, Kunlun Energy will amplify its contributions to building a beautiful China and accelerating the nation's goals, driving transformative progress across the energy value chain.

Chairman & Executive Director



About Us

Corporate Profile

Kunlun Energy is an integrated energy company registered in Bermuda (British Overseas Territory) and listed on the Main Board of The Stock Exchange of Hong Kong Limited (SEHK: 00135.HK), with PetroChina Company Limited ("PetroChina" or "Parent Company") as the controlling shareholder. As of 2024, the Company has been shortlisted in 25 prominent indices, including the Hang Seng SCHK China Central State-owned Enterprises Index, Hang Seng SCHK China Central SOEs ESG Leaders Index, Hang Seng SCHK Central SOEs Value Index, Hang Seng SCHK China Central SOEs ESG 40 Index, Hang Seng SCHK China Central State-owned Enterprises ESG Enhanced Index, and Hang Seng SCHK China Central State-owned Enterprises ESG Index.

Kunlun Energy consistently upholds the corporate value proposition of "Green Development, Energy Dedication: Driving Customer Growth and Empowering People's Happiness". By focusing on our core business mission, the Company deeply leverages industrial synergy potential, fully integrates process conversion, transportation and distribution, and end-user sales, continuously consolidates our core natural gas business, and expands our diversified business portfolio. The Company's principal operations include Downstream Natural Gas Retailing, Liquefied Natural Gas (LNG) Receiving and Processing, Liquefied Petroleum Gas (LPG) sales. Kunlun Energy ranks among China's largest enterprise in terms of the sales scale of natural gas terminal utilization and LPG distribution.

Kunlun Energy's value chain

As of 2024, Kunlun Energy has achieved comprehensive coverage across 31 provincial-level administrative regions (including provinces, autonomous regions, and direct-administered municipalities) in China, providing integrated energy solutions to 17 industrial sectors. The annual operational performance metrics are presented as follows:

Downstream Gas Retailing

The retail volume of natural gas was **32.76** billion cubic meters an increase of last year ▲8.1%

Liquefied Natural Gas (LNG) Receiving

LNG received for processing total **15,939.9** million cubic meters an decrease of last year ▼2.4%

Liquefied Natural Gas (LNG) Processing

LNG processing **3,550.3** million cubic meters an increase of last year ▲25.6%

Liquefied Petroleum Gas (LPG) Sales

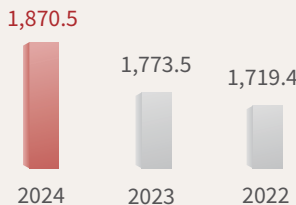
LPG sales amounted to **5,783,800** tonnes an increase of last year ▲0.3%

Operational Performance

Kunlun Energy, leveraging the deep-rooted domestic presence and extensive international footprint, has established a safe, reliable, clean, and efficient energy supply system for diverse users, delivering comprehensive and customized premium services. The Company has achieved steady growth in its operational performance over the past few years.

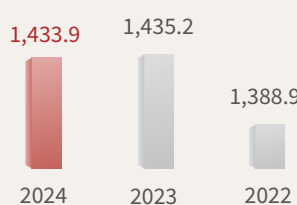
Revenue

100 million yuan



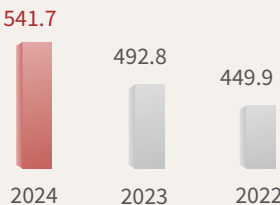
Total Assets

100 million yuan



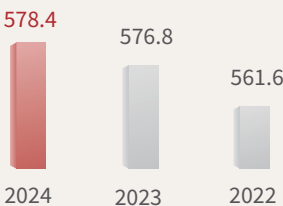
Sales volume of natural gas

100 million cubic meters



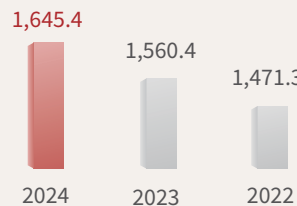
Annual sales volume of LPG

10,000 tonnes



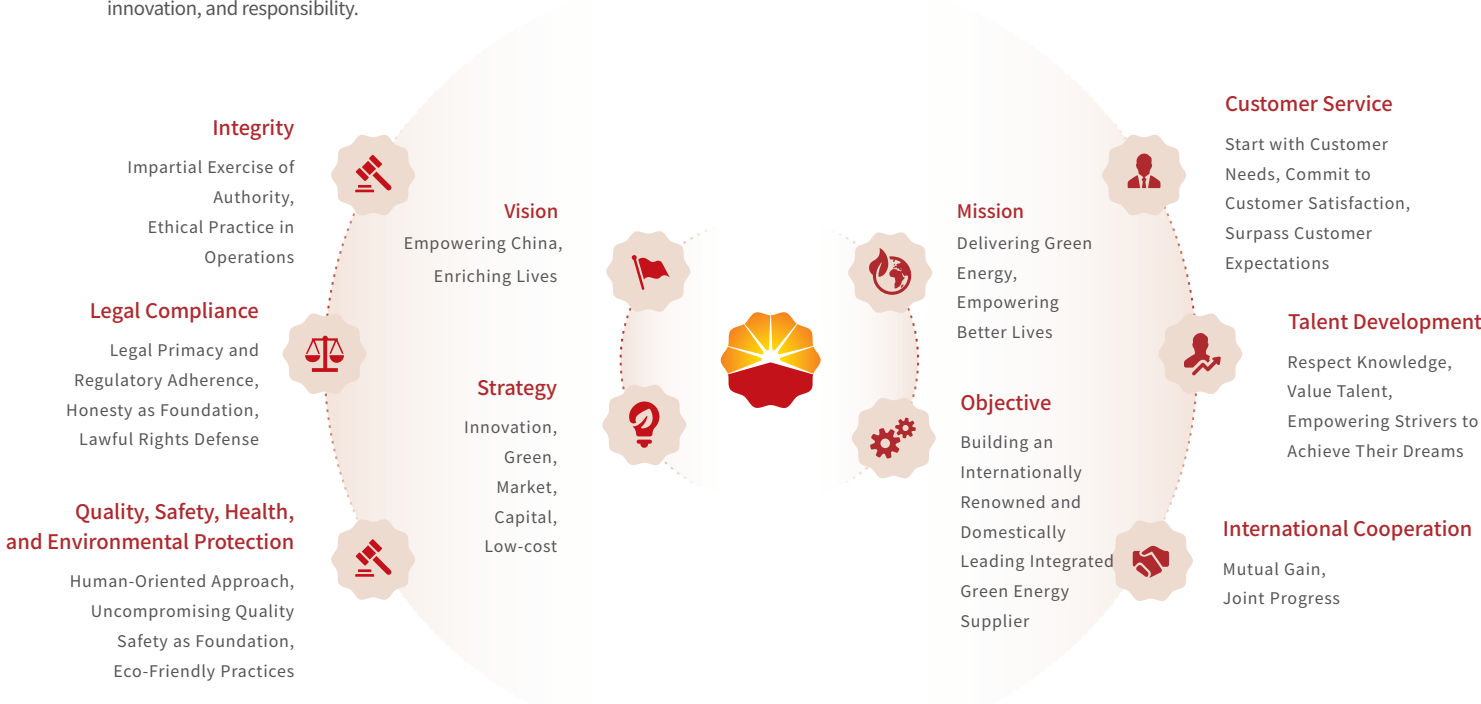
Number of users

10,000 households



Corporate Culture

Kunlun Energy's corporate culture embodies a unique synthesis of industrial legacy and contemporary ethos. It is rooted in the disciplined operational traditions of China's "petroleum heritage" while evolving through market-driven innovation and global engagement, demonstrating the traits of openness, innovation, and responsibility.

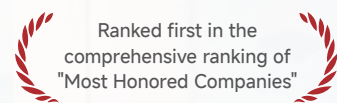


2024 ESG Recognition & Achievements

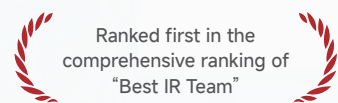
Kunlun Energy adheres to the philosophy of "Persisting in Green and Low-Carbon Development, Achieving High-Quality Growth, and Building a Beautiful Ecosystem". We follow the path of sustainable development and actively cooperates with shareholders, customers, employees, and other stakeholders to advance our ESG management goals.

ESG Recognitions

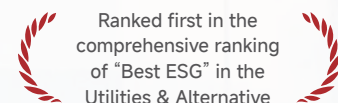
《Institutional Investor》in the Utilities & Alternative Energy Industry



Ranked first in the comprehensive ranking of "Most Honored Companies"



Ranked first in the comprehensive ranking of "Best IR Team"



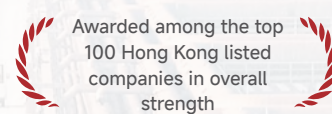
Ranked first in the comprehensive ranking of "Best ESG" in the Utilities & Alternative

The 14th China Securities "Golden Bauhinia Awards"



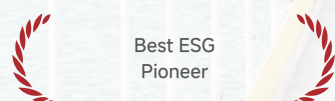
Outstanding Enterprise Contribution Award for the 75th Anniversary of the Founding of the People's Republic of China

Top 100 Hong Kong Listed Companies Awards

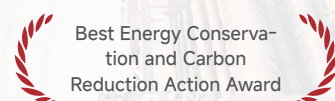


Awarded among the top 100 Hong Kong listed companies in overall strength

Hong Kong International ESG Rankings

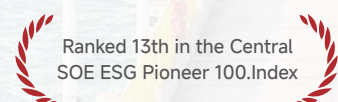


Best ESG Pioneer

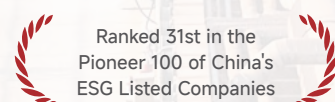


Best Energy Conservation and Carbon Reduction Action Award

SASAC



Ranked 13th in the Central SOE ESG Pioneer 100.Index



Ranked 31st in the Pioneer 100 of China's ESG Listed Companies

Indexes

In 2024, the Company achieved remarkable results in the field of ESG. We optimized our internal structure to establish a scientific and efficient management system, clarified responsibilities, and facilitated the implementation of ESG. Adhering to the principle of transparency, we regularly disclosed ESG information to enhance stakeholder trust. All operational processes strictly followed green and low-carbon standards, with comprehensive management measures. These efforts have significantly improved Kunlun Energy's ESG performance, demonstrating progress in energy conservation, emission reduction, and fulfillment of social responsibility, which has been fully recognized by the capital market.

- Hang Seng Composite Index
- Hang Seng Large-cap Index
- Hang Seng SCHK China Central SOEs ESG 40 Index
- Hang Seng SCHK China Central State-owned Enterprises ESG Enhanced Index
- Hang Seng HK State-Owned Enterprises Value Index
- Hang Seng HK State-Owned Enterprises Selection Index
- Hang Seng Chinese State-Owned Enterprises Index
- Hang Seng HK Quality Growth Low Volatility Index
- Hang Seng HK Central Enterprises Selection Index
- Hang Seng Chinese Central Enterprises Index
- Hang Seng Large-Mid Cap Momentum Index
- Hang Seng Defensive Industries Index
- Hang Seng SCHK Telecommunications & Utilities (Investable) Index
- Hang Seng China Enterprises Index
- Hang Seng Composite Industry Index (Utilities)
- Hang Seng HKEX Stock Connect China Enterprises Index
- Hang Seng SCHK China Central State-owned Enterprises ESG Index
- Hang Seng HK Central Enterprises Low Volatility Index
- Hang Seng Chinese Mainland Enterprises High Dividend Yield Index
- Hang Seng SCHK China Central SOEs High Dividend Yield Index
- Hang Seng HK State-Owned Enterprises Momentum Index
- Hang Seng Mainland China Companies High Dividend Yield Index
- Hang Seng Stock Connect Hong Kong Index
- Hang Seng Large-Mid Cap Value Tilt Index
- Hang Seng SCHK Telecommunications & Utilities Index





ESG Governance

Kunlun Energy upholds its corporate mission of "Delivering Green Energy for a Better Life", fostering an open approach built on respect, equity, and shared success. Driven by innovation, we actively embrace social responsibility and pursue a green development path. We are committed to delivering clean, reliable, and affordable energy in a responsible, sustainable, and ethically sound manner. In full compliance with local laws and regulations, we prioritize human rights, environmental protection, and meaningful contributions to the socio-economic progress of the communities we serve.

In 2024, guided by the Board's sustainable development directives, we systematically established a new sustainability framework. We comprehensively deepened our responsibility practice by issuing three guiding documents, namely the White Paper on Climate Action (2024 Edition), Action Plan Towards Carbon Peaking and Carbon Neutrality (2024 Edition) and Occupational Health and Safety Management White Paper (2024 Edition)¹, and initially establishing a "1+N+X" disclosure framework. This initiative demonstrates Kunlun Energy's systematic approach and responsibility in practicing high-quality, sustainable development.



In the future, Kunlun Energy will further deepen our commitment to sustainable development by advancing the implementation of the United Nations Sustainable Development Goals (SDGs), enhancing corporate governance frameworks, driving the clean energy transition across the industry, and establishing synergistic mechanisms across internal and external value chains. Through active participation in global cooperation, the Company integrates international experiences while sharing China's energy transition solutions, demonstrating multidimensional corporate responsibility.

¹For details reports please visit <https://www.kunlun.com.hk/s1/n161/n206/n321/list.html?pagesize=8>

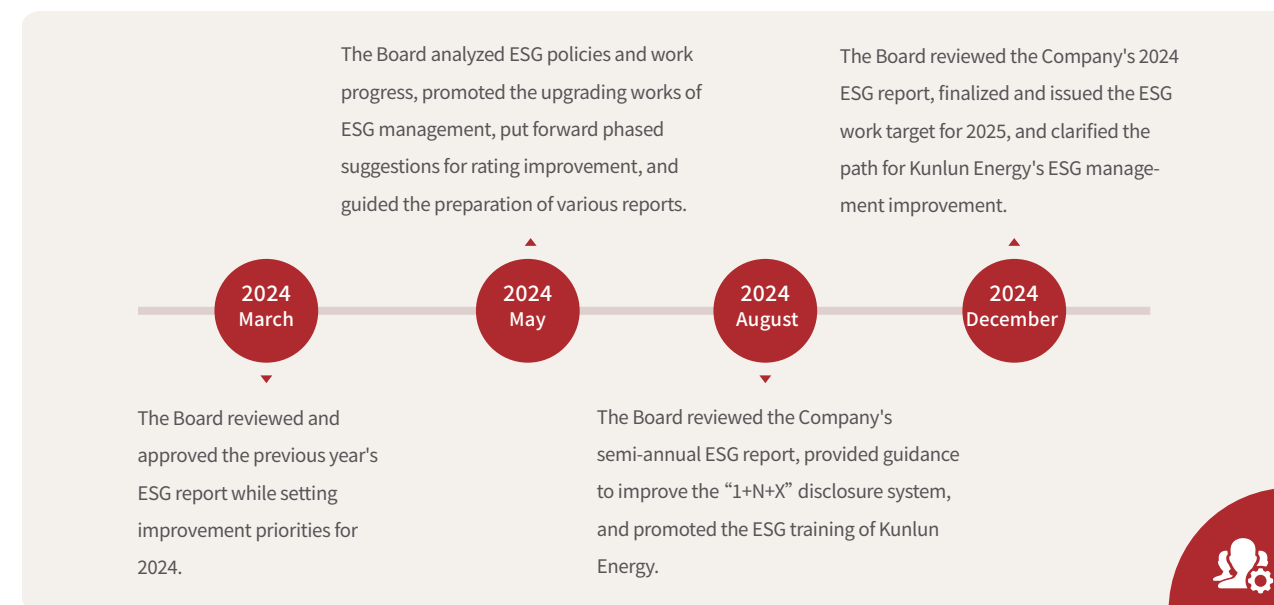
Board Statement

The Board of Directors ("the Board"), as the highest governance body, is responsible for comprehensively integrating ESG principles into the Company's overarching management policies and every business decision-making process, strategically steering the organization's sustainable development. In 2024, demonstrating its strong commitment to ESG initiatives, the Board participated in ESG training sessions on multiple occasions and convened four board meetings, providing strategic guidance for the advancement of the Company's ESG work.

The Board has established a dedicated Sustainability Committee to comprehensively identify ESG risks and opportunities throughout corporate operations. This committee develops forward-looking and actionable ESG management strategies that adapt to the evolving internal and external environments and conducts regular strategy reviews and effectiveness evaluations. We continuously track and monitor the implementation of ESG management objectives, guaranteeing the realization of management objectives through quantitative assessment and other means.

The Board routinely engages with the Sustainability Committee and external advisors to rigorously assessment and approval ESG management targets. It thoroughly reviews the Company's ESG governance structure and internal oversight systems to verify their adequacy and efficiency, thereby driving continuous improvement and providing a solid guarantee for the implementation of ESG work. Furthermore, the Board has also established clear guidelines for the Company's annual ESG work, clarifying the responsibilities of each department in ESG work, and fostering cross-functional collaboration.

Throughout the reporting year, the Board reviewed and deliberated on ESG-related matters across all four quarterly meetings:



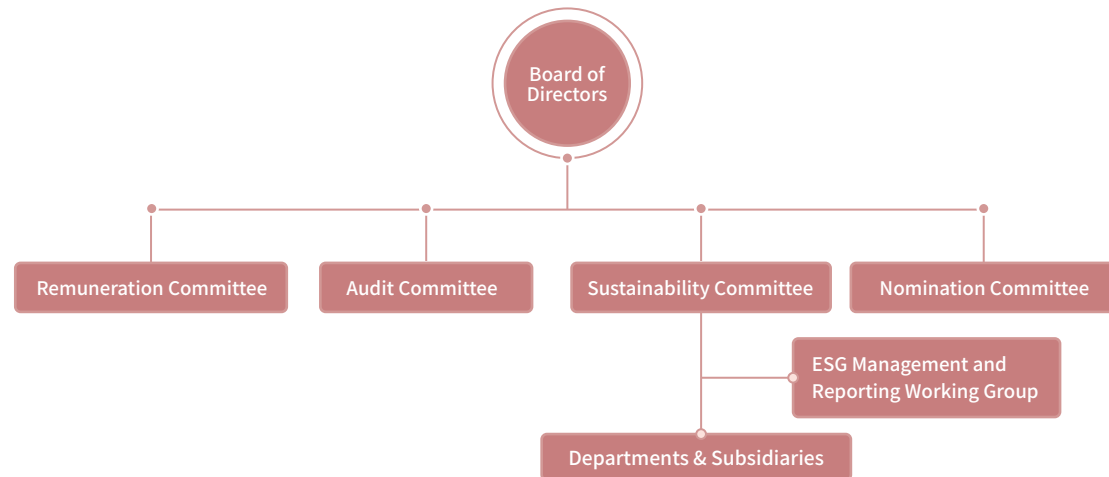
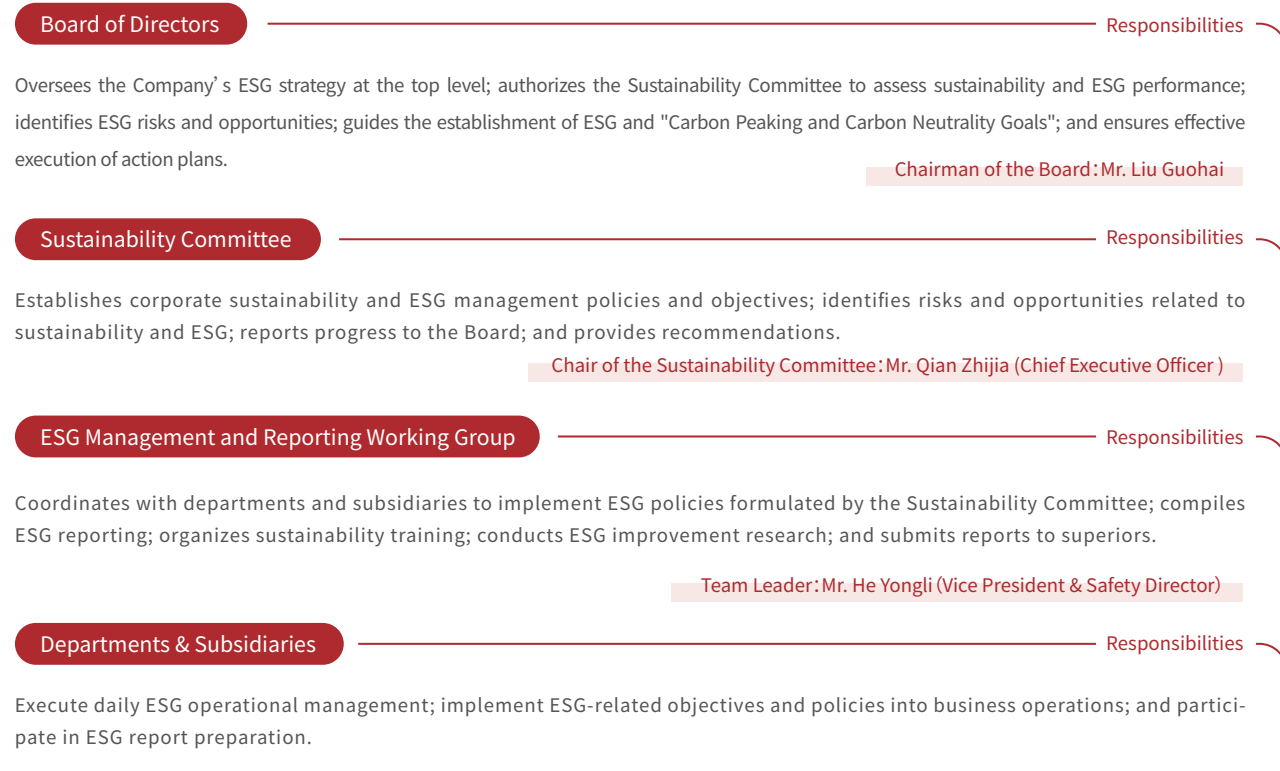
Kunlun Energy maintains rigorous engagement with stakeholder expectations regarding ESG matters through annual materiality assessment that evaluate, prioritize, and select material issues based on industry-specific relevance and significance in terms of operational impact. The latest stakeholder assessment, conducted in January 2025, with the Board acknowledged, reviewed and approved the relevant results in March 2025.

On March 25, 2025, the Board reviewed and approved this Report.

ESG Governance Framework

Kunlun Energy has established a sustainable development governance structure with comprehensive coverage at all levels, laying a solid foundation for planning and implementing sustainable development strategies. The Board serves as the core decision-making body for the Company's sustainable development and climate governance. Under the Board is the Sustainability Committee, which fully assists the Board in promoting the implementation of ESG-related work. In collaboration with the ESG Management and Reporting Working Group, multiple departments and subsidiaries incorporate sustainable development and ESG management requirements into their daily operations to ensure that sustainable development is implemented in every aspect of the Company's business.

Our Board of Directors has formally incorporated sustainability and ESG matters into its regular meeting agenda, systematically reviewing and deliberating the Company's progress in sustainable development. The Sustainability Committee convenes dedicated meetings to examine specific initiatives. During the reporting period, the Board received four comprehensive sustainability briefings, covering ESG policies, standards, and implementation progress.



Stakeholder Engagement

Kunlun Energy actively pays attention to the demands of all stakeholders, communicates through multiple open and diverse channels, comprehensively collects stakeholders' opinions, suggestions, and expectations regarding the Company's sustainable development, and responds accordingly.

Stakeholder	Engagement Channels	Key Concerns	Kunlun Energy's Actions & Responses
 End-consumers	<ul style="list-style-type: none"> Business site Online APP Customer-service hotline E-mail 	<ul style="list-style-type: none"> Customer health & safety Stable clean energy supply Product/service quality Privacy & information security 	<ul style="list-style-type: none"> Collect feedback and complaints Improve product/service quality Conduct safety inspections and awareness campaigns Perform customer satisfaction surveys Enhance privacy policies and technical safeguards
 Commercial Clients	<ul style="list-style-type: none"> Client meeting Customer-service hotline 	<ul style="list-style-type: none"> Customer health & safety Product/service quality Stable clean energy supply Privacy & information security 	<ul style="list-style-type: none"> Address feedback and complaints Optimize product/service quality Strengthen energy reserves and regulatory capacity Conduct satisfaction surveys Enhance privacy policies and technical safeguards
 Government & Regulators	<ul style="list-style-type: none"> Participation in policy making Public announcements Meetings 	<ul style="list-style-type: none"> Business ethics & anti-corruption Integrity & compliance Risk control Resource efficiency Sustainability management Community welfare & local development 	<ul style="list-style-type: none"> Develop sustainability strategies and targets Implement product quality inspections and safety protocols Strengthen energy reserves and regulatory capacity Ensure legal compliance Enhance ethics oversight Align operations with local development needs
 Suppliers	<ul style="list-style-type: none"> Supplier training Supplier audits 	<ul style="list-style-type: none"> Legal employment & labor rights Customer health & safety Sustainable supply chain management 	<ul style="list-style-type: none"> Establish supplier management procedures Implement transparent procurement Facilitate business exchanges
 Employees	<ul style="list-style-type: none"> Labor union Feedback box/email Employee surveys Training programs Performance evaluations 	<ul style="list-style-type: none"> Legal employment & labor rights Employee health & safety Employee welfare Employee satisfaction Talent development 	<ul style="list-style-type: none"> Establish labor union mechanisms Open feedback and grievance channels Conduct employee satisfaction surveys Organize training programs Develop compensation and promotion systems
 Shareholders & Investors	<ul style="list-style-type: none"> General meetings Public disclosures Investor feedbacks Media responses Press conferences 	<ul style="list-style-type: none"> Business ethics & anti-corruption Corporate governance Integrity & compliance Risk control Enterprise reform 	<ul style="list-style-type: none"> Optimize governance frameworks Ensure legal compliance Conduct risk assessments and mitigation Maintain operational stability Strengthen business ethics supervision
 Media	<ul style="list-style-type: none"> Public disclosures Open Days 	<ul style="list-style-type: none"> Corporate governance Ecology & biodiversity Renewable energy adoption 	<ul style="list-style-type: none"> Fulfill information disclosure obligations Respond to external inquiries promptly
 Industry Associations, Academic Institutions & NGOs	<ul style="list-style-type: none"> Project partnerships Industry conferences 	<ul style="list-style-type: none"> Community welfare & local development Innovation & digital transformation Industry advancement 	<ul style="list-style-type: none"> Participate in public welfare initiatives Facilitate academic exchanges and collaborations Contribute to industry standards Share corporate best practices

Materiality Assessment

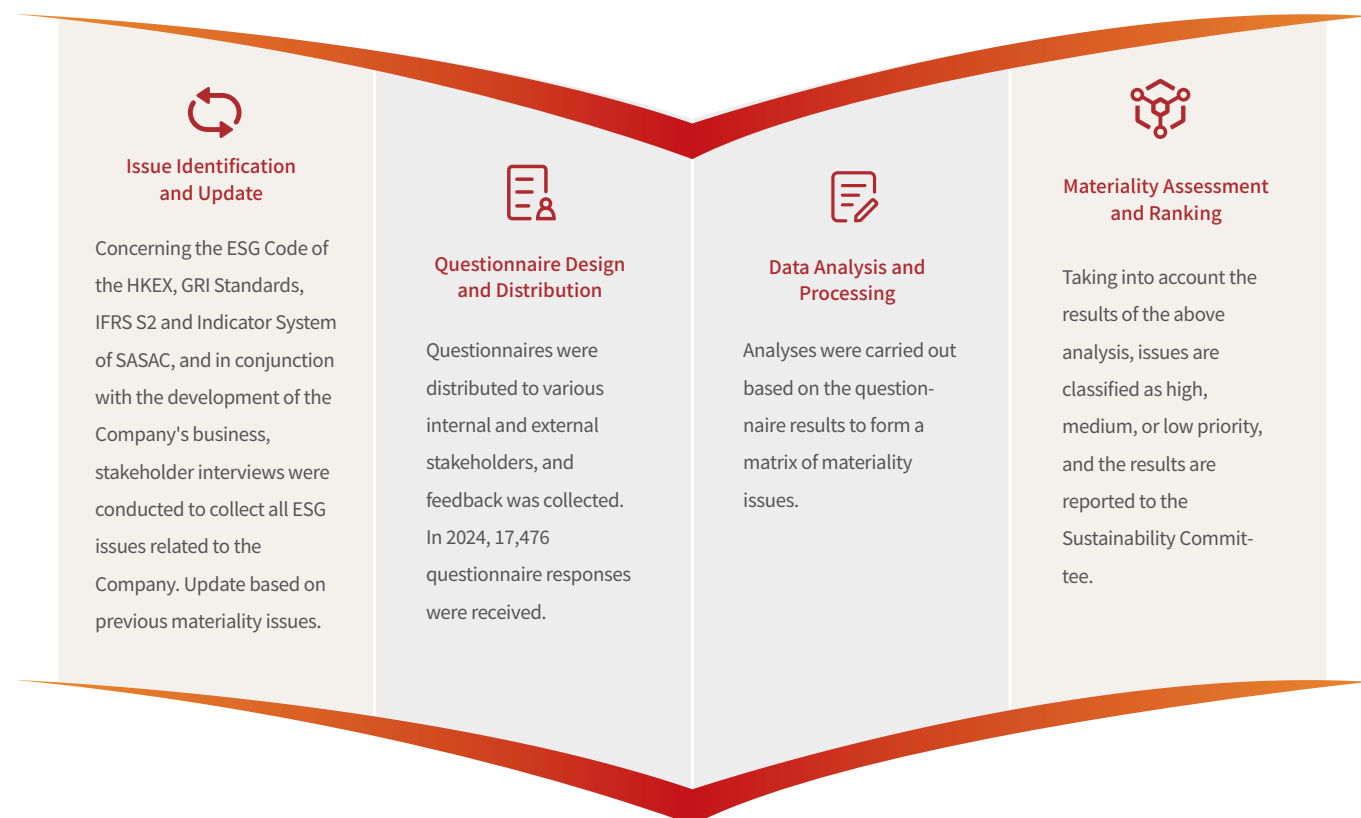
Kunlun Energy maintains close communication with internal and external stakeholders to keep abreast of material issues of concern to Kunlun Energy's development. In 2024, Kunlun Energy continued to conduct qualitative and quantitative analyses of materiality issues and distributed research and evaluation questionnaires to create a matrix of materiality issues.

Through effective stakeholder communication and materiality analysis, the Company hopes that the ESG report can truly and comprehensively reflect our environmental, social, and governance performance and efforts.



Materiality Assessment Process

Kunlun Energy updated the ESG Issues Database based on our business characteristics and the needs of internal and external stakeholders, in conjunction with the requirements of the HKEX ESG Code, SASAC, and international ratings. Various parties' views on Kunlun Energy's materiality issues were collected through a questionnaire, and a matrix of materiality issues was constructed using quantitative analyses. The purpose of this exercise is to identify key ESG issues from the Company's and external stakeholders' perspectives, and to provide a scientific basis for the development of the Company's sustainable development strategy.



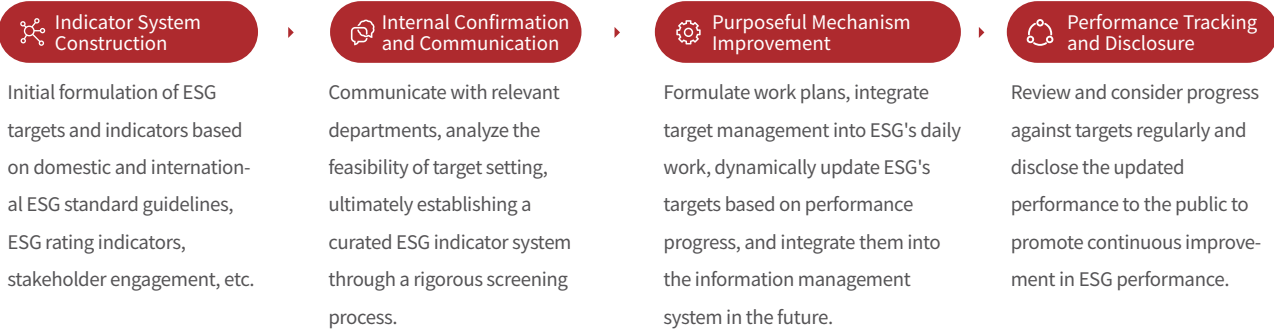
Materiality Issues Matrix

This year, Kunlun Energy identified 26 materiality issues, constructed a matrix of materiality issues for 2024 based on the dimensions of "importance to external stakeholders" and "importance to corporate sustainability", and ranked them according to their priorities.



ESG Objectives & Progress

To actively respond to the United Nations Sustainable Development Goals (SDGs), Kunlun Energy constructed a systematic, scientific and unique ESG indicators and targets management system by considering the current situation and characteristics of Kunlun Energy and benchmarking against the world's first-class enterprises. Concerning advanced practicesat home and abroad, we formed a library of ESG indicators to guide the long-term management of ESG performance and information disclosure. Every year, the Company maintains and updates our sustainable development goals to ensure that they are both challenging and adaptable. We will continuously improve ESG disclosure and management capabilities to lay a solid foundation for building a world-renowned, domestic, first-class, integrated green energy supplier.



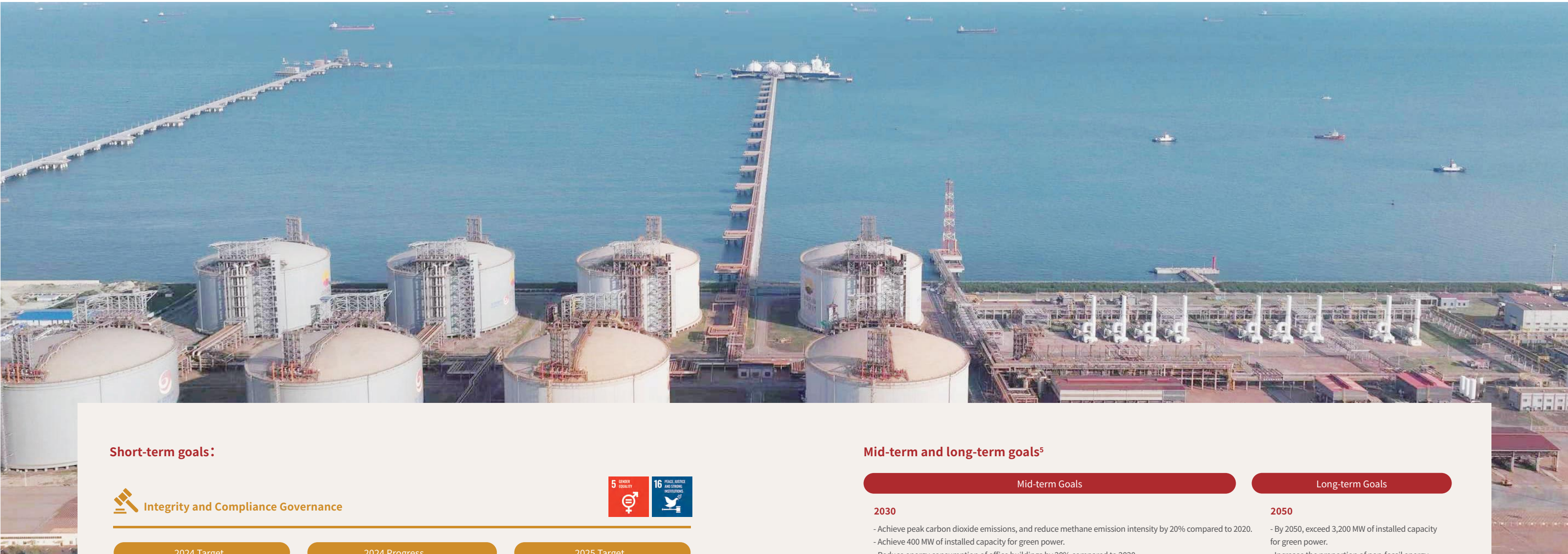
Kunlun Energy has permanently attached importance to ESG target setting, believing that clear ESG targets are key to driving sustainable development and as an essential way of responding to stakeholders' expectations. By setting ESG objectives, we can be better measuring and managing environmental impact, social responsibility, and corporate governance levels. During the year, Kunlun Energy updated the ESG goals for the five themes of green and low-carbon development, safeguarding health and safety, talent development and growth, focusing on product responsibility, and integrity and compliance governance in conjunction with the materiality issues. These goals were further broken down into specific targets, and the primary responsible departments were identified to ensure the achievement of the Company's objectives.

Short-term goals²:


Green and low-carbon development		
2024 Target	2024 Progress	2025 Target
3% reduction in intensity of CO ₂ emissions (by gas sales) in 2024 compared to 2023	10% reduction in intensity of CO ₂ emissions (by gas sales) in 2024 compared to 2023	2% reduction in intensity of CO ₂ emissions (by gas sales) in 2025 compared to 2024
Energy saving by no less than 1,100 tonnes of standard coal in 2024	Energy saving by 1,720 tonnes of standard coal in 2024	Energy saving by no less than 1,400 tonnes of standard coal in 2025
—	11.02 MW of green power capacity installed in 2024	200 MW of green power capacity installed in 2025
—	57.22% electrification rate by 2024	60% and above electrification rate by 2025
Ensuring health and safety		
2024 Target	2024 Progress	2025 Target
100% security training coverage by 2024	100% security training coverage by 2024	100% security training coverage by 2025
0 new occupational diseases by 2024	0 new occupational diseases by 2024	0 new occupational diseases by 2025
100% detection of occupational hazards by 2024	100% detection of occupational hazards by 2024	100% detection of occupational hazards by 2025
—	0.0134 Lost Time Injury Rate (LTIR) per million hours worked by 2024	The Lost Time Injury Rate (LTIR) per million hours worked in 2025 shall not exceed 0.5

Talent Development and Growth		
2024 Target	2024 Progress	2025 Target
No less than 90% of employees participating in career development training by 2024	100% employee participation in professional development training in 2024	No less than 90% of employees participating in career development training by 2025
Maintain the number of cases of child and forced labor at 0 in 2024	Keep the number of cases of child and forced labor at 0 in 2024	Maintain the number of cases of child and forced labor at 0 in 2025
Focusing on Product Liability		
2024 Target	2024 Progress	2025 Target
Maintain 99% or more user satisfaction by 2024	99.5% user satisfaction rate reached by 2024	Maintain 99% or more user satisfaction by 2025
The proportion of material suppliers assessment reaches 100% in 2024, with reviews covering compliance, environmental protection, business ethics, health and safety, quality, and human rights.	The proportion of material suppliers assessed reaches 100% in 2024, with reviews covering compliance, environmental protection, business ethics, health and safety, quality, and human rights.	The proportion of material suppliers assessed reaches 100% in 2025, with reviews covering compliance, environmental protection, business ethics, health and safety, quality, and human rights, etc.
100% of inbound suppliers certified to the ISO 45001 Occupational Health and Safety Management System by 2024	100% of inbound suppliers certified to the ISO 45001 Occupational Health and Safety Management System by 2024	100% of inbound suppliers certified to the ISO 45001 Occupational Health and Safety Management System by 2025

²Green power capacity installed, electrification rate and LTIR are new targets for 2025.



Short-term goals:

<div> Integrity and Compliance Governance</div> <div><div>5</div><div>Gender Equality</div></div> <div><div>16</div><div>Peace, Justice and Strong Institutions</div></div>		
2024 Target	2024 Progress	2025 Target
Continuous Improvement of Corporate Governance System	Including the first female non-executive director on the Board in 2024 brings the proportion of women on the board to 14% and the proportion of non-executive directors to 57%.	Appointment of the chief independent non-executive director Inclusion of a female director on the Nomination Committee
100% coverage of anti-corruption training ³ for directors by 2024	100% coverage of anti-corruption training for directors by 2024	100% coverage of anti-corruption training for directors by 2025
100% coverage of anti-corruption training for employees ⁴ , suppliers, contractors, and service providers by 2024	100% coverage of anti-corruption training for employees, suppliers, contractors, and service providers by 2024	100% coverage of anti-corruption training for employees, suppliers, contractors, and service providers by 2025

³ Including participation in internal and external discussions, centralized training, training materials and other forms.

⁴ All employees of Kunlun Energy.

Mid-term and long-term goals⁵

Mid-term Goals	Long-term Goals
<div>2030</div> <ul style="list-style-type: none">- Achieve peak carbon dioxide emissions, and reduce methane emission intensity by 20% compared to 2020.- Achieve 400 MW of installed capacity for green power.- Reduce energy consumption of office buildings by 20% compared to 2020.- Completely phase out diesel vehicles.- Ensure that more than 50% of demonstration sites are low-carbon or zero-carbon. <div>2035</div> <ul style="list-style-type: none">- Exceed 800 MW of installed capacity for green power, with green power consumption accounting for 40%.- Increase the proportion of non-fossil energy consumption to 30%.- Ensure that more than 65% of demonstration sites are low-carbon or zero-carbon.- Achieve "net zero" emissions first in LPG operations, urban gas pipeline networks, and branch pipelines. <div>2040</div> <ul style="list-style-type: none">- Reduce carbon dioxide emission intensity by 40% compared to 2020; reduce methane emission intensity by 40% compared to 2020.- Achieve 1,600 MW of installed capacity for green power, with green power accounting for 60%.- Increase the proportion of non-fossil energy consumption to over 50%.- Ensure that more than 80% of demonstration sites are low-carbon or zero-carbon.	<div>2050</div> <ul style="list-style-type: none">- By 2050, exceed 3,200 MW of installed capacity for green power.- Increase the proportion of non-fossil energy consumption to over 95%.- Achieve "net zero" emissions.

⁵Please refer to Action Plan Towards Carbon Peaking and Carbon Neutrality (2024 Edition): <https://www.kunlun.com.hk/s1/n161/n301/list.html>



Governance

Strengthening Governance for Systematic Advancement

Scientific and standardized corporate governance is the cornerstone of building a world-class enterprise. In the process of solidly promoting high-quality development, we have adopted a sound governance structure and effective governance mechanism as a solid foundation and have integrated compliance and risk management requirements into every aspect of our operations. In particular, we focus on key areas of high concern to stakeholders, such as anti-corruption, anti-monopoly, and corporate governance, and concentrate our efforts on key tasks to continuously improve the overall competitiveness of the enterprise and strengthen our risk-resistant capabilities to build a solid foundation for the Company's sound operation and ensure that the Company will move forward steadily in the complex and volatile market environment.

The materiality issues covered in this chapter:

- > Corporate Governance
- > Integrity and Compliance
- > Risk Management
- > Business Ethics and Anti-corruption
- > Privacy and Information Security Management
- > In-depth Enterprise Reform



Corporate Governance Enhancement

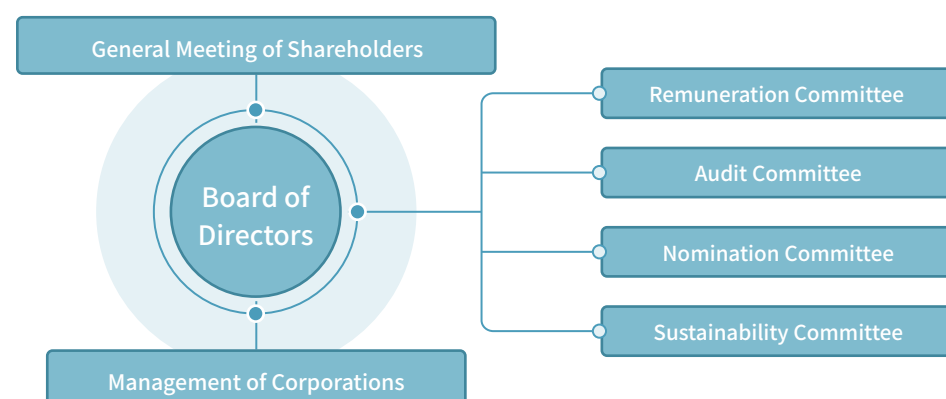
Kunlun Energy adheres to the principle of seeking progress while maintaining stability, consolidating compliance governance, and deepening the reform of state-owned enterprises. During the year, the Company further optimized the system to meet the needs of the Company's strategic development and the requirements of operational supervision, actively carried out the formulation and revision of the system, comprehensively implemented the deployment of the deepening reform, pushed forward the implementation of the new round of the "Double-Hundred Action"⁶reform task plan, deepened the effectiveness of the governance, and pushed forward the Company's high-quality development.

Corporate Governance System

A perfect and effective corporate governance structure and operational system are the keys to enhancing corporate value. Kunlun Energy always focuses on improving governance effectiveness, and continuously optimizes the corporate governance structure. The Company vigorously strengthens the construction and management of the director team, gradually raises the requirements for directors, continuously optimizes the organizational system and operational mechanism, and regulates directors' performance in exercising their duties and powers. Simultaneously, the Company adopts a multidimensional assessment method combining performance assessment and ESG factors to evaluate directors' performance, while comprehensively and deeply promote the modernization of the Company's governance system and governance capacity, and to build a solid foundation for long-term development and value enhancement.

> Corporate Governance Framework

Kunlun Energy has established its corporate governance structure in compliance with regulatory requirements, such as Appendix C1 (Corporate Governance Code) of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited. The Board is the highest decision-making body for the overall management of the Company's business, which is responsible for approving and overseeing all significant matters, including institutional policies, corporate strategies, internal control and risk management systems, ESG management systems, and essential transactions of the Company. Four board committees are under the Board, namely the Audit Committee, the Remuneration Committee, the Nomination Committee, and the Sustainability Committee. The Board Committees regularly report to the Board and assist the Board in fulfilling its management and supervisory duties to ensure the healthy operation of corporate governance.



⁶The State-Owned Enterprise Reform Leadership Group under the State Council has selected over 100 subsidiaries of central enterprises and over 100 key local state-owned enterprises to implement the SOE reform program.

> Board of Directors

The Company has formulated the Rules of Procedure of the Board of Directors, Administrative Measures for Delegation of Authority by the Board of Directors, List of Delegated Decisions, and other management policies. We have earnestly implemented the relevant requirements and opinions, such as the State Council's Opinions on Further Improving the Quality of Listed Companies, the Rules for the Work of the Boards of Directors of Central Enterprises (for Trial Implementation), and other documents, and clarified the division of responsibilities and coordination mechanisms of the various governance bodies. The Board regularly monitors and reviews the performance of senior management. Specialized committees are responsible for the preliminary deliberation of motions and provide professional advice and recommendations to the Board to ensure the scientific nature of the Board' decision-making.

Kunlun Energy values board independence and diversity. We have established a Board Diversity Policy and a sound board membership structure.

Board Diversity



Additionally, Kunlun Energy has robust mechanisms to continually optimize the structure of the Board and ensure that it can perform its duties effectively.

The Company conducts an annual assessment of the independence of its Independent Non-executive Directors (INEDs) in accordance with the Independence Guidelines issued by the HKEX. The Company confirms that all INEDs meet the criteria for independence.

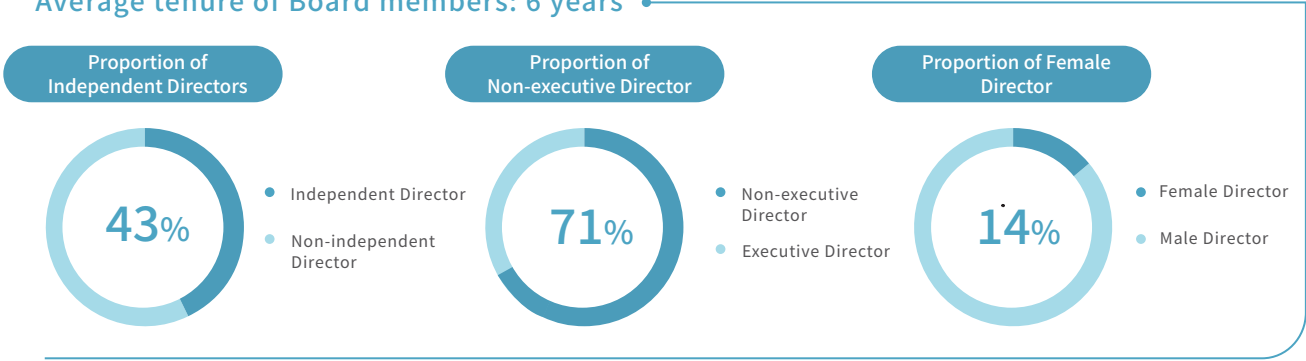
Each director of the Board (including those with specified terms) shall retire at least once every three years. Directors newly appointed by the Board during the year, or any director appointed to fill a casual vacancy, shall retire at the next General Meeting.

The "Double-Hundred Action" requires continuous optimization of board structures. This includes completing the adjustment and appointment of directors in directly administered equity-affiliated enterprises, ensuring compliance with requirements such as external directors constituting a majority and restrictions on the number of affiliated enterprises that full-time and part-time directors may serve.

The Board has seven directors, comprising two executive directors, two non-executive director, and three independent non-executive directors. We provide pre-service training to new directors according to the regulations.

Including the first female non-executive director on the Board during the year highlights our efforts and commitment to diversity on boards.

Average tenure of Board members: 6 years



Composition of the Board of Directors of Kunlun Energy⁷

Name	Duty	Main Experience	Audit Committee	Remuneration Committee	Nomination Committee	Sustainability Committee
Mr. Liu Guohai	Chairman & Executive Director	Mr. Liu is a senior engineer and concurrently serves as the Executive Director of the PetroChina Natural Gas Sales Branch. He obtained a Bachelor’ s degree in Engineering from Fushun Petroleum Institute (now renamed Liaoning Petrochemical University) in July 1994. With over 30 years of experience in the oil and gas industry, Mr. Liu has held leadership positions at various organizations, including Daqing Petrochemical General Plant, PetroChina Daqing Petrochemical Branch, PetroChina Dalian Petrochemical Branch, PetroChina Sichuan Petrochemical Co., Ltd., PetroChina Refining and Chemical & New Materials Branch, and PetroChina Natural Gas Sales Branch. Mr. Liu was appointed as an executive director and Chairman of the Board on April 1, 2025.			Chairman	
Mr. Qian Zhijia	CEO & Executive Director	Mr. Qian is a senior engineer with over 30 years of experience in China’s oil and gas industry. He has a professional background in engineering and management science and was appointed as an executive director and chief executive officer of the Company in 2020.				Chairman
Ms. Lyu Jin	Non-Executive Director	Ms. Lyu is a senior economist with over 20 years of experience in the oil and gas industry. She has long been engaged in legal compliance work in this industry. She holds a doctorate degree in law and was appointed a non-executive director of the Company in 2024.				
Mr. Qi Zhenzhong	Non-Executive Director	Mr. Qi holds a Bachelor’ s degree in Engineering from Shanxi Mining Institute and a Master’ s degree in management science from Nankai University. He is a senior economist with over 30 years of experience in the petroleum and natural gas industry. Mr. Qi has been deeply involved in capital operation management for an extended period and possesses extensive expertise and practical experience in equity investment and capital operations.				

⁷Mr. Fu Bin has resigned from his positions as Executive Director, Chairman of the Board, and Authorized Representative of the Company with effect from April 1, 2025, upon reaching the statutory retirement age. Concurrently, he has relinquished his roles as the Chairman and the member of the Company’s Nomination Committee.

Mr. Gao Xiangzhong has resigned from his positions as Chief Financial Officer and Executive Director of the Company with effect from on March 25, 2025, due to age-related reasons. He has also ceased to serve as the member of the Company’s Sustainability Committee.

Name	Duty	Main Experience	Audit Committee	Remuneration Committee	Nomination Committee	Sustainability Committee
Dr. Liu Xiao Feng	Independent Non-Executive Director	Dr. Liu has more than 20 years of experience in corporate finance, having worked for several international financial institutions. He is a professional in monitoring and managing financial and transactional risks. He is an independent non-executive director of several Hong Kong-listed companies.	Committee Member	Chairman	Committee Member	Committee Member
Mr. Sun Patrick	Independent Non-Executive Director	Mr. Sun is a fellow of the Association of Chartered Certified Accountants in the United Kingdom and the Hong Kong Institute of Certified Public Accountants. Mr. Sun has more than 30 years of experience in international financial investment and has held key positions at JPMorgan Chase Bank and Jardine Fleming Holdings Limited. He has also served as chairman of the Chamber of Hong Kong Listed Companies, a member of the Takeovers and Mergers Panel and the Takeovers Appeal Committee of the Securities and Futures Commission of Hong Kong, deputy convener of the Listing Committee of the Stock Exchange of Hong Kong, and a member of the Council of the Stock Exchange of Hong Kong. Mr. Sun was an independent non-executive director and the chairman of the Audit and Risk Management Committee of CRRC Corporation Limited (2015-2021) and is currently an independent non-executive director of several Hong Kong-listed companies.	Chairman	Committee Member	Committee Member	
Mr. Tsang Yok Sing Jasper	Independent Non-Executive Director	Mr. Tsang is a veteran of the political and education sectors in the Hong Kong Special Administrative Region. He has extensive experiences in handling public administration crises and risk management. He has served as the President and member of the Legislative Council of the Hong Kong Special Administrative Region, a member of the Executive Council of the Hong Kong Special Administrative Region, a member of the Independent Commission Against Corruption Complaints Committee, and a non-executive director of Hong Kong Securities and Futures Commission.	Committee Member	Committee Member	Committee Member	Committee Member

Board of Directors Performance Indicators

2024

4 Sessions

Number of board meeting sessions convened

35 Cases

Number of Resolutions Approved by the Board

35 Cases

Number of Presentations to the Board

9 Sessions

Number of Meetings of the Board’s Committees

26 Cases

Number of Resolutions Approved by Board’s Committees

26 Cases

Number of presentations to the Board’s Committees

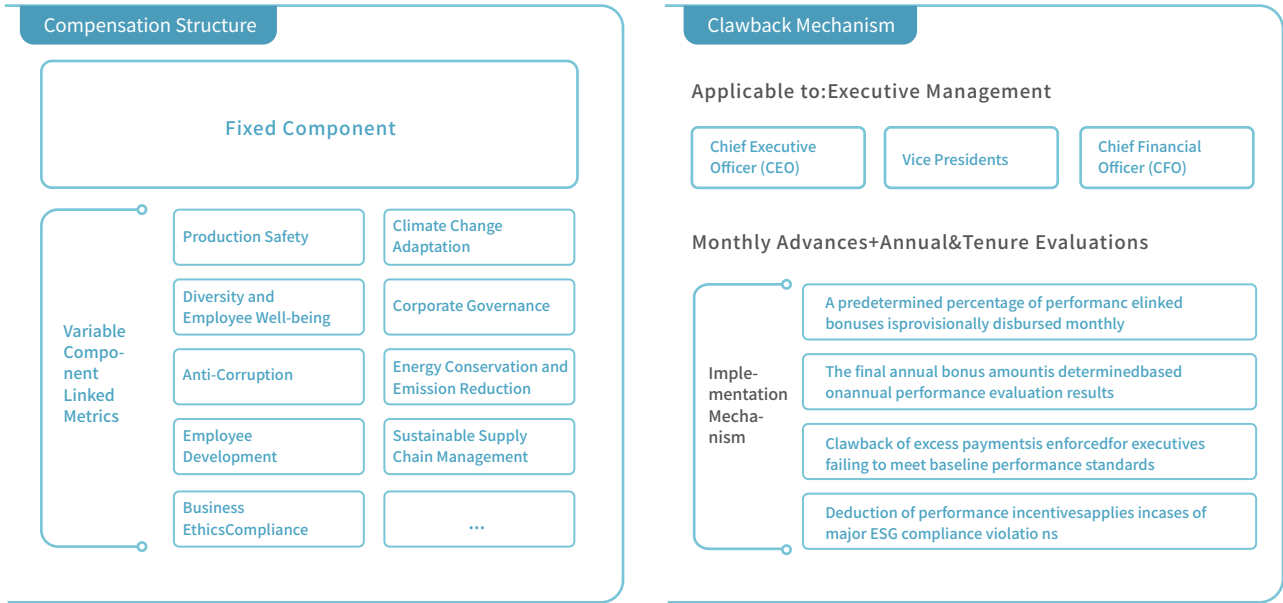


Remuneration Policy

The Remuneration Committee of Kunlun Energy is dedicated to establishing a transparent, and reasonable compensation policy framework. In formulating remuneration standards, the Company comprehensively evaluates multifaceted factors, including corporate operational performance, individual employee competencies, and daily work contributions, to incentivize directors and employees to continuously enhance their professional accountability, drive work efficiency, and fuel the Company’s sustainable development with a robust momentum.

In alignment with our commitment to sustainable development principles, the Company has fully integrated ESG metrics into the performance evaluation criteria for executive directors and senior management. These metrics encompass critical areas such as production safety, energy conservation and emission reduction, climate change adaptation, employee growth and development, diversity and employee welfare protection, sustainable supply chain development, effective corporate governance, business ethics compliance and anti-corruption initiatives. Performance evaluation outcomes are directly linked to performance-based compensation, thereby establishing a remuneration incentive model driven by sustainable principles. This framework ensures that the management and directors prioritize ESG-related responsibilities as core components of their works.

Regarding the compensation management mechanism, the Company strictly adheres to the Interim Measures for Compensation Management of Executive Management Members and the Interim Measures for Performance Evaluation of Executive Management Members. A Clawback Mechanism is rigorously implemented, under which a predetermined percentage of performance-linked bonuses is provisionally disbursed to executives monthly. Following the annual performance evaluation, the final total annual bonus is determined based on the assessment results of the evaluation. If an executive’s performance fails to meet the baseline requirements, the portion of monthly advance payments exceeding the actual entitlement is reclaimed. This mechanism reinforces the scientific rigor, and discipline inherent in the Company’s compensation governance system.



Case: Investor/analyst project visit event

In June 2024, Kunlun Energy, in collaboration with the Parent Company, organized an investor and analyst project visit event in Heilongjiang and Jilin. By inviting investors to visit and conduct research at the Company's production and operational management sites, they were able to gain an in-depth understanding of the Kunlun Energy's business processes and development prospects in a more intuitive way.



During the reporting year, the Company participated in 27 offline/online investment summits hosted by 17 securities firms and attended 76 sessions with 314 investor attendees. A total of 26 securities firms published 65 research reports on Kunlun Energy, with ratings of "Buy/Overweight/Market Outperform."

Management of Connected Transactions

As a petrochemical company operating in the midstream and downstream fields of natural gas, Kunlun Energy possesses the advantages of integrated industrial chain synergy, which substantially boosts the Company's steady development. The Company has established long-term and stable trading relationships with the industry's leading enterprises and has a good foundation for cooperation without any conflicts of interest.

Kunlun Energy has always adhered to the principles of integrity and fairness in connected transactions and followed the commercial terms. We have formulated and issued the Administrative Measures for Connected Transactions in strict accordance with the requirements of the Company Law of the People's Republic of China, the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited, and other laws and regulations to strictly regulate connected transactions in all aspects, from signing the agreements, the approval process, the cap management, the disclosure of information, and the control of the connected transactions. During the year, the Company set up a special team to thoroughly sort out and review the contracts and amounts of significant connected transactions, commissioned an independent third-party financial adviser to assess the reasonableness of the amounts of connected transactions, and issued announcements and circulars promptly to ensure that the entire process of connected transactions was operated in full compliance. In addition, the independent non-executive directors have given full play to their duties in reviewing the fairness and commercial reasonableness of the connected transactions to ensure that the connected transactions will not adversely affect the Company's operation and independence, and issued independent opinions to safeguard the interests of the minority shareholders effectively.

Regulatory Compliance

Kunlun Energy attaches great importance to compliance management. This year, the Company launched the "Compliance Management Enhancement Year" initiative, continuously improving various compliance management systems, guidelines, and instructional documents, and incorporating compliance requirements into fundamental systems and management processes. The Company has consistently strengthened compliance awareness through promotion, education, and training, while enhancing compliance management capabilities and advancing the development and improvement of the compliance management system. Kunlun Energy has also continuously reinforced the assessment and prevention of various risks, including ESG-related risks, conducted regular risk assessments and issue rectifications, and worked to establish a robust risk prevention and control system, thereby improving our overall risk mitigation capabilities.

Compliance Management System

Kunlun Energy strictly complies with the Civil Code of the People's Republic of China, the Company Law of the People's Republic of China, the Anti-Monopoly Law of the People's Republic of China, and other relevant laws and regulations, as well as the laws and regulations of the Hong Kong Special Administrative Region. The Company is continuously advancing the development and improvement of our compliance management system.

During the year, Kunlun Energy revised and improved the fundamental system of the Compliance Management Measures, formulated specialized systems such as the Compliance Review Management Measures and the License and Permit Management Measures, and developed the corporate standard of Compliance Management Monitoring Guidelines to further strengthen compliance management. The Company also continued to promote compliance management system rating and certification, using the compliance management rating and certification of our subsidiaries as a key focus to enhance the construction of compliance management systems at the subsidiary level. This effort aims to improve compliance management capabilities and lay a solid foundation for the Company to initiate overall certification.

Highlights

In the reporting year

2 subsidiaries

(Jilin and Chongqing) obtained Compliance Management System Certifications⁹

As of December 2024

3 subsidiaries

obtained Compliance Management System Certifications in total¹⁰

Compliance Management Capacity Enhancement

Kunlun Energy has consistently strengthened legal education and compliance training. The Company organized specialized training sessions on law-based compliance for management personnel at all levels, while supporting and encouraging cadres and employees to pursue qualifications such as the Legal Professional Qualification and Corporate Compliance Officer Certification. The 2024 Working Plan on Improving Legal Awareness was released, accompanied by the issuance of a compliance obligation catalog. Compliance publicity and legal education activities were conducted through diverse formats and channels, effectively enhancing the compliance awareness and capabilities of cadres and employees.

⁹ Compliance Management System Certification aligned with GB/T 35770-2022/ISO 37301:2021.

¹⁰ Three subsidiaries are Northwest, Jilin, and Chongqing company.

During the year, through systematic training and rigorous assessments, 160 key business personnel obtained Internal Auditor Certifications for Compliance Management Systems, 100 cadres and employees earned intermediate or senior Corporate Compliance Officer Certifications, and 18 in-service cadres and staff acquired Legal Professional Qualification Certificates, building a professional talent pool for the development of a law-governed enterprise. The "Legal Knowledge Lecture Series" initiative was launched, hosting three thematic seminars throughout the year that attracted 8,311 participants. To reinforce learning outcomes, the Company organized three knowledge competitions covering 1,511 employees and distributed 1,128 legal education handbooks.



Internal control and risk management

Kunlun Energy strictly adheres to the Internal Control Management Manual, which clarifies the requirements for control environment development and risk assessment and mitigation, and serves as actionable guidelines. Additionally, the Company proactively adapts to internal changes by regularly reviewing and optimizing risk management processes through annual revisions, ensuring that the mechanism remains aligned with operational realities and fortifies the risk defense framework.

In the reporting year, Kunlun Energy prioritized risk monitoring and mitigation to minimize the impact of risks. The Company implemented a quarterly risk quantification analysis model and quarterly risk reporting mechanism to systematically identify critical risks, propose response strategies, and integrated risk management with business operations, thereby providing robust support for decision-making and operational management.

In the reporting year, the Company revised and issued the following governance documents to strengthen its risk management framework including Risk Management Procedures, Internal Control & Risk Management Evaluation Measures, Investment Project Risk Assessment Guidelines. Concurrently, we optimized departmental structures and duty allocations in line with the updated organizational system. Based on the latest job descriptions, the Compliance Risk Prevention Guidelines were also updated and promulgated, providing policy support for the continuous enhancement of internal controls and risk management.

Highlights

Compared to the 2021 version of the Compliance Risk Prevention Guidelines, the revised guidelines identified 57 categories and 288 specific risk sources across 10 operational areas; it also formulated 601 preventive measures, representing an increase of 81 risk sources and 283 measures from the previous edition.

Key Performance Indicator



8,502 Persons

Number of participants in the Company's 2024 material risk assessment

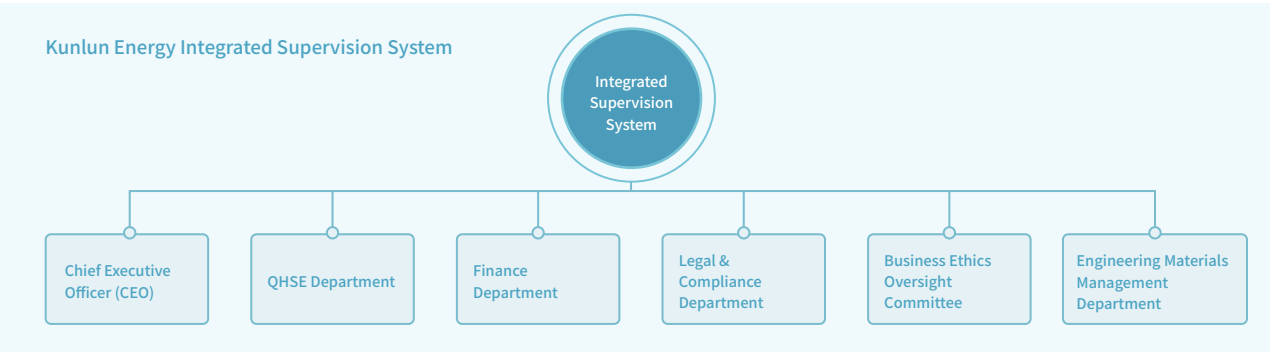
Business Ethics

Kunlun Energy has always adhered to the bottom line of business ethics, upholding the principles of trustworthiness, integrity, fairness, and impartiality in various business activities. The Company vigorously promotes the construction of a clean culture within the Company, strengthens the supervision mechanism, and strictly regulates the behavior of our employees. Simultaneously, we also put forward to the strict requirements on the behavior of our suppliers , ensuring that cooperation is lawful and compliant. The Company resolutely resists any infringement on the rights and interests of shareholders, customers, and the public. We actively utilize digital means to improve our governance level. We are committed to creating a healthy, orderly, and fair market environment that contributes to the sustainable development of the enterprise and industry.

Oversight of Business Ethics

Kunlun Energy strictly complies with the Company Law of the People's Republic of China, Supervision Law of the People's Republic of China, Prevention of Bribery Ordinance of the Hong Kong Special Administrative Region, and other relevant laws and regulations. We maintain a high-pressure regulatory stance against corruption and bribery and continuously deepen the construction of a cultural of integrity.

The Company has established an Anti-Corruption Working Group led by the Chairman of the Board, which is responsible for the overall deployment of the Company's business ethics and anti-corruption work, studying and handling major issues in anti-corruption work, and promoting the improvement of the anti-corruption system. The Business Ethics Supervision Committee and the Office of the Company are responsible for anti-corruption work, coordinating disciplinary reviews, daily supervision, and disciplinary education, focusing on the formulation of plans, supervision, guidance, inspection, and assessment. The Business Ethics Supervision Center is vertically managed by the Business Ethics Supervision Committee, highlighting the functional positioning of the specialized agency for disciplinary review and focusing on the investigation and handling of cases and special supervision. The Business Ethics Supervision Committees of subordinate units focus on fulfilling their overall supervisory responsibilities and effectively conducts ethical supervision, daily supervision, and disciplinary education.



Kunlun Energy conducts audit regularly. We carry out internal audits of provincial companies at least once every three years, and internal audits of project companies once every five years. Meanwhile, internal control tests are carried out semi-annually. Departure audits are conducted for provincial companies where cadres leave their posts each year. Project companies are randomly audited annually. Projects of Class III and above, as well as those with an investment of over 30 million yuan, are subject to comprehensive audits. In addition, special audits are carried out for key areas and major matters.

Highlights

In the reporting year, Kunlun Energy conducted 38 audit projects of various types, spot-checked 141 project companies, and reviewed 1.57 billion yuan investment in engineering and construction projects. Provincial companies performed 333 audit tasks on project companies, including 102 economic responsibility audits, 184 engineering audits, and 47 special audits.

The audits prioritized the identification of non-compliant practices in areas such as marketing, equity acquisitions, financial revenues/expenditures, fund lending, measurement losses, and executive benefits. Instances of excessive executive benefits expenditures were promptly corrected, with rectification mandated prior to personnel exit. The Company also focused on critical areas, including strict oversight of project costs to prevent overestimation, and rigorous management of illegal contracting, subcontracting, or outsourcing.

During the year, the Company revised the Implementing Rules on Improving and Perfecting the Supervision System and Promoting the Coherence and Synergy of Various Types of Supervision, improved 29 systems, established 14 long-term mechanisms, held three meetings of the Coordination Group, Integrity Building and Anti-Corruption Work, and implemented 60 special enhancement measures. We organized special actions, such as rectifying corruption in infrastructure projects and unique governance of issues violating the spirit of the eight-point decision on improving Party and government conduct of the Central Committee of the Communist Party of China (the Eight-point Regulation). 14 subsidiaries were inspected to implement the Eight-point Regulation and carry out self-examination and self-correction. Implementing the Eight-point Regulation was included in the annual integrity assessments.

The Company organized an online quiz activity themed "Learning the Regulations, Understanding the Rules." A total of 13,336 person-times of cadres at all levels in the Company participated in the quiz, achieving a 100% coverage rate.

Integrity education content is embedded in business training, and deliver special lectures on integrity education in nine training courses, including those for middle-level leaders of the Company.

Deepen the “Six Ones”¹¹ integrity education before the appointment of cadres, and implement integrity education before the appointment for 99 newly promoted and further-appointed leading cadres.



Reporting Channels

Kunlun Energy strictly cracks down on and punishes violations of the business ethics. The Company has set up multiple reporting channels, such as email and reporting mailbox addresses¹², to accept complaints and reports from internal and external stakeholders. Moreover, the Company's internal website announces an employee complaint and reporting hotline and email address to handle violations and disciplinary matters involving employees and partners.

Informant Protection

Kunlun Energy has formulated a Reporting Policy¹³, which promises to keep the informant's information strictly confidential and protect the informant from unreasonable treatment such as dismissal, demotion, suspension, harassment, discrimination, or prejudice. The Company has established a comprehensive investigation and handling process for the reported information received, including detailed and standardized steps such as clue investigation, preliminary verification, follow-up, acceptance and handling, review, and case closure to ensure timely feedback to the informant on the investigation and handling status. Once corruption is discovered, the case will be referred to the relevant regulatory authorities for further handling.

¹¹The "Six Ones" refers to "watch a integrity short film, read a integrity initiative, take a integrity oath, sign a integrity commitment, receive a integrity gift and attend a integrity Party class".

¹²For details of the reporting channels, please refer to <https://www.kunlun.com.hk/s1/n159/n181/list.html>

¹³For details of the reporting policy, please refer to https://www.kunlun.com.hk/r/s1/pdf/20221230130526431979744_tc.pdf

Integrity-Driven Supply Chain

Kunlun Energy not only strictly guards against the risk of internal corruption, but also attaches the importance to the construction of anti-corruption awareness and the behavior of suppliers and partners. The Company has formulated Management Measures for the Resource Pool of Contractors, Suppliers, and Service Providers. All suppliers (including contractors and service providers) are required to sign the Partners¹⁴Admission Commitment during the enrollment phase, and comply with the provisions of good professional ethics in the Commitment. We distribute anti-corruption training materials through offline in-person lectures and online mini-programs to conduct publicity and education on business ethics.

During the year, the signing rate of the Partners Admission Commitment and the Self-discipline Integrity Commitment for inbound suppliers was maintained at 100%.

100 %

Indicators	Unit	2023	2024
Proportion of material suppliers signing the Sunshine Purchasing Pledge	%	100	100
Proportion of material suppliers signing Social Responsibility Pledge	%	100	100

Competition and antitrust

Kunlun Energy complies with industry regulatory requirements and market operation rules, maintaining a fair and just competitive order. This year, the Company continued to strengthen and improve the antitrust compliance management by formulating the Work Plan for Strengthening Anti-Monopoly Risk Governance, issuing the Notice on Standardizing Charging Practices, and revising the Urban Gas Business Anti-Monopoly Compliance Management Guidelines and the Guidelines for Responding to Anti-Monopoly Investigation and Enforcement Actions. The Company also organized special actions to identify and rectify antitrust compliance risks, continuously standardizing and enhancing antitrust compliance management within our subsidiaries. We strictly adhere to the Prior Notification of Concentrations of Undertakings of the State Administration for Market Regulation. To ensure compliance with laws and regulations, the Company developed and issued the Guidelines for Prior Notification of Concentrations of Undertakings and the Notice on Standardizing Work Related to Prior Notification of Concentrations of Undertakings, further standardizing the prior notification of concentrations of undertakings process for our investment and acquisition projects.

From June to October 2024, the Company focused on the governance of antitrust compliance risk inspections, comprehensively carried out antitrust compliance risk point investigation and remediation actions, issued the Prompt Letter on Strengthening Antitrust Compliance Risk Prevention and Control of the Company's Gas Engineering and Value-added Business, and took measures such as on-site interviews, on-site training, one-on-one supervision, signing of commitment letters, and answering questions to implement problem and risk rectification and further eliminate antitrust risks.

Inspection Group

Provincial Branches

Project Company

Organized 10 Inspection Group

Spot-checked 29 Provincial Branches

Spot-checked 110 Project Companies

Highlights

¹⁴Partners, including engineering, materials, and service suppliers.

Information Security & Privacy Protection

Kunlun Energy adheres to the Cybersecurity Law of the People’s Republic of China, the Personal Information Protection Law (PIPL) of the People’s Republic of China, and relevant cybersecurity regulations in the jurisdictions where the Company operates. We continuously strengthens our information security management system to safeguard network and data integrity. The Cybersecurity and Informatization Leadership Group, chaired by the Chairman of the Board, serves as the decision-making body for cybersecurity and informatization strategies. Its responsibilities include formulating strategic plans for network security and informatization, coordinating critical initiatives, and reviewing performance outcomes, thereby guiding the Company’s cybersecurity and digital transformation efforts.

In strict compliance with internal policies, such as the Cybersecurity Management Regulations and Cybersecurity Emergency Response Plan, the Company sets basic requirements for employees and establishes assessment and disciplinary mechanisms. In response to the major risks to the security of the network and information systems, the Company has clearly defined the classification and grading of emergencies, delineated the emergency organizational structures and their responsibilities, established a handling process that covers information reporting, early warning, response activation, emergency handling, and response termination, and specified the emergency support teams, materials, and equipment of the Company and the subsidiaries.

Based on our customer groups, Kunlun Energy prioritizes client information security through the encrypted storage and transmission of critical data and sensitive personal information to prevent unauthorized access, implement strict access control strategies limiting data access to authorized personnel only, regular security audits to identify and remediate vulnerabilities, and robust data backup mechanisms for ensuring rapid recovery capabilities.

Key Performance

0 Cases

Cybersecurity and data incidents during the reporting period

Highlights

Information Security

- The Company has revised the Cybersecurity Management Measures and the Cybersecurity Emergency Response Plan.
- Launched a cybersecurity improvement project and completed an assessment of self-built system-level protection.
- Conducted a Cybersecurity Attack and Defense Exercise 2024.

Privacy Protection

- The online account opening process informs users of the collection of user information.
- Contracts and agreements with clients are accompanied by establishing special clauses on confidentiality or separate confidentiality agreements are established.
- Encrypting customer information and preventing it from being exported in the system through technical means.

During the year, the Company carried out a network security level protection assessment of five systems, including the Kunlun Energy Production Management System, Kunlun Energy Safety Monitoring System, Kunlun Energy Planning Program Management System, Kunlun Energy Natural Gas Sales Data Analysis System, and Kunlun Energy Liquefied Petroleum Gas Marketing Management System, with no high-risk issues.

Assessment Subject	Security Level	Rating Conclusion
Kunlun Energy Production Management System	Level 3 S3A3	Good
Kunlun Energy Safety Monitoring System	Level 2 S2A2	Good
Kunlun Energy Planning Program Management System	Level 2 S2A2	Good
Kunlun Energy Gas Sales Data Analysis System	Level 3 S3A2	Good
Kunlun Energy Liquefied Petroleum Gas Marketing Management System	Level 2 S2A2	Good



Environment

Empowering Low-Carbon Practices for Green Transformation

As a practitioner of clean energy development, Kunlun Energy responded to global climate challenges with systematic practices, and deeply integrated the idea of low carbon into the core of our development strategy and operations. Guided by the concept of "climate governance", we have improved the multi-level climate governance structure, deepened the dynamic assessment of climate risks and response strategies, and driven carbon reduction actions across the entire value chain through the scientific setting targets and quantitative indicators. Taking "clean transformation" as a breakthrough, we have accelerated the large-scale application of renewable energy, promoted the improvement of energy efficacy and process innovation, and achieved the synergistic effect of optimizing the energy structure and reducing carbon emissions. Moreover, with "Green Operation" as the foundation, we have implemented environmental management throughout the whole project cycle, strengthened ecological protection in the production process, and fulfilled our commitment to sustainable development in the areas of intensive resource utilization, pollution prevention and control, and biodiversity protection.

The materiality issues covered in this chapter:

- > Climate Risk Management
- > Waste Management
- > Greenhouse Gas Emissions Management
- > Resource Efficiency
- > New Energy Utilization
- > Ecosystem and Biodiversity Protection
- > Green Enterprise Building



Climate Change Action

With a high sense of responsibility and a mission to lead the industry, Kunlun Energy considers climate adaptation and mitigation as dual-track engines driving net-zero transformation. In 2024, the Company has taken the initiative to align itself with the International Financial Reporting Standard on Sustainable Disclosure 2 - Climate-Related Disclosure (IFRS S2) and the ESG Climate Disclosure Framework of HKEX. The Company has innovatively released the "White Paper on Climate Action (2024 Edition)", creating a four-dimensional management loop of "Governance - Strategy - Risk - Indicators." The system combines the core business scenarios of town gas, LNG processing, storage and transportation, and new energy. Through tools like climate scenario analysis and resilience path planning, it comprehensively incorporates climate elements into investment decision-making and the entire operation cycle, thus strengthening the foundation of the enterprise's climate resilience.



White Paper on Climate Action (2024 Edition)¹⁵

Climate Governance

Kunlun Energy has established a three-tier climate change governance structure with clear responsibility. A top-down management, supervision, and governance system driven by sustainable development helps the Company efficiently identify climate-related risks and opportunities, formulate and implement response plans, comprehensively reduce the impacts of climate risks, and enhance climate resilience.

> Climate Governance Framework

Kunlun Energy has established a sustainable development governance framework, with the Board serving as the highest decision-making body. The Board reviews the progress of climate management disclosure and other sustainable development issues quarterly. The Company has established the Sustainability Committee, with members of the Board as key members. The Terms of Reference of the Sustainability Committee specify the functions of the Committee to support the Board in assessing climate risks and opportunities, formulating the climate strategy and "Carbon Peaking and Carbon Neutrality" targets, and defining the response strategy and the emissions reduction path. The Sustainability Committee meets at least once a year and may be convened ad hoc when vital decisions are made regarding sustainability.

Climate strategy

The Company attaches great importance to the risks and opportunities arising from climate change. It comprehensively analyses the impact of climate factors on our business, strategy, and finances, incorporates them into our strategic considerations and top-level design, and strives to enhance our climate change resilience and ability to cope with climate change.

¹⁵ White Paper on Climate Action(2024 Edition) download link: <https://www.kunlun.com.hk/s1/n161/n301/list.html>

> Climate-related Risks and Opportunities

Kunlun Energy is advancing the integration of climate change risk management into its existing integrated risk management framework. Under the operation of the risk management mechanism where the board of directors conducts top - level planning, the management provides overall leadership, and the legal and compliance department collaborates with business departments, in accordance with the process of "Risk Identification, Risk Analysis, Risk Evaluation, Risk Mitigation, and Monitoring and Review," we comprehensively assesse the management strategies, solutions, and supervision and inspection plans for climate risks and opportunities.



Climate Risk Closed Loop Management Diagram of Kunlun Energy



List of Physical Risks of kunlun Energy

Physical Risks	Potentially Influenced Stakeholders	Potentially Influenced Value Chain Links	Potential Impact Pathways	Potential Financial Influence
Climate change has resulted in a high incidence of extreme heat weather and a long-term warming trend in global temperatures	<ul style="list-style-type: none">● Employees● End- consumers	<ul style="list-style-type: none">● Production and operation● Downstream of the supply chain	<ul style="list-style-type: none">● Decreased consumer heating demand and lower natural gas sales● Increase in temperature of equipment and facilities such as storage tanks, increasing BOG generation● Reduced condenser heat transfer efficiency, lower cooling capacity, and higher energy consumption in production● Increase in energy consumption of cooling equipment, such as air conditioners, and demand for heat-protection supplies● Impacts on the health and safety of employees, disrupting production activities or delays in the construction of the project	<ul style="list-style-type: none">● Increased operating costs● Decrease in operating income
Unusual cold events such as extreme low temperatures or cold snaps occurring	<ul style="list-style-type: none">● Suppliers● Employees● Commercial customers● End-consumers	<ul style="list-style-type: none">● Production and operation● Upstream of the supply chain● Downstream transport and distribution	<ul style="list-style-type: none">● Surge in gas demand due to heating needs, increasing pressure on upstream gas procurement and Kunlun Energy's operations and deployment● Frozen soil compresses and damages buried pipelines, increasing the risk of pipeline leakage● Freeze and blockage of pipelines or valves, increasing the risk of pipeline disruption and affecting the regular supply of natural gas to downstream commercial customers and consumers● Increased energy consumption for pipeline insulation and heating equipment to keep transport activities running due to frequent cold events● Increased risk of frostbite or accidental injury to employees due to impacts on commuting, outdoor inspection, and other activities	<ul style="list-style-type: none">● Asset impairment losses● Increased operating costs● Decrease in operating income● Rising insurance costs



List of Physical Risks of kunlun Energy

Physical Risks	Potentially Influenced Stakeholders	Potentially Influenced Value Chain Links	Potential Impact Pathways	Potential Financial Influence
Frequency of extreme precipitation or flooding events due to climate change	<ul style="list-style-type: none">• Employees• Commercial customers• End-consumers	<ul style="list-style-type: none">• Production and operation• Downstream transport and sales	<ul style="list-style-type: none">• Increase the pressure on the drainage system of production and operation sites such as field stations and terminals, resulting in operation interruption, equipment damage, affecting the safety of employees and production activities, and increasing operation and maintenance inputs• Exposure or displacement of buried pipelines due to rain or flooding can affect the safety of pipeline operations and increase the need for pipeline maintenance• Pipeline deformation or damage that interrupts natural gas supply to downstream commercial customers and consumers, affecting the ability to carry out normal business activities	<ul style="list-style-type: none">• Asset impairment losses• Increased operating costs• Decrease in operating income• Rising insurance costs
Severe weather events such as cyclones/typhoons	<ul style="list-style-type: none">• Suppliers• Employees• Commercial customers• End-consumers	<ul style="list-style-type: none">• Production and operation• Upstream transport and logistics• Downstream transport and marketing	<ul style="list-style-type: none">• Vessels were unable to dock on time, affecting the stable supply of LNG from upstream suppliers• Suspension of truck loading and fleet transport, affecting gas sales to downstream commercial customers and consumers and increasing pressure on inventories• Typhoons are prone to thunderstorms, flooding, and other weather events, which can cause voltage instability and shutdowns at LNG terminals, and power outages affecting LNG loading and gasification exports• Severe weather increases the risk of asset damage and endangers employees' lives	<ul style="list-style-type: none">• Asset impairment losses• Increased operating costs• Decrease in operating income• Rising insurance costs
Climate disasters such as sudden droughts and water scarcity	<ul style="list-style-type: none">• Commercial customers• End- consumers	<ul style="list-style-type: none">• Production and operation• Downstream sales	<ul style="list-style-type: none">• The reduction of available resources, such as recycled cooling water, affects the efficiency of production and operation, such as cooling, and indirectly affects the efficiency of sales and supply, which may result in the disruption of domestic production activities for downstream consumers and commercial users	<ul style="list-style-type: none">• Decrease in operating income
Sea level rise	<ul style="list-style-type: none">• Employees• Commercial customers• End-consumers	<ul style="list-style-type: none">• Production and operation• Downstream sales	<ul style="list-style-type: none">• Sea water back-ups flood production operations in coastal areas, disrupting operations and affecting gas supply to downstream commercial customers and consumers• Seawater corrodes facilities and equipment, affecting production safety and equipment longevity and increasing investment in operations and maintenance	<ul style="list-style-type: none">• Asset impairment losses• Increased operating costs• Decrease in operating income

List of Transition Risks of kunlun Energy

Transition Risks	Potentially Influenced Stakeholders	Potentially Influenced Value Chain Links	Potential Impact Pathways	Potential Financial Influence
Policy				
National energy structure	<ul style="list-style-type: none">• Government and regulatory bodies	<ul style="list-style-type: none">• Downstream sales	<ul style="list-style-type: none">• The country is facing the energy structure transformation, with the proportion of clean energy gradually increasing. The growth space for the share of fossil energy in the energy structure is limited, which will affect the long-term revenues of natural gas and LPG-related business	<ul style="list-style-type: none">• Decrease in operating income
Carbon market mechanisms	<ul style="list-style-type: none">• Government and regulatory bodies	<ul style="list-style-type: none">• Production and operation	<ul style="list-style-type: none">• The country is gradually expanding the coverage of the carbon market mechanism and setting carbon emission quotas for key emission units. Carbon emission trading will become more market-oriented in the future. Kunlun Energy may explore participation in the carbon market. Still, we will need to invest additional workforce and financial costs to carry out carbon inventory, quota purchase and trading, and the allocation of carbon commissioners	<ul style="list-style-type: none">• Increased operating costs
Technology				
High-carbon or energy-in- tensive equipment	<ul style="list-style-type: none">• Government and regulatory bodies	<ul style="list-style-type: none">• Production and operation	<ul style="list-style-type: none">• The development of energy-saving and low-carbon technologies will accelerate the replacement of major energy-consuming equipment, and Kunlun Energy's original high-carbon emission and energy-consuming equipment and assets (e.g., oil-fired transport trucks and vessels, fuel oil or gas refueling and compression equipment, etc.) may be subject to early decommissioning or disposal	<ul style="list-style-type: none">• Asset impairment losses• Increase in operating costs
Methane monitoring and emission reduction technology	<ul style="list-style-type: none">• Public organizations, and industry associations• Government and regulatory Institutions	<ul style="list-style-type: none">• Production and operation	<ul style="list-style-type: none">• Public methane data collection and monitoring technologies continue to evolve, potentially exposing methane emissions from natural gas projects to more stringent external regulatory and review pressures, and Kunlun Energy will need to advance the research, development, and application of methane monitoring and emission reduction technologies to strengthen methane emissions management	<ul style="list-style-type: none">• Increased operating costs
Renewable energy technologies	<ul style="list-style-type: none">• End consumers• Commercial customers	<ul style="list-style-type: none">• Downstream sales	<ul style="list-style-type: none">• Renewable energy costs will likely decrease with the maturity of renewable energy technologies (e.g., biomass gas, solar, wind, hydrogen, etc.). The market demand for new energy sources will increase, leading to a decrease in the demand for traditional energy sources such as natural gas, LNG, LPG, etc	<ul style="list-style-type: none">• Decrease in operating income

List of Transition Risks of kunlun Energy

Transition Risks	Potentially Influenced Stakeholders	Potentially Influenced Value Chain Links	Potential Impact Pathways	Potential Financial Influence
Market				
International gas markets	<ul style="list-style-type: none">Suppliers	<ul style="list-style-type: none">Upstream procurement	<ul style="list-style-type: none">The price of natural gas in the international market is affected by temperature, economy, geopolitics, energy policies of various countries, and other factors. Kunlun Energy is in the middle and lower reaches of the natural gas industry chain, and higher prices of upstream natural gas may adversely affect the Company's gross purchasing and sales margins and profitability	<ul style="list-style-type: none">Increase in product costs
Reputation				
Stakeholder requirements for climate risk disclosure	<ul style="list-style-type: none">Government and regulatory bodiesShareholders and investors	<ul style="list-style-type: none">Direct operation	<ul style="list-style-type: none">Regulatory requirements for public disclosure of climate risks are becoming increasingly stringent, and non-compliant disclosures and inappropriate climate performance may damage corporate reputationsInvestors are increasingly emphasizing a company's ability to identify and manage climate-related risks, and a failure to impact climate risk directly may be detrimental to a company's access to finance	<ul style="list-style-type: none">Decreased access to financingIncreased credit risk

List of Transition Opportunities of Kunlun Energy

Transition Opportunities	Potentially Influenced Stakeholders	Potentially Influenced Value Chain Links	Potential Impact Pathways	Potential Financial Influence
Policy				
National energy structure	<ul style="list-style-type: none">Government and regulatory bodies	<ul style="list-style-type: none">Downstream sales	<ul style="list-style-type: none">Natural gas plays a prominent role in promoting national clean energy transformation and ensuring energy security. In the short to medium term, natural gas consumption may show an upward trend under the guidance of policies, which will favor continued the sustainable growth growth in the natural gas businessIncreasing the proportion of non-fossil energy is the long-term path of national energy structure transformation. Kunlun Energy's new energy business covers distributed photovoltaic, wind power, integrated energy, and other types of new energy, which will usher in growth opportunities under the impetus of the national energy transformation policyDuring the gradual transition phase of increasing the proportion of non-fossil energy, the increase in the proportion of new energy power generation may affect the stability of the power grid, and Kunlun Energy's natural gas power generation business can play the role of peak and frequency regulation, thus gaining opportunities for business development	<ul style="list-style-type: none">Increase in operating income

List of Transition Opportunities of Kunlun Energy

Transition Opportunities	Potentially Influenced Stakeholders	Potentially Influenced Value Chain Links	Potential Impact Pathways	Potential Financial Influence
Green financial policies	<ul style="list-style-type: none">Government and regulatory bodies	<ul style="list-style-type: none">Direct operations	<ul style="list-style-type: none">Kunlun Energy's development of natural gas power generation and new energy projects can help promote the low-carbon transformation of the society, which is in line with the national green financial policy guidance and can be funded through green financing or refinancing	<ul style="list-style-type: none">Increased access to financing
Technology				
Usage of low-carbon energy	<ul style="list-style-type: none">Kunlun Energy	<ul style="list-style-type: none">Production and operation	<ul style="list-style-type: none">Installing distributed photovoltaics and replacing new energy vehicles will increase the proportion of new energy consumption, which will help reduce greenhouse gas emissions and save on purchased electricity and carbon compliance transaction costs	<ul style="list-style-type: none">Reduced operating costs
Clean production transformation	<ul style="list-style-type: none">Kunlun Energy	<ul style="list-style-type: none">Production and operation	<ul style="list-style-type: none">Introducing and applying low-carbon and energy-efficient processes and equipment (e.g., improved filling and compression processes, replacement of energy-intensive compressors, etc.) can improve operational efficiency and reduce resource consumption costs	<ul style="list-style-type: none">Reduced operating costs
Digital management system	<ul style="list-style-type: none">Kunlun EnergyEmployees	<ul style="list-style-type: none">Production and operation	<ul style="list-style-type: none">Applying digital technology and building systems such as intelligent pipeline networks and smart stations can help identify production and operation links with high energy consumption and emissions promptly and take improvement measures to avoid methane leakage and energy wastage, improve production and management efficiency, and reduce operational workforce costs	<ul style="list-style-type: none">Reduced operating costs
Market				
Voluntary emission reductions and carbon assets	<ul style="list-style-type: none">Government and regulatory bodiesOther enterprises	<ul style="list-style-type: none">Downstream sales	<ul style="list-style-type: none">With the restart of the Chinese Certified Emission Reduction (CCER) mechanism, Kunlun Energy can develop carbon assets based on the relevant voluntary emission reduction methodologies and trade them in the voluntary carbon market in the future, which will bring in other business income	<ul style="list-style-type: none">Increase in operating income
Reputation				
Industry and public concerns	<ul style="list-style-type: none">Commercial customersShareholders and investors	<ul style="list-style-type: none">Downstream sales	<ul style="list-style-type: none">Strives to be a leader in low-carbon development in the industry while ensuring a safe and stable supply of natural gas, which can create a good brand image, enhance the Company's reputation, and attract more customers and investors	<ul style="list-style-type: none">Decreased access to financeDecrease in credit risk

Climate Risk Management

In 2024, Kunlun Energy conducted the identification and assessment of climate-related risks and opportunities across the operational processes and value chain based on a comprehensive climate risk management framework. Furthermore, leveraging climate scenario analysis, the Company assessed material risk exposures of physical risks. We also conducted a quantitative analysis of the impacts of future carbon pricing systems and market changes under different scenarios, as well as the impacts of future demand changes in the natural gas business under different scenarios, so as to assess the effectiveness of our existing climate-related response strategies. Meanwhile, the Company continuously strengthened the "adaptation" and "mitigation" capabilities in climate risk management.

> Physical Risk

Materiality Assessment

Based on the results of risk research, Kunlun Energy identified seven acute entity risks and six chronic physical risks this year. Among them, extreme heat, extreme precipitation, and floods were judged as highly material physical risks.

Matrix for Assessing the Materiality of Physical Risks to Kunlun Energy



Scenario Analysis

To accurately identify and assess the impacts of climate hazards under climate change, Kunlun Energy conducted a physical risk analysis based on the Shared Socioeconomic Pathways proposed in the Intergovernmental Panel on Climate Change's Sixth Assessment Report. Specifically, we adopted SSP2-4.5 (medium-low emission scenario) and SSP5-8.5 (high emission scenario), integrating domestic climate hazard data and geographic distribution to establish the following key assumptions.

- Assuming that internal factors (such as core business operations, asset scale, and risk mitigation measures) remain unchanged, we analyzed the specific climate risks faced by the held assets under varying hazard levels across scenarios.
- Owing to data availability constraints, we measured the potential financial impacts of physical risks solely through asset value, excluding operational disruptions/efficiency losses or other mechanisms.

Risk Analysis

Scenario analysis revealed that Kunlun Energy and its subsidiaries primarily face risks from extreme precipitation and river flooding, whereas extreme heat is projected to escalate to high-risk levels under long-term high-emission scenarios. A quantitative assessment of these three major risks was conducted by business segment and geographic distribution.

- Extreme Heat:** The proportion of business-related assets exposed to high risks will increase over time. Taking the natural gas business as an example in the low-emission scenario, in the future, the related assets in the regions south of the Qinling Mountain-Huaihe River will be more vulnerable to the impacts of extreme high temperatures at high-risk levels.
- Extreme Precipitation:** The scale of assets potentially affected by extreme precipitation shows an upward trend, although the impact severity remains uncertain. Taking the natural gas business as an example in the low-emission scenario, in the future, the related assets in coastal areas will be more vulnerable to the impacts of extreme precipitation at high-risk levels.
- River Flooding:** Financial loss simulations and quantification indicate that subsidiaries in Jilin, Hainan, Sichuan, and Jiangsu may incur greater potential financial losses than those in other regions.

Additionally, Kunlun Energy analyzed the impact of temperature increases on annual natural gas sales. Lower winter temperatures were correlated with higher gas sales in Northern and Northwestern China. Higher summer temperatures were correlated with increased gas sales in Southern China (excluding Hunan, Hubei, and Zhejiang).

Response Strategies

Kunlun Energy has deployed strategies for addressing physical risks from four major aspects, namely, enhancing the climate resilience of facilities and equipment, strengthening energy conservation and emission reduction to mitigate climate impacts, closely monitoring and providing early warnings for the occurrence of climate risk events, and filing in advance and conducting drills to accelerate the emergency restoration of supply. For high-materiality risks and high-risk regions, the Company prioritizes targeted risk prevention measures.

Case: Hainan branch: Fight against super typhoon, build energy supply lifeline

In September 2024, the super typhoon "Yagi" swept through Hainan. The Hainan branch of the Company established an emergency task force in advance and organized the safety and production units to conduct a thorough inspectipn of 13 stations, achieving 100% rectification of potential risks and hazards. The production dispatching accurately allocated resource reserves, and an additional 3 LNG tank trucks were dispatched to ensure the industrial gas supply in Qionghai. A dual gas source supply was activated to defuse the risk of gas supply interruption in Wenchang and Danzhou.

During the landing of typhoon, the leadership team was in front of the station, all the staff strictly performed 24-hour duty, and the dispatching center stood firm in the environment of power outage and disconnection to ensure the smooth flow of information. After the disaster, the resumption of work and production was promptly initiated, including the clearance of fallen trees, emergency repairs of equipment at the LNG terminal, and the resumption of gas supply at the CNG main station. Within one week, all 13 stations fully resumed operation, and there were zero casualties among employees and their families. Also, 300,000 residential customers did not experience large-scale gas outages, and gas supply to the 3,456 households affected by the gas outage resumed within 48 hours.

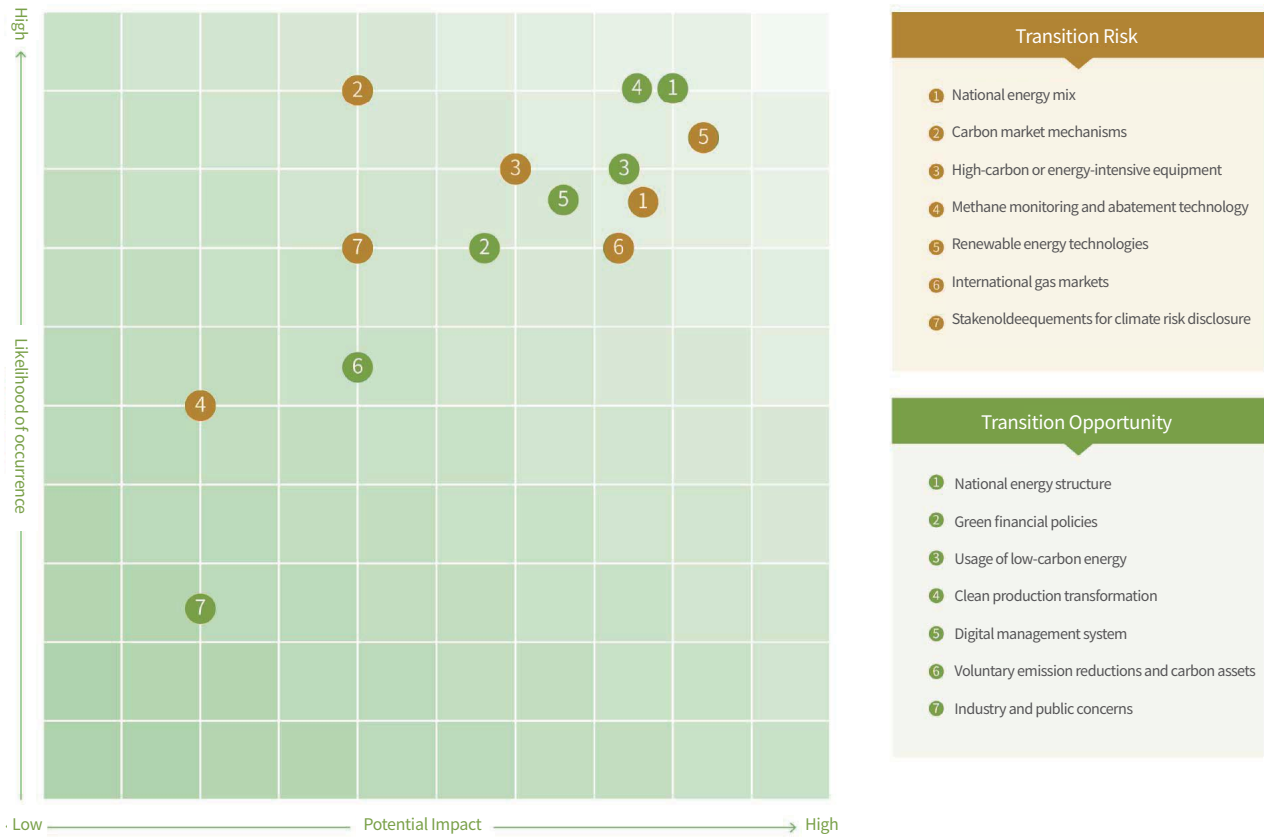


Transition Risk

Materiality Assessment

Based on the results of risk survey, Kunlun Energy identified seven transition risks this year, of which the likelihood of occurrence and potential impact of the national energy structure transition, high-carbon or high-energy-consuming equipment, renewable energy technology, and the international natural gas market were somewhat higher than those of other risks.

Matrix for Assessing the Materiality of Transition Risks to Kunlun Energy



Scenario Analysis

Kunlun Energy selected the Net Zero Emissions by 2050 scenario (low-emission scenario), Announced Pledges Scenario (medium-emission scenario), and Stated Policies Scenario (high-emission scenario) from the World Energy Outlook released by International Energy Agency (IEA) to analyze risks and opportunities under varying external transition pressures. The following key assumptions were established:

- During the scenario analysis timeframe, government carbon tax policies and carbon market mechanisms were fully effective and operational.
- Kunlun Energy's operational markets and core business remain the same.
- Kunlun Energy strictly executes carbon reduction actions according to the existing decarbonization roadmap.

Risk Analysis

The scenario analysis of transition risks focuses on potential carbon cost risks arising from carbon emission trading under policy-driven scenarios. The results indicate that if Kunlun Energy does not implement additional carbon reduction measures, the Company is projected to incur potential incremental carbon abatement costs starting in 2036 (low-emission scenario) and 2044 (medium-emission scenario). If Kunlun Energy adheres to the current decarbonization roadmap, the Company will face minimal carbon cost risks in all scenarios.



Response Strategies

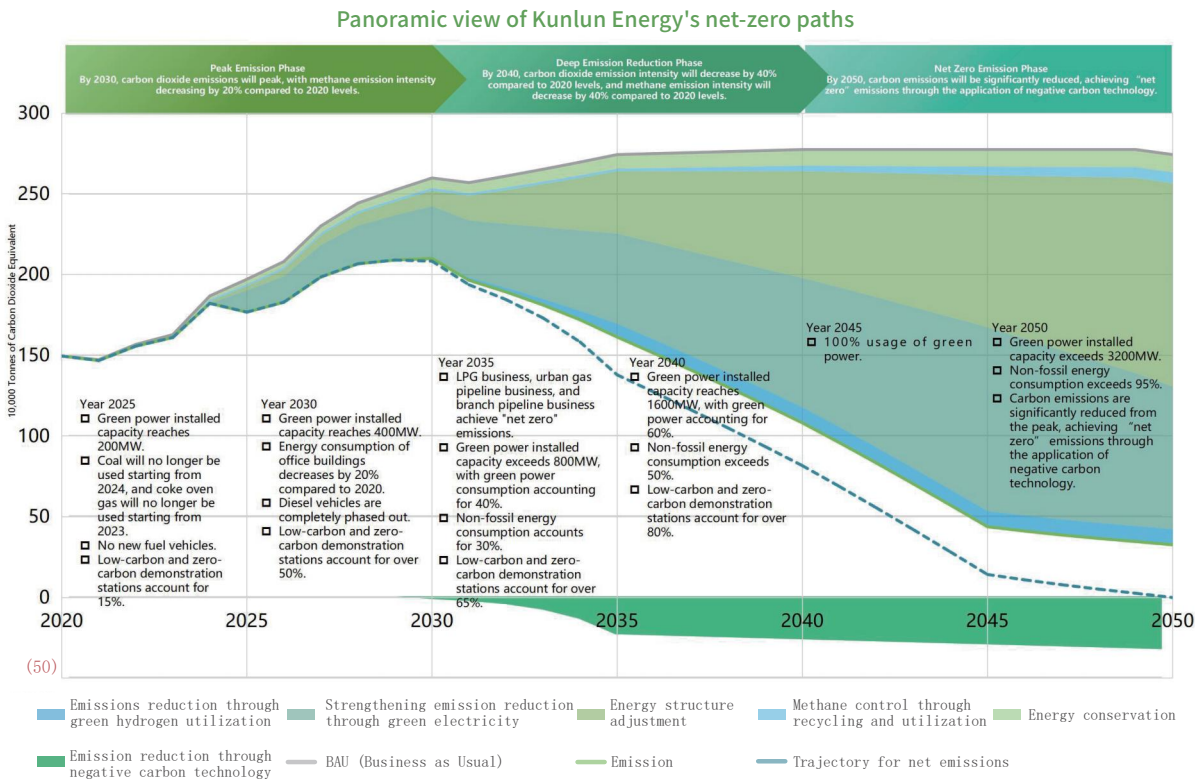
In the operational process, diverse measures such as adjusting the energy structure, controlling methane emissions, and introducing digital and intelligent technologies are adopted to expand the potential for energy conservation and efficiency improvement. In terms of organizational management, strengthen management resilience by refining climate change and emission reduction systems and closely tracking external policies and market trends. Advancing the net-zero transition pathway to mitigate the impacts of increasingly stringent regulations.

Indicators and Targets

Kunlun Energy, as one of the largest natural gas terminal retail suppliers in China, is fully committed to implementing the national "Carbon Peaking and Carbon Neutrality" target and adhering to the path of green and low-carbon development. In 2024, the Company actively formulated targets for achieving carbon peak and carbon neutrality as well as emission reduction paths. We also continuously paid attention to our own progress in greenhouse gas emissions, tracked the gap between actual emissions and the target pathway, and monitored the effectiveness of emission reduction efforts. The Company comprehensively promoted the implementation of the "Carbon Peaking and Carbon Neutrality" goals and accelerated the green transformation.

Carbon Peaking and Carbon Neutrality Targets

Kunlun Energy has set the overall goal of "achieving peak carbon emissions by 2030 and 'net-zero' emissions by 2050", striving to achieve peak carbon emissions ahead of schedule by 2027. We will take the lead in achieving "net-zero" emissions in our LPG, city gas pipeline network, and branch pipeline businesses by 2035.



*The calculation is in reference to "China Oil and Gas Producing Enterprises Greenhouse Gas Emission Accounting Methodology and Reporting Guidelines (for Trial Implementation)" emission factors.

Greenhouse gas emission

Kunlun Energy takes carbon dioxide emissions and methane emissions as the main indicators for the carbon peak and carbon neutrality targets and tracks them in detail year by year to ensure the solid and effective implementation of the Company's greenhouse gas emission reduction measures.

Carbon Dioxide emissions

Target 2024	≤154.30	10,000 tonnes	Target Achieved
Progress 2024	144.99	10,000 tonnes	

Methane emissions

Target 2024	≤0.75	10,000 tonnes	Target Achieved
Progress 2024	0.69	10,000 tonnes	

In 2024, we achieved our carbon dioxide and methane emission reduction targets, formulated and implemented the Greenhouse Gas Emission Accounting Guidelines, standardized the accounting methodology of our Scope 1 and Scope 2 greenhouse gas, and continued to improve quality of our greenhouse gas emission data.

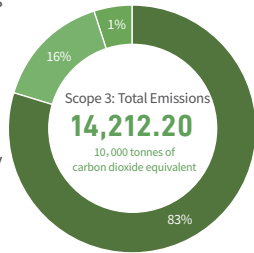
Kunlun Energy 2024 Greenhouse Gas Emissions

Indicators	Unit	2022	2023	2024
Total GHG Emissions (Scope 1+Scope 2)	Tonnes of CO ₂ e	1,556,814	1,618,370	1,594,055
Total GHG Emission Intensity (by gas sales) ¹⁶	Tonnes of CO ₂ e/10,000 cubic meters	0.346	0.328	0.294
Total GHG Emission Intensity (by revenue)	Tonnes of CO ₂ e/ten thousand yuan in revenue	0.091	0.093	0.085
Direct GHG emissions (Scope 1) ¹⁷	Tonnes of CO ₂ e	460,708	373,839	489,665
Direct GHG emission intensity (Scope 1)	Tonnes of CO ₂ e/10,000 cubic meters	0.10	0.08	0.09
Indirect GHG emissions (Scope 2) ¹⁸	Tonnes of CO ₂ e	1,096,106	1,094,381	1,104,390
Indirect GHG emission intensity (Scope 2)	Tonnes of CO ₂ e/10,000 cubic meters	0.24	0.22	0.20

Scope 3 Emissions Disclosure

Kunlun Energy proactively demonstrates the carbon management capabilities across the entire value chain. In response to IFRS S2 disclosure requirements, the Company has expanded the annual reporting of Scope 1 and Scope 2 greenhouse gas (GHG) emissions by disclosing Scope 3 GHG emissions¹⁹ for the first time in the 2023 White Paper on Climate Action. This Scope 3 carbon inventory aligns with the GHG Protocol: Corporate Accounting and Reporting Standard, referencing the Corporate Value Chain (Scope 3) Accounting and Reporting Standard and the Technical Guidance for Calculating Scope 3 Emissions. It covers 9 Scope 3 categories in Kunlun Energy's upstream and downstream value chain, such as the upstream production of raw materials and energy, the transportation of purchased and resold goods, and waste disposal.

Kunlun Energy recognizes the significant impact of energy products on Category 1 (Purchased Goods and Services) and Category 11 (Use of Sold Products). Moving forward, the Company will collaborate with value chain partners to conduct third-party lifecycle assessment (LCA) studies, enhancing the accuracy and traceability of emissions data.



class	Unit	emission volume	Percentage
Category 1 Purchased goods and services	tCO ₂ e	22,792,451	16.04%
Category 2 Capital Goods	tCO ₂ e	184,381	0.13%
Category 3 Fuel- and Energy-Related Activities	tCO ₂ e	176,235	0.12%
Category 4 Upstream Transportation and Distribution	tCO ₂ e	82,793	0.06%
Category 5 Waste Generated in Operations	tCO ₂ e	5,084	0.00%
Category 6 Business Travel	tCO ₂ e	2,725	0.00%
Category 7 Employee Commuting	tCO ₂ e	10,927	0.01%
Category 9 Downstream Transportation and Distribution	tCO ₂ e	602,602	0.42%
Category 11 Use of Sold Products	tCO ₂ e	118,264,841	83.21%
Total	tCO ₂ e	142,122,040	100.00%

¹⁶Total GHG Emission Intensity(by gas sales) (tonnes of carbon dioxide equivalent per 10,000 cubic meters) = GHG Emissions (Scope 1+ Scope 2) / Natural Gas Sales; Total GHG Emission Intensity (by revenue) (tonnes of carbon dioxide equivalent / ten thousand yuan in revenue) = GHG Emissions (Scope 1 + Scope 2)/Revenue.

¹⁷Direct GHG emissions (Scope 1) include greenhouse gas emissions from the Company's consumption of petrol, diesel, natural gas and liquefied petroleum gas. The calculation of the above Scope 1 GHG emissions is based on the emission factors in the "Guidelines on Greenhouse Gas Emission Accounting Methodology and Reporting for China's Oil and Gas Producing Enterprises (for Trial Implementation)".

¹⁸Indirect GHG emissions (Scope 2) include emissions from the Company's purchased electricity and purchased steam. The calculation of the above Scope 1 greenhouse gas emissions is in reference to "China Oil and Gas Producing Enterprises Greenhouse Gas Emission Accounting Methodology and Reporting Guidelines (for Trial Implementation)" emission factors.

¹⁹Corporate Value Chain GHG Emissions (Scope 3) encompass emissions from both upstream and downstream activities. The calculation of Scope 3 emissions combines the industry-average method and financial expenditure method to ensure comprehensive quantification.

Highlights

Green Low-Carbon Transformation

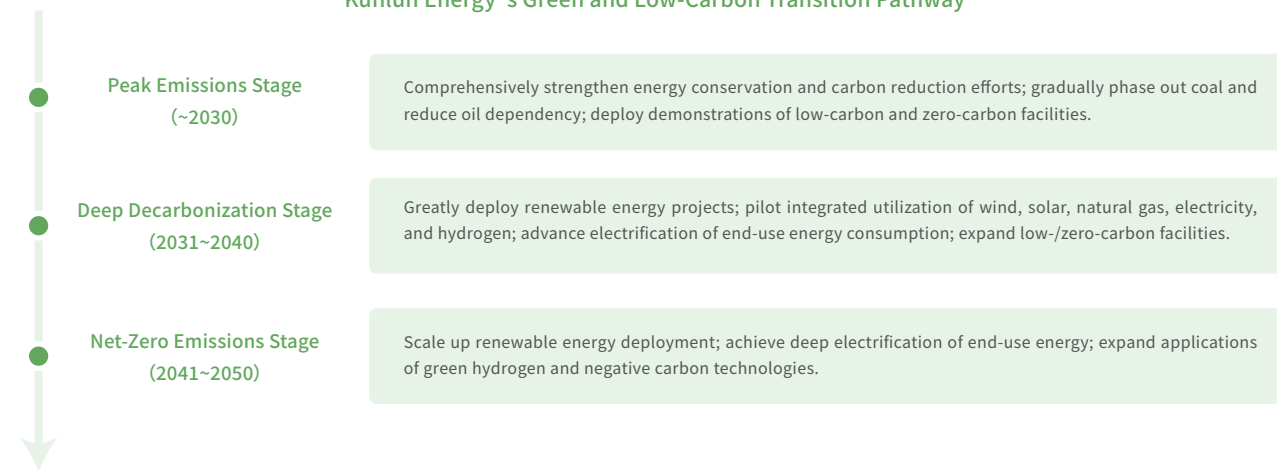
Kunlun Energy is leading the charge in ecological civilization by building a clean, low-carbon, secure, and efficient modern energy system. We are accelerating the deployment of new energy projects and implementing integrated energy solutions while driving progress in cleaner production, methane emission control, and zero-carbon scenario development. This transformation from a traditional energy provider to a comprehensive energy services partner pioneers a new green development pathway, delivering strong momentum for sustainable growth across the industry.



Action Plan Towards Carbon Peaking and Carbon Neutrality (2024 Edition)²⁰

Promoting green and low-carbon transitions and developing new growth areas in green industries are pivotal to achieving high-quality development. Kunlun Energy has integrated green and low-carbon principles into the overarching development strategy and the 14th Five-Year Plan, aligning with the Parent Company's three-step green transition pathway of "Clean Replacement, Strategic Succession, and Green Transformation." The Company synergistically advances carbon reduction, pollution control, green expansion, and sustainable growth, actively and prudently progressing toward carbon peaking and carbon neutrality.

Kunlun Energy's Green and Low-Carbon Transition Pathway

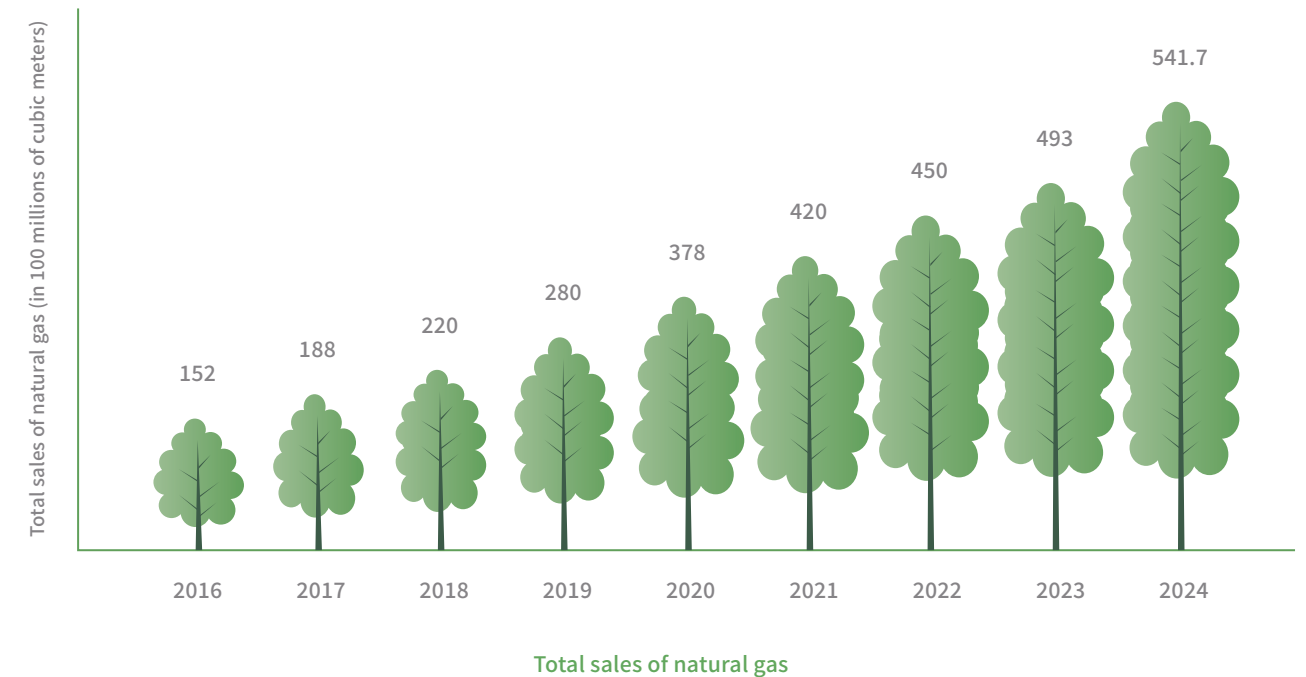


Clean Energy Utilization

Kunlun Energy actively advances the green transition by leveraging internal and external resource advantages to harness natural gas as a transitional energy source, alternative energy source, and relatively clean fossil energy. The Company realizes the integrated development of natural gas and new energy sources to maximize value. In 2024, Kunlun Energy made joint efforts in multiple projects across the three major sectors of new energy layout, resource reserve, and energy reserve. The Company revised the Market Development Management Measures for Gas-Fired Power and New Energy and the Production and Operation Management Measures for Gas-Fired Power and New Energy, solidifying the foundation for a comprehensive and clean energy portfolio.

> Natural Gas Development and Utilization

Kunlun Energy is committed to providing all users with safe, stable, green energy, and high-quality, efficient customer services. Total natural gas sales have increased from 15.2 billion cubic meters in 2016 to 54.17 billion cubic meters in 2024, with a cumulative natural gas sales volume of approximately 312.3 billion cubic meters, which is equivalent to the substitution of 415 million tonnes of standard coal, and has actively contributed to the transformation of the national energy structure.



²⁰Action Plan Towards Carbon Peaking and Carbon Neutrality (2024 Edition) download link: <https://www.kunlun.com.hk/s1/n161/n301/list.html>

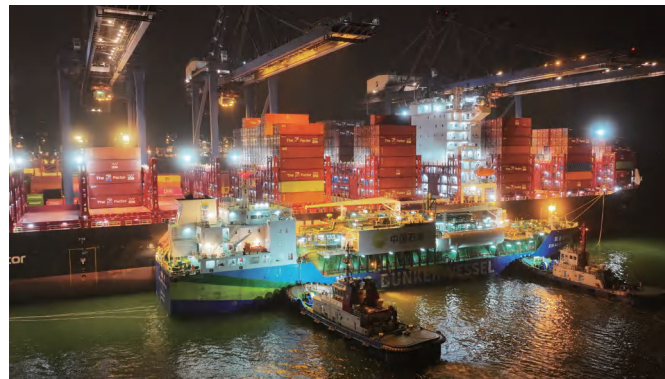
LNG Bunkering for Vessels

Compared to traditional diesel fuel, LNG bunkering reduces carbon dioxide emissions and pollutants, such as sulfides and nitrogen oxides, advancing the low-carbon transition of the shipping industry. Kunlun Energy is committed to building an International Bonded LNG Bunkering Center through rigorous vessel management, optimized safety management and control systems, and global market expansion, injecting green momentum into enhancing the international competitiveness of China's clean energy-bunkering brand.

In 2024, Kunlun Energy has completed 65 vessel bunkering operations with a total volume of 110,000 tonnes of maritime LNG, capturing over 90% of Shenzhen Port's market share and consolidating our position as the second largest international vessel bunkering service provider in China.

Case: Progress of International Ship LNG Refueling Business

In February 2024, Shenzhen Bunkering Company (Kunlun Energy's subsidiary) refueled at the Diefu Receiving Terminal and conducted regular bonded bunkering operations at the Zhoushan Qushan Anchorage, achieving a cross-customs direct supply model. In June 2024, Shenzhen Bunkering Company accomplished the first simultaneous bunkering of two vessels at the same port in Yantian Port, further strengthening the Yantian Port's comprehensive competitiveness as an international shipping hub.



> Promoting New Energy Projects

Kunlun Energy actively embraces the opportunities of energy transition by leveraging its natural gas resources and terminal advantages. The company continues to deepen collaboration with power enterprises and grid operators, strengthens internal coordination, and focuses on securing new energy quotas. It is proactively planning and deploying new energy projects, vigorously promoting the clean replacement of its own energy consumption, and increasing the proportion of green energy usage. Concurrently, Kunlun Energy is advancing the construction of infrastructure such as new energy charging stations to support green and low-carbon development.

2024

**560** MWCumulative Clean Energy
procured by the Company**6** ProjectsApproved Equity Participation
in Gas-fired Power Project**7.89** million kWhClean Energy Power
Generation**4.05** billion kWhEquity-accounted Power
Generation**33** projectsNewly Commissioned
Distributed PV Projects**119.27** million kWhRenewable Energy Certificate
(REC) Procurement Volume

Highlights

On-Site Photovoltaic Development

Kunlun Energy accelerates clean energy substitution projects at our facilities. For projects suitable for new energy integration, the Company ensures the coordinated planning of new energy initiatives with main projects, achieving simultaneous design, approval, and construction if applicable. By progressively increasing the "self-generation and self-consumption" ratio of distributed photovoltaic systems and adopting solar-powered video surveillance for transmission lines, the Company enhances clean energy utilization and reduces carbon emissions. As of the end of 2024, the Company distributed 56 photovoltaic projects at owned facilities and one rooftop photovoltaic project at a third-party facility with a total installed capacity of 13.5 MW, an annual power generation of 7.89 million kWh, and an annual CO₂ reduction of 4,233.77 tonnes.



New Energy Charging Stations

Kunlun Energy continuously promotes the infrastructure construction of new energy charging stations. We innovate the model of a comprehensive new energy service station integrating green energy, intelligent energy storage, and fast charging, known as the "Photovoltaic-Storage-Charging" (PV-Storage-Charging) model. By doing so, we lead the high-quality development of charging infrastructure and builds a green mobility ecosystem featuring "ultra-fast charging + zero carbon emissions".

Case: Integrated PV-Storage-Charging Service Station

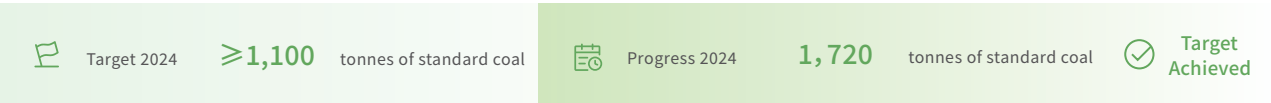
Kunlun Energy integrates green technologies such as the new energy microgrid system, microgrid transformer substation, and super liquid cooling terminals to develop a PV-storage-charging comprehensive new energy service station. The station is equipped with 30 Direct Current (DC) charging terminals, including the first super liquid cooling charging terminal in Hainan with a maximum power of 480 kilowatts. It can fully charge a new energy vehicle in within 5 minutes only at the fastest speed.



Promoting Energy Conservation and Carbon Reduction

To promote energy conservation, emission reduction, quality improvement, and efficiency enhancement, Kunlun Energy has formulated and implemented the “14th Five-Year Plan for Energy Conservation”, thoroughly implemented cleaner production, established a normalized energy conservation diagnosis and cleaner production audit mechanism, focused on promoting energy-efficient equipment and clean production technologies, integrated the application of new materials and technologies, continuously optimized the carbon reduction path, and continued to explore emission reduction potential. Simultaneously, methane emission control has been strengthened, and a whole-process management system covering monitoring, early warning, and governance has been established. In the field of zero-carbon demonstration construction, special scenarios such as multi-energy complementarity and cold-energy utilization have been created.

Energy Conservation



Kunlun Energy's 2024 Energy Consumption

Indicator (Unit)		2022	2023	2024
Total Energy Consumption (MWh) ²¹		2,832,199.58	2,889,323.85	3,159,286.64
Energy Consumption Intensity (MWh/10,000 cubic meters) ²²		0.63	0.59	0.58
Direct Energy Consumption	Gasoline (Tonnes)	3,753	4,223	4,077
	Diesel (Tonnes)	498	875	881
	Natural Gas (10,000 cubic meters)	10,167	11,378	11,879
	LPG (Tonnes)	112	82	23.18
	Total Direct Energy Consumption (MWh)	1,153,658.64	1,186,925.58	1,345,161.05
Direct Energy Consumption Intensity (MWh/10,000 cubic meters)		0.26	0.24	0.25
Indirect Energy Consumption	Purchased Electricity (MWh)	1,676,668.04	1,689,893.58	1,814,125.50
	Purchased Steam (MWh)	1,872.95	12,504.68	10,864.89
Total Indirect Energy Consumption (MWh)		1,678,540.95	1,702,398.26	1,824,990.39
Indirect Energy Consumption Intensity (MWh/10,000 cubic meters)		0.37	0.35	0.34

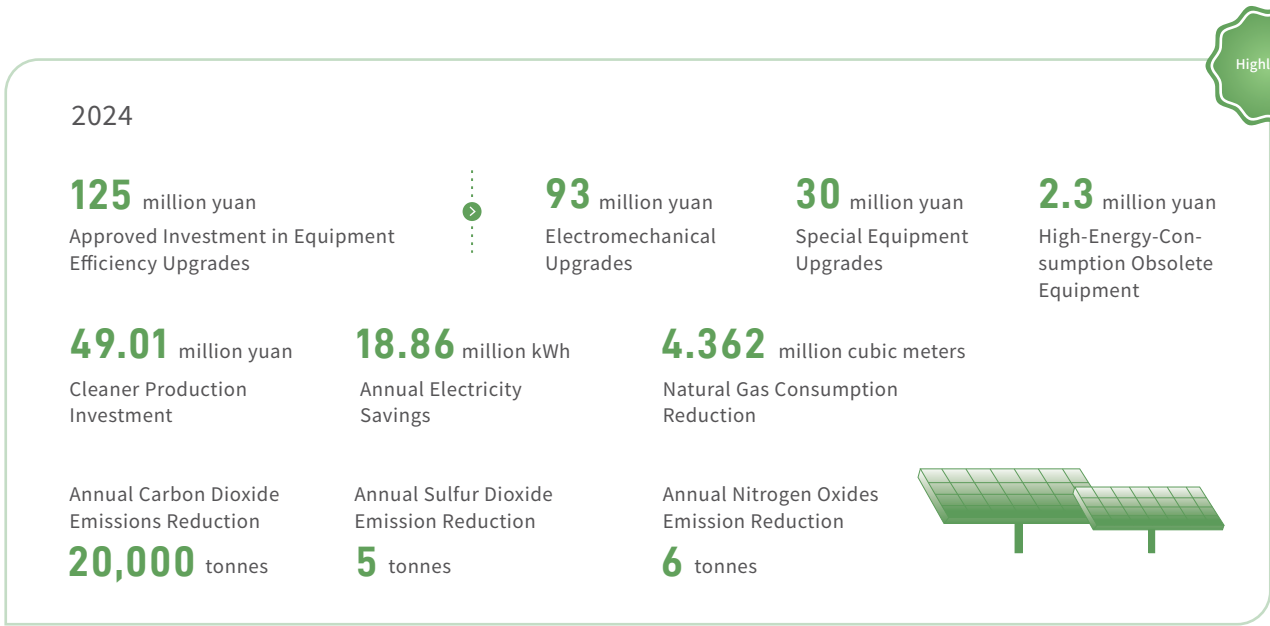
²¹The data for total energy consumption (MWh) is calculated using the relevant conversion factors from the General Rules for Calculating Comprehensive Energy Consumption (GB/T 2589-2020) published by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China and the Standardization Administration of China.

²²Energy consumption intensity (MWh/10,000 cubic meters) = Total energy consumption/Natural gas sales



> In-depth Implementation of Clean Production

Through the advancement of renewable energy development, increased electrification, implementation of clean production audits, and formulation of clean production plans, we have explored multiple approaches and measures to tap into the potential for emission reduction. We are actively promoting energy and resource emission reduction initiatives and the application of energy-saving technologies, integrating the concept of low-carbon development into practical operations. Projects such as wind power, photovoltaic power generation, and differential pressure power generation are being actively advanced. High-efficiency electric heating equipment, high-efficiency heat pumps, solar thermal and thermal storage technologies are being further applied, while waste heat and energy utilization technologies are ongoing research. As of the end of 2024, the Company has conducted clean production audits for two LNG receiving terminals and 11 LNG plants, proposing 107 clean production measures with significant results achieved..



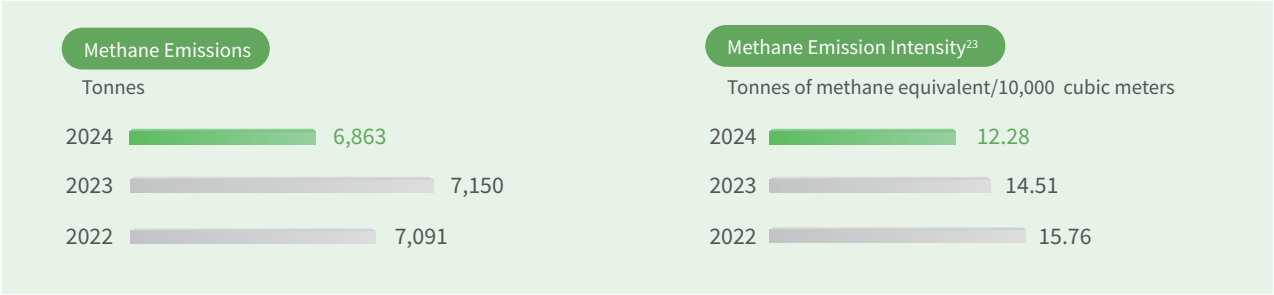
Case: Guang'an LNG Plant: Creating a Municipal-level Green Factory

Sichuan Company's Guang'an LNG plant has implemented the Interim Measures for the Gradient Cultivation and Management of Green Factories, constructed a green manufacturing system, and passed greenhouse gas emission verification and product carbon footprint analysis. The plant has achieved reductions in carbon dioxide and nitrogen oxide emissions through technical transformation measures such as the green transformation for infrastructure, iterative upgrades of green processes, and independently developing replacements for high-energy-consuming equipment, and has been awarded the title of municipal-level green factory.

> Actively Control Methane Emissions

Kunlun Energy is committed to methane emission reduction efforts by fully methane leak detection and mitigation equipment and facilities, ensuring comprehensive coverage of combustible gas alarm systems, and actively introducing advanced technologies such as pan-tilt laser methane monitoring robots. In response to the national methane emission control action plan, the Company issued the Methane Emission Control Action Plan, strengthening target management and advancing emission reduction projects. These efforts have successfully achieved the goal of a 3% year-on-year reduction in methane emission intensity.

Kunlun Energy's 2024 Methane Emission



Kunlun Energy is constantly improving the construction of the methane emission reduction as well as management and control system. Based on the pilot LDAR projects at the Jingtang LNG Receiving Station and Tai'an LNG Plant, we are gradually promoting methane leak detection and repair work. We have actively introduced professional methods to improve the accuracy of methane detection, enhance the efficiency of leak detection and repair, and persist in exploring and developing a methane leak detection and repair database.

Highlights

Methane leak detection technology

- 1 Introduction of ppb-level vehicle-mounted detection technology: By equipping the detection vehicle with a Beidou high-precision module and using big data algorithms to determine the type of leaked gas, a detection accuracy of 1 ppb level can be achieved. It can quickly locate the leak point within a range of 150 meters through the analysis of wind speed and direction and improve the average responding speed by 10-20 seconds, which represent great advantages in detection accuracy, efficiency and comprehensive effect. ;
- 2 Upgrade the natural gas leak monitoring system: Supplement and upgrade the pan-tilt scanning Volatile Organic Compounds (VOCs) gas infrared imaging leak detector, high-altitude observation camera, and pan-tilt scanning laser methane leak concentration detector to improve real-time early warning capability. This enab real-time collection and monitoring of combustible gas concentrations in the factory area. Through the collection and analysis of big data, it can effectively evaluate and provide safety early warnings for major hazard sources, key locations, and key parts of the factory with regard to the risk of natural gas leaks, to achieve factory-wide monitoring without blind spots.
- 3 The "Space-Air-Ground Integrated Network" Patrol Model: This model integrates technological measures such as drone patrols and video surveillance with human patrols to establish a five-in-one interactive monitoring and patrol system combining "high-level video surveillance, low-level blind spot coverage, drone patrols, manual inspections, and accompanying optical cables." This approach enables the timely, comprehensive collection, transmission, and storage of environmental status data surrounding pipelines.

In 2024, **320** million cubic meters of methane emissions will be reduced through the BOG²⁴recovery process and enhanced process control and management.

²³Methane emission intensity (tonnes of methane equivalent/100 million cubic meters) = methane emissions/natural gas sales.

²⁴BOG is the LNG boil-off gas that is inevitably produced during the production, storage and use of LNG.

Kunlun Energy fulfills the duties as a member of the China Oil and Gas Methane Alliance, participates in methane emissions control and management cooperation, and undertakes research on methane emissions from urban gas. In 2024, Kunlun Energy actively participated in the Alliance's seminars on methane emissions reduction and experience - sharing meetings on methane emissions reduction, discussing advanced industry practices and fully exchanging experiences and insights. The Company organized the collection of 17 green and low-carbon papers for the exchange activities, and 10 of them were awarded.

> Creating a Zero Carbon Demonstration Model

Based on its business characteristics, Kunlun Energy has tapped into the potential for emission reduction. We give full play to the role of new energy, digital intelligence, and market mechanisms, and has constructed an innovative system of “distributed photovoltaics + organic waste treatment + BOG recycling.” The Company promotes the construction of clean energy and simultaneously implements projects such as LNG tanker waste gas recovery and kitchen waste recycling, thereby reducing methane emissions and enhancing the capacity of biological carbon sequestration. Kunlun Energy takes the lead in exploring the creation of a zero-carbon demonstration benchmark, driving green and low-carbon development in the industry.

Case: The Shengli Gate Station of Yinchuan Company in Ningxia - the first station to obtain the "carbon neutrality" certification, leading the green energy transition



The Shengli Natural Gas Gate Station of the Yinchuan Company in Ningxia has successfully certified as a "carbon neutral" station, becoming the first energy station in Ningxia to achieve carbon neutrality. During the station renovation, the company laid 129.44 square meters of photovoltaic panels on the roof and open space. These panels generate 37,900 kWh of green electricity annually, replacing the use of traditional energy sources and meeting the electricity needs of the production and intelligent systems. This measure reduces carbon emissions by 25.28 tonnes annually, significantly improving the level of low-carbon and intelligence. Simultaneously, energy-saving technologies such as remote pressure adjustment, pilot valve heating, and inspection robots have been introduced to optimize energy-efficiency management and reduce the operational carbon footprint.



Green Enterprise Initiative

Kunlun Energy deeply integrates environmental protection into the entire process of enterprise development. We systematically promote the in-depth integration of ESG and business through the synergy of the three dimensions of source prevention and control of engineering environmental management, process optimization of production and operation, and endpoint conservation of ecosystems. In 2024, the Company issued the Green Enterprise Creation and Enhancement Programme, together with the Green Unit Recognition Specification and Four Types of Green Stations (Teams) Recognition Specification, thereby establishing a "2+1+4" green enterprise management model. This further strengthened the systematic management according to business type. The indicators for green enterprise creation were integrated into the "Safety and Environmental Protection Responsibility Letter" for annual evaluation. Throughout the year, the attainment rate of Grade B in green enterprise creation exceeded 97%. Through the endeavor of green enterprise creation, the Company has comprehensively advanced undertakings such as zero-carbon procurement, the development of clean energy, energy conservation, pollution abatement, carbon reduction, and green production and operation.

Kunlun Energy has established and obtained certification for the GB/T24001 (ISO 14001) Environmental Management System. The Company has set up a QHSE Committee as the leadership and decision-making body for environmental management, responsible for overseeing and coordinating the Company's ecological and environmental protection efforts. The Committee defines the responsibilities of management departments and supervisory bodies at all levels and promotes system management through measures such as system audits and environmental protection assistance inspections.



Kunlun Energy’s Environmental Management System Certificate

Engineering Environmental Management

Kunlun Energy strictly abides by the national ecological and environmental regulatory system, incorporates the concept of green engineering into the whole-life cycle environmental management. Relying on environmental management requirements such as green site selection, green construction, and green acceptance, we minimize construction disturbances and precisely control pollution. Through the systematic implementation of ecological restoration projects, we establish a resilient ecological foundation, and promote the continuous improvement of the service functions of the ecosystem.

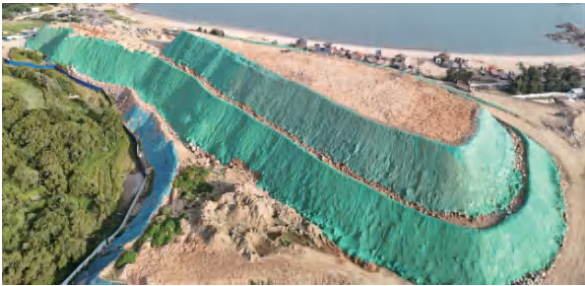
> Green Site Selection and Design

Kunlun Energy attaches great importance of environmentally friendly and green operations in the site selection process. In 2024, we revised and issued the Administrative Measures for Engineering Construction Projects and the Administrative Procedures for the Preliminary Design of Engineering Construction Projects. We established pre-control management for the approval of environmental impact reports and soil and water conservation plans, and strictly implemented the “three simultaneous” system for environmental protection facilities, forming a closed-loop management system of “environmental impact assessment constraints-design response-construction implementation.” During the construction phase, we strictly adhered to the red lines of vegetarian protection and soil and water conservation. During the design phase, environmental sensitive areas such as water sources and nature reserves are avoided, and location-specific strategies are adopted to minimize environmental impact. Construction activities are scheduled to avoid harvest seasons and flood periods. Dedicated construction access routes are built, and construction sites, including areas for project development, vehicle movement, and material storage, are carefully planned to prevent unnecessary occupation and impact on additional land resources. Simultaneously, we actively planned and carried out the construction of distributed photovoltaic power generation facilities based on site conditions and promoted the model of “self-generation for self-use, with remaining power sold to the grid.”

Case: Fujian LNG Receiving Terminal Project: Implementing ecological priorities and creating a green energy hub



In the construction of the supporting export pipeline for the Fujian LNG Receiving Terminal Project, the initial design route was shortened to 93.29 kilometers through repeated optimization of the design plan, avoiding the Fuqing Dongzhang Reservoir Bird Nature Reserve and reducing the impact on ecologically sensitive areas. During construction, the width of the forest operation zone was strictly compressed to 22 meters, saving 22.44 hectares of forest land, and refined measures such as topsoil stratification and stripping and landform restoration were implemented to ensure vegetation reclamation. During the construction phase of the receiving station, 36 trees within the site area were transplanted and protected, and the original sheepfold was relocated. Meanwhile, soil and water conservation projects such as topsoil stripping, slag retaining walls, and drainage ditches were carried out in tandem. An integrated ecological protection system encompassing construction, restoration, and management and maintenance was established.



> Green Construction

Kunlun Energy abides strictly by national laws and regulations. We have formulated the Environmental Protection Management Guidance Manual, Civilized Construction Management Guidance Manual, Special Operation Management Guidance Manual and Regulations on the Preparation of High-quality Development Reports for Construction Projects to enhance the capability of green and civilized construction. The Company promotes green procurement by giving priority to the purchase of energy-efficient, environmentally friendly, and low-carbon materials and supplies, and encourages the application of renewable packaging materials. We comprehensively improve the management system of green and civilized construction in multiple dimensions.

Green Assembly


We actively promote prefabrication and modular construction in factories and have clarified the overall requirements for the modular construction of key specialties, such as steel structures, equipment installation, pipelines, buildings and structures, and electrical instruments, to maximize the efficiency and sustainability of construction projects. For example, we consider the “threaded connection, high-position back-hung meter + external electromagnetic shut-off valve”; the traditional solution had 12 threaded ports, whereas the optimized solution had six, representing a 50% reduction in the number of interfaces. Modular construction reduces potential environmental and noise pollution caused by on-site construction, minimizes waste generation and energy consumption at the construction site, and mitigates damage to the natural environment by pre-manufacturing and assembling building components in the factory. This approach aims to maximize the efficiency and sustainability of construction projects.

Noise Management

We strictly control noise pollution during the construction of engineering projects. During the environmental impact assessment stage, the Company strictly assesses the impact of noise pollution, proposes prevention and control measures, and designs the project in accordance with the noise control measures proposed in the environmental impact assessment stage. During the construction stage, enclosed machinery sheds are set up for machines with strong noises, such as electric saws, planers, and grinders, on the construction site to reduce the spread of loud noises. Simultaneously, environmental protection education for employees is strengthened to prevent unnecessary noise. When the project is in operation, we strictly implement noise prevention and control measures simultaneously with the main project. Noise monitoring is conducted on noise pollution sources in accordance with relevant regulatory requirements and is included in the scope of ecological and environmental hazard investigation, and rectification is carried out for identified problems.


> Green Acceptance and Restoration

Kunlun Energy attaches great importance to green concepts, such as construction protection, ecological restoration, and long-term management, formulated the Management Measures for the Completion and Acceptance of Construction Projects. After completion, ecological restoration, such as systematic topsoil backfilling and replanting of suitable plants, is implemented, and a dynamic monitoring and species rescue mechanism for biodiversity is established simultaneously. Through standardized and refined ecological management, harmonious coexistence of project construction and the natural environment is realized.




System Construction

Strengthen the management of construction personnel, enhance awareness campaigns on wildlife protection, establish a dynamic biodiversity monitoring and species rescue mechanism, and implement standardized and refined ecological management practices.



Vegetation Protection

Preserve arable soil in construction areas as much as possible. For permanently occupied land and temporarily used farmland during construction, collect and store topsoil for future use. Replant vegetation with plant species adapted to the local ecological environment and carry out land reclamation and restoration for agricultural use.



Soil and Water Conservation

Implement measures such as converting slopes into terraces to reduce runoff velocity, constructing diversion ditches and sedimentation ponds, and repairing drainage systems. Combine these efforts with soil stabilization techniques using plant root systems to achieve effective soil and water conservation. Emphasize water environment protection to prevent eutrophication in local water bodies and minimize impacts on aquatic habitats.

Green Production and Operation

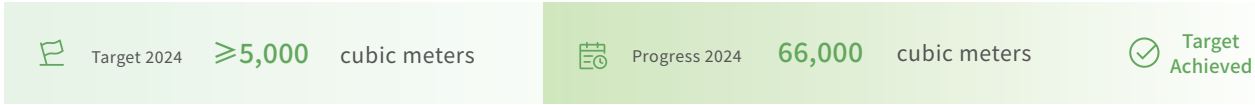
Kunlun Energy adopts a full-lifecycle environmental management approach as the strategic anchor, integrating the concept of green and low-carbon development into every aspect of our production and operation. The Company implements a wide range of measures, including energy conservation and carbon reduction, improving measurement systems, enhancing equipment efficiency, optimizing processes, strengthening operation and maintenance, and introducing clean energy. Management efforts have been intensified in environmental protection and efficient resource utilization. Over the year, a total of 342 special meetings on ecological and environmental protection were held to ensure the effective operation of the environmental management system.

> Water Management

Kunlun Energy has established a comprehensive water abstraction and conservation system. The Company's water supply is mainly from municipal supplies , also including a small portion of groundwater collected through self-built wells. For groundwater collection, Kunlun Energy has obtained a formal water-abstraction license from the relevant authorities and conducted water quality tests in strict accordance with legal requirements.

The Company strictly decomposes the Decomposition Table of Energy and Water Conservation Indicators for 2024 and Management Measures for Advanced Selection of Energy and Water Conservation issued at the beginning of 2024, and incorporates water conservation indicators into the performance contract of prominent leaders to solidify the primary responsibility. Relying on refined statistical management, we achieved 100% of timely, accurate and complete monthly data reporting rates, providing solid support for scientific decision-making.

Water Savings

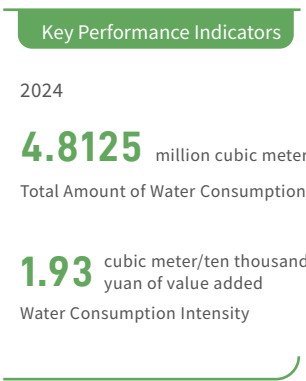


> Waste Management

Kunlun Energy attaches great importance to waste water, waste gas and other waste discharge management; we strictly abides by laws and regulations, such as the Environmental Protection Law of the People's Republic of China, the Water Pollution Prevention and Control Law of the People's Republic of China, the Air Pollution Prevention and Control Law of the People's Republic of China, the Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Wastes, and the Law of the People's Republic of China on the Prevention and Control of Radioactive Pollution. The Company actively promotes measures such as the high-energy-consumption motor elimination plan, circulating water process optimization, technological management innovation, and resource recycling to effectively reduce the emission production intensity. The Company continues to deepen the standardized management of wastewater, waste gas, and solid waste and carries out emissions disposal in accordance with laws and regulations.

Highlights

Regularly carry out special ecological protection actions, focusing on promoting special investigations and remediation in the whole process control of the Yangtze River and Yellow River basins/discharge permits/atmospheric pollution sources/solid waste, environmental impact assessments for construction projects and soil and water conservation filings, comprehensive VOCs management, etc., to effectively ensure that pollution sources and pollutant emissions are under controlled management.



Wastewater Disposal

We have strengthened the compliance management and comprehensive utilization of wastewater. In addition to recycling and reusing a portion of industrial wastewater, we entrust third-party organizations to handle wastewater in accordance with legal and regulatory requirements, ensuring that the discharge of domestic and industrial wastewater meets national standards. Meanwhile, we have intensified efforts in water recycling technology. By optimizing the dosing of circulating water treatment chemicals and enhancing reclaimed water reuse systems, we have reduced annual wastewater generation by 81,000 cubic meters.



Case: Guangyuan LNG Plant of Sichuan Company Circulating Water System Renovation

Sichuan Company's Guangyuan LNG plant has reduced tap water hardness by replacing the original water pump with a high-efficiency energy-saving pump and introducing a water softening device, and has reduced the volume of waste water and the amount of water required for replenishment by installing online water quality monitoring and an automatic dosing and drainage system. After the renovation, the operating efficiency of the circulating water pump increased from 69% to 78%. In 2024, the plant achieved a year-on-year water reduction of 28,700 cubic meters, generating cost savings of 110,000 yuan.

Kunlun Energy's 2024 Wastewater Discharge and Recycling

Industrial Wastewater Discharge

10,000 cubic meters

2024 21

2023 22

2022 35

Domestic Wastewater Discharge

10,000 cubic meters

2024 102

2023 84

2022 84

Industrial Wastewater Recycling

10,000 cubic meters

2024 3.3

2023 6.8

2022 6.0

Domestic Wastewater Discharge

10,000 cubic meters

2024 4.8

2023 1.9

2022 1.9

Exhaust Gas Disposal

Kunlun Energy attaches great importance to the management and control of exhaust gas. Each year, we formulate work plans for the tackling of air pollution prevention and control, and pollutant emission reduction plans, clarifying the target tasks and specific measures for key pollution prevention and control. Strict safeguards have been implemented to actively and effectively promote air pollution detections and preventions.

Highlights

- By the end of 2024, the Company has completed the transformation of 225 low-nitrogen boilers, achieving low-nitrogen emissions of boiler pollutants;
- Carried out special inspections in the Yangtze River and Yellow River basins, and implemented dynamic tracking and management of 338 atmospheric emission outlets;
- Dynamically updated the pollution source inventory and risk prevention and control measures to continuously deepen pollution source monitoring and management;
- Strengthened the control of mobile sources such as diesel vehicles and non-road mobile machinery, and promoted the use of clean fuels;
- Strengthened the management of pollutants from construction projects, adopt measures such as contractual restrictions and process supervision, and strengthened supervision of relevant parties;
- Construction sites are required to strictly implement measures such as surrounding the construction site with fences, covering material stockpiles, wet excavation, hardening of road surfaces, cleaning of vehicles entering and leaving the site, and enclosed transportation of muck vehicles. Waste was disposed of in accordance with the law.
- Energy conservation assessments and carbon emission assessments for construction projects are actively promoted, scientific and green designs are enhanced, and energy consumption and exhaust gas production are reduced.

Kunlun Energy attaches great importance to pollution control and environmental protection during project construction. We actively carry out special investigations and remediation of ecological hazards, environmental protection assistance, the Yangtze River and Yellow River basins, pollutant discharge permits, air pollution sources, solid waste whole-process control, construction project environmental impact assessments, soil and water conservation filings, and VOCs to ensure that pollution sources and pollutant emissions are under controlled management.

Sulfur Dioxide Emissions



Target 2024

≤22

tonnes



Target Achieved



Progress 2024

19.9

tonnes

Nitrogen Oxide Emission



Target 2024

≤228

tonnes



Target Achieved



Progress 2024

205

tonnes

Kunlun Energy's 2024 Exhaust Emissions

Sulfur Dioxide Emissions

Tonnes

2024 19.9

2023 20.0

2022 18.2

Nitrogen Oxide Emissions

Tonnes

2024 205

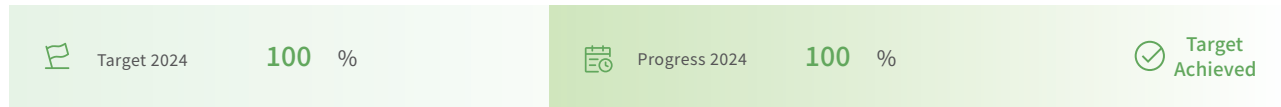
2023 400

2022 452

Solid Waste Disposal

Kunlun Energy attaches great importance to the prevention and control of solid waste pollution, especially hazardous waste, and strictly abides by the National Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Wastes. In 2024, we carried out whole-process control and verification of solid waste to ensure that the entire process of solid waste generation and disposal is under control and that all solid waste is disposed of in accordance with the law. We also pilot the promotion of recycling of organic waste and the implementation of kitchen waste biochemical fertilizer projects. For hazardous waste, such as molecular sieves, filter cartridges, and compressor lubricant waste, we strictly abide by national laws and regulations and entrust qualified institutions to handle it safely. Construction and demolition waste and domestic waste are transported to designated locations for disposal in accordance with relevant regulations.

Waste Disposal Rate

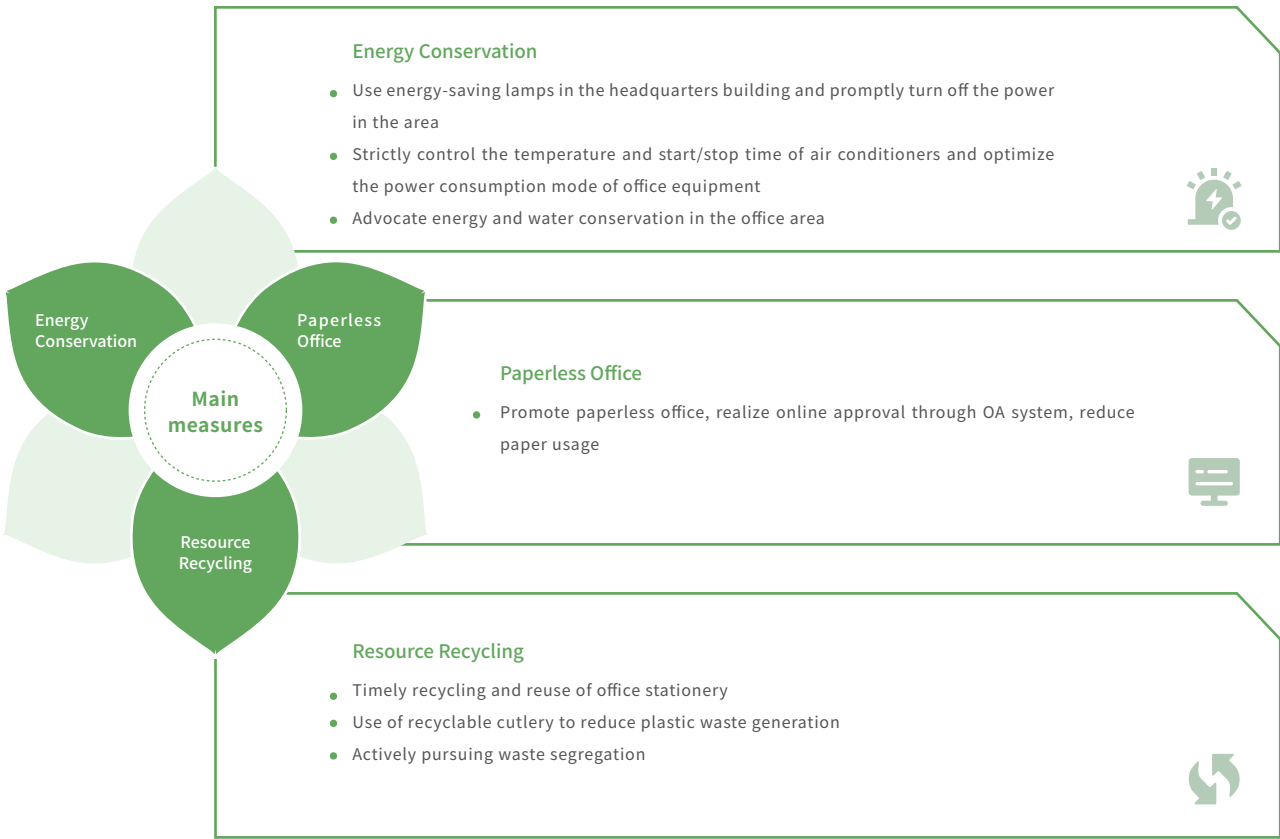


Kunlun Energy's 2024 Waste Management Performance



> Office Environment Management

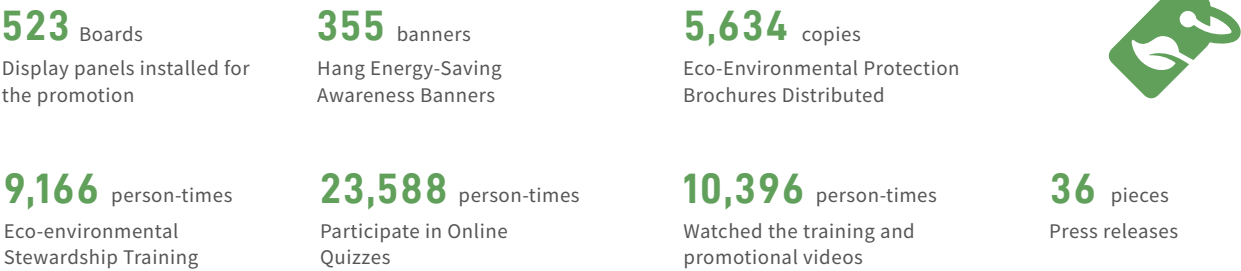
Kunlun Energy integrates the concept of green environmental protection into our daily operations, implements several resource and energy-saving and waste reduction measures, and continuously increases green office publicity, guiding our employees to establish energy-saving and low-carbon awareness utilizing internal publicity and posting of slogans.



Increased Environmental Awareness

To strengthen employees' awareness of low-carbon and environmental protection, the Company has implemented measures such as conducting regular specialized training sessions and placing water and electricity conservation signs in office areas. Over 30,000 participants have engaged in environmental protection training and competitions, including topics like "Corporate Green and Low-Carbon Practices" and "CCER," integrating environmental protection concepts into employees' daily work and lives.

During National Environment Day and Ecology Day, the Company established a "multi-dimensional communication matrix" with the following initiatives:



Targeting environmental management professionals at all levels, the company has prioritized leadership capability enhancement by delivering advanced training programs—including Scope 3 carbon accounting and carbon sink forestry management—taught by industry experts. Through this initiative, 89 environmental managers have systematically mastered policy tools and practical skills, while 105 employees obtained professional certifications in greenhouse gas (GHG) accounting and emissions trading. This comprehensive upskilling has significantly elevated the organization's carbon management expertise.

Biodiversity Conservation

Kunlun Energy adheres to the principle of "Development through Conservation, Conservation through Development", systematically integrating biodiversity protection into daily production operations. The company proactively implements precautionary measures to mitigate potential ecosystem impacts, continuously enhances biodiversity conservation performance, and remains committed to fostering harmonious coexistence between humanity and nature.

> Innovative Creation of the Protection Model

Biodiversity is the material foundation for human survival and sustainable development. Kunlun Energy combines the requirements of the Parent Company's Opinions on the Construction of Self-contributed Biodiversity Conservation Areas, and constructs demonstration sites for self-contributed biodiversity conservation areas in accordance with the identification principles of OECMs.

Case: Construction of a demonstration site for a self-contributing biodiversity conservation area



On the National Ecology Day in 2024, Kunlun Energy established the “Wenfeng Egret Habitat,” a self-contributing biodiversity conservation site, at the LNG storage facility in Chengmai, Hainan, which is one of the Parent Company's top ten self-contributing biodiversity conservation sites. The Company conducted a background survey in conjunction with Hainan University and discovered more than 230 species of wild plants and animals in the 125,000-square-meter operating area, including one plant species near threatened on the IUCN Red List, one national second-level protected animal, and 11 national second-level protected birds.

The project focuses on “nature-based solutions” and has constructed a three-dimensional protection system that “emphasizes more protection and less renovation”: ecological corridors have been opened up to ensure the migration of amphibians and mammals; seabird rookeries have been set up to optimize the foraging environment; and a regularized management mechanism of “volunteer patrols + intelligent monitoring” has been established.



> Continuously Promote Environmental Protection for Public Interest

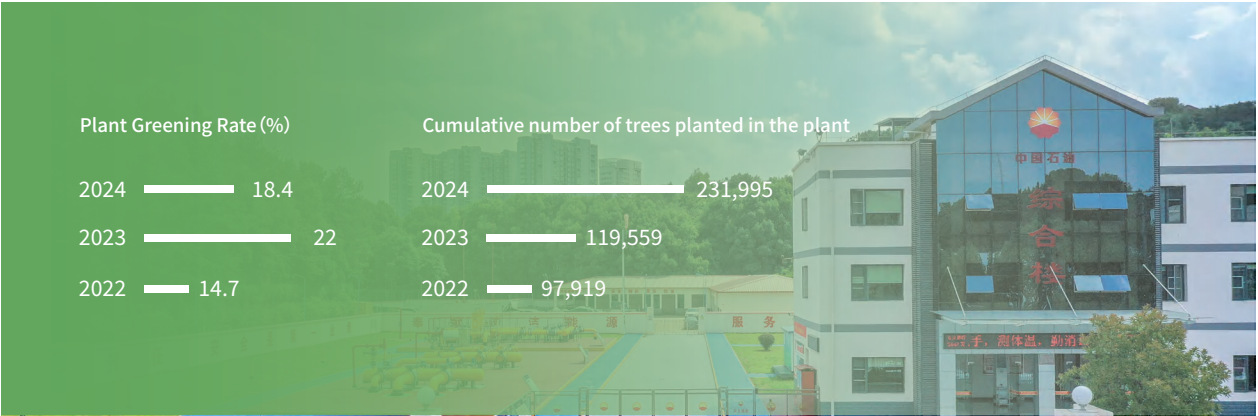
Kunlun Energy has carried out various public welfare activities, such as voluntary tree planting, and continues to exert a sustainable influence, striving to achieve harmonious coexistence between humans and nature as well as symbiotic coexistence between the economy and the environment.

In 2024, Kunlun Energy organized and participated in the “I'll Plant a Tree for Carbon Neutrality” event, actively carrying out voluntary tree-planting activities through a combination of online and offline methods, such as on-site tree planting, voluntary service, nature conservation, and tree adoption. The employee participation rate exceeded 75%, with a donation of 596 thousand yuan, 20,184 trees planted on site, and 86,177 trees planted through other forms, such as donations for maintenance. Simultaneously, the Company has

strengthened the greening of the factory area and formulated a special plan. We intend to achieve full greening of all the self-owned land plots suitable for afforestation by 2026, thus contributing to the construction of a harmonious and beautiful ecological city.



Progress of Greening the Plant of Kunlun Energy in 2024



Case: Creating a Peaceful Paradise for Birds



Kunlun Energy's Chongqing subsidiary organized a themed activity titled “Building a Green Home Together, Creating a Peaceful Paradise for Birds” with the goal of protecting birds and improving the ecological environment. The subsidiary organized employees to use environmentally friendly materials to make bird nests, which were installed on trees to provide a safe breeding place for birds. Hunan Xiangloushao subsidiary has incorporated regular bird rescue into its line patrol work. In areas with frequent bird activity, the situation around facilities such as power transmission lines and iron towers are observed. Once injured birds are found, the line patrol staff will immediately contact the relevant rescue units to initiate the rescue process to ensure that the birds receive timely treatment.



“Building a Green Home Together, Creating a Peaceful Paradise for Birds”



Photos of the rescue of the national second-class protected animal egret at the Shaoyang Sub-transmission Station of Xiangtan-Loudi-Shaoyang Company



Social

Serving Society for Shared Prosperity

Kunlun Energy focuses on internal and external value chain synergies in business development. Internally, based on fair employment and professional growth, we stimulate the potential of our employees through skills training, healthcare, and diversified activities. We have built a safety and health management system for all employees and strengthened risk prevention, control, and occupational health. Externally, we work with our partners to establish a green and compliant supply chain, advocate for green procurement, and optimize the value of our products through stringent quality management and customer service. Simultaneously, we fulfill our responsibilities as a corporate citizen and achieve a deep connection between corporate development and public interest.

The materiality issues covered in this chapter:

- > Legal Employment and Protection of Labour Rights and Interests

> Customer Health and Safety

> Employee Health and Safety

> Employee Satisfaction

> Employee Well-being

> Product and Customer service quality

> Innovation and Digital Transformation

> Talent Training and Development
- > Sustainable Supply Chain Management

> Stable Supply of Clean Energy

> Promoting the Industry

> Intellectual Property Protection

> Community Benefit and Local Development



Employee Potential Activation

Kunlun Energy regards talent as an essential source of innovation and development. We focus on the construction of a talent team and the precipitation of human capital. The Company respects the value of the employees, comprehensively safeguards their rights and interests, and is committed to providing fairness. We aim to synchronize talent development with industry development, conduct scientific and effective talent management, stimulate employees' potential, enhance their well-being, and strengthen their sense of achievement and belonging.

Employee Rights Protection

Kunlun Energy strictly abides by the Labor Law of the People's Republic of China, Labor Contract Law of the People's Republic of China, Regulations on the Prohibition of the Use of Child Labor, and other relevant laws and regulations. We continuously improve and implement the internal management system, such as the Measures for the Management of Labour Contracts and the Measures for the Management of Employee Occupations, to effectively safeguard the lawful rights and interests of employees and to build a harmonious labor relationship to promote the healthy development of the enterprise.

> Fair Employment

We adhere to the people-oriented principle of fair employment, which are committed to creating an equal and diversified career development space. We prohibit all discriminatory acts, including nationality, gender, ethnicity, race, religious beliefs, educational qualifications, physical and mental deficiencies, and prohibit the employment of child labor, forced labor, and harassment.

Key Performance

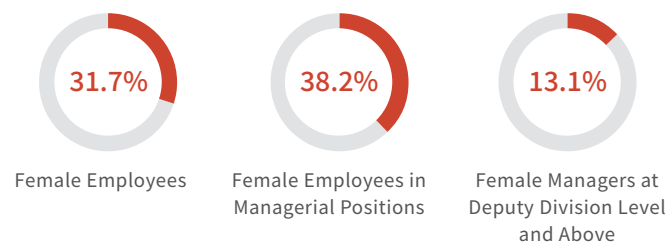
2024

0 cases
Discrimination, Child Labor, Forced Labor or Harassment Incidents

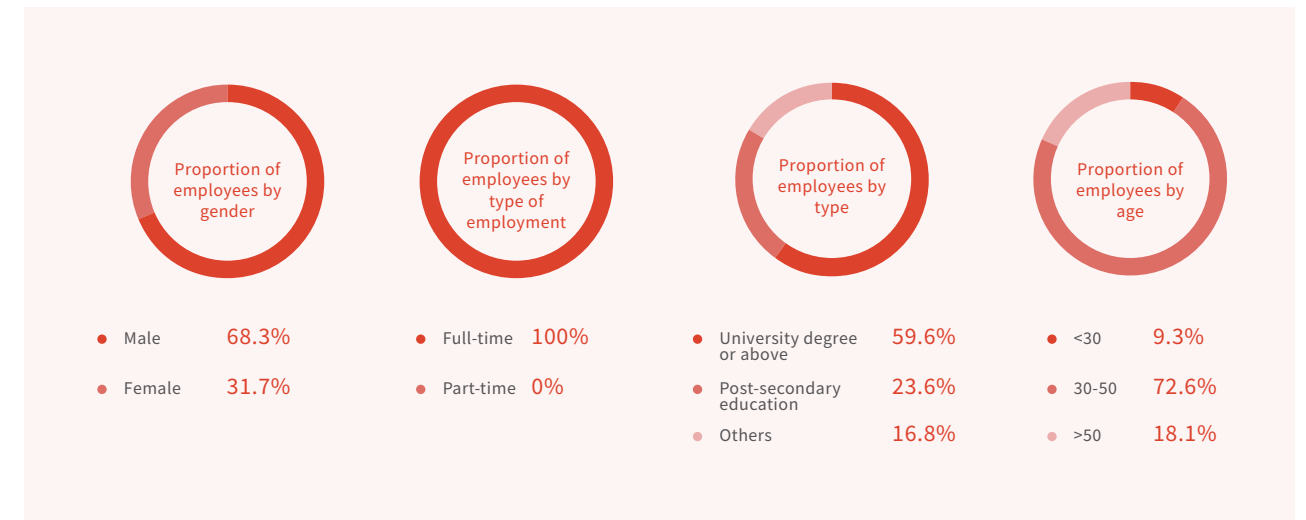


At the end of 2024

24,809 persons
Total Employees



Number and Proportion of Employees



> Salary and Welfare

We protect the legitimate rights and interests of employees, follow the principle of distribution according to work, implement the system of equal pay for equal work. We formulate and implement the Salary Management Measures and Implementation Measures of Enterprise Pension, and establish a perfect salary and benefit system. Our company ensures that our employees enjoy statutory benefits such as "five social insurances and one housing fund," labor insurance products, and paid holidays. We also provide supplementary benefits such as enterprise annuities and serious illness protection.

The Company strictly adheres to the working hour standard and the rest and leave system as stipulated by the law. We have formulated the Employee Leave Management Measures, and firmly resist all forms of forced and compulsory labor. For employees who work overtime due to work needs, the Company will arrange for them to take compensatory leave. For employees who cannot arrange compensatory leave under exceptional circumstances, the Company will pay them overtime wages in accordance with the regulations.

> Employee Communication

Kunlun Energy actively listens to the employees and continuously improves the employee communication mechanisms, providing employees with a platform to voice their opinions, communicate, and learn. To collect employees' opinions, the Company has established unobstructed communication channels, such as a mailbox for letters and visits and the collection of reasonable suggestions to ensure that employee opinions are promptly and accurately conveyed to the relevant departments. The Company also holds new employee forums to provide a communication channel, take targeted measures to address the difficulties they reflect, and help new employees quickly adapt to their jobs.

The Company understands the demands of employees through the staff congress, employee questionnaires, in-depth visits to the grassroots, and other forms, encourages employees to express their opinions when new systems, policies, or plans are introduced, and fully exercises the rights to participate, to be informed, to express, and to supervise. The Company has established a three-level trade union organization that covers each grassroots team, giving full play to the maintenance, construction, participation, and education functions of the trade union.

Highlights



Highlighted Achievements: Convening the Trade Union Congress

The Company's trade union congress was held in Hefei in December 2024, with a total of 130 delegates attended. The meeting systematically summarized the results of the past five years of work: focusing on the role of a bridge and link, deepening the protection of employees' rights and interests, contributing to the Company's success, democratic management and other functions, and injecting trade union momentum into the Company's high-quality development. In the next five years, the trade union will anchor itself to the four-dimensional construction goals of "unity, achievement, warmth, and trust," and implement the four core tasks of "strengthening ideological and political leadership, improving the training mechanism for industrial workers, improving the service and support system, and strengthening the foundation of grassroots governance." The sense of belonging and organizational cohesion of employees will be comprehensively enhanced through five major measures: building a "three-type" workforce, optimizing the rights and interests' protection mechanism, and improving production and living conditions. The conference elected the first trade union committee and financial review committee in accordance with the law, and deliberated and passed the resolution on the work report, ensuring harmonious labor relations through institutional innovation.

Talent Management

Kunlun Energy implements the strategy of strengthening the enterprise with talents. We gradually perfect the closed loop of talent "selection, training, and retention" to reduce the loss of excellent talents, expand the talent team with both professional abilities and comprehensive qualities, and continuously improves the assessment mechanism for the career development of the employees. We incorporat the ESG indicators into the performance evaluation of the employees, while efficiently exerting various incentives to contribute to the Company's sustainable development. We pay attention to the needs of employees in different positions and stages and actively mobilize internal and external learning and training resources to provide a broad platform for employees to exercise and grow their capabilities.

> Attracting Capable Talent

Kunlun Energy places a high priority on talent attraction and cultivation. Based on industry trends and the Company's own growth needs, we adopt scientific and reasonable approaches to formulate recruitment plans, strengthen university-enterprise collaboration, and promote the recruitment of high-level experts, thereby broadening talent acquisition channels.

In 2024, Kunlun Energy continued to improve the structure and quality of graduate recruitment. Upholding the development philosophy of "treating talent as the primary resource," the Company focused on the core responsibilities and aimed at building three key talent teams. Efforts were intensified to recruit graduates, innovate recruitment methods, enhance salary support measures, and increase campus promotion activities. Over 80% of recruited graduates were master's or doctoral degree holders, significantly improving recruitment quality. Additionally, the Company increased internal open recruitment efforts by publishing job postings for headquarters departments and professional business units, conducting open competitions for certain vacant positions across the Company. This strengthened internal talent mobility, enhanced headquarters management capabilities, and improved management efficiency.

Highlights

To strengthen the construction of technical expert team, Kunlun Energy appointed 2 chief experts and 14 senior technical experts and experts (Level 1 Engineers) in 2024. The Company issued the Implementation Opinions on Further Strengthening the Management of Technical and Skilled Experts, collaborating with relevant functional departments to actively support and ensure that technical experts can fully leverage their roles. These efforts aim to inspire innovation and efficiency among professional technical talents while guiding and motivating young employees to learn technical skills, enhance their abilities, and improve their competencies.

> Unblocked Promotion Pathways

Kunlun Energy attaches great importance to employees' career development. We build a perfect promotion system and performance appraisal mechanism to promote employees' self-improvement in their careers. Kunlun Energy has established a professional and technical job management matrix that horizontally covers eight professions and vertically runs through the three levels of management of the headquarters, provincial companies, and project companies, realizing a reasonable structure and a clear talent layout. We continue to systematically plan for the cultivation of young cadres and the construction of echelons to enhance the vitality of the talent pool at the managerial level.

> Strengthen Performance Appraisal

The Company has formulated corresponding appraisal programs for employees of different grades, implemented appraisal methods such as key performance indicator appraisal, 360-degree performance appraisal, and goal-setting rolling appraisal, and linked the results of job performance appraisal with job promotion and remuneration packages to enhance the precision and effectiveness of appraisal incentives. Based on the Management Measures for Special Incentives (Trial) and the 2024 Performance Indicator Assessment Rules, we standardized the special incentive items, highlighted the role of special incentives as key, precise, and supplementary incentives, refined the assessment standards, and improved the accuracy of the assessment. In addition, we strengthened the assessment of employees' ESG work tasks for the current year. We included energy and water conservation, carbon emissions, emergency response, compliance management in accordance with the law, intrinsic safety, and other relevant assessment contents in the managers' performance contracts, and the assessment results were linked to rewards, punishments, appointments, and removals.

> Improving the Quality and Effectiveness of Training

Kunlun Energy continuously improves the stratified training mechanism, carries out diversified and differentiated training. In accordance with systems such as the High-Skilled Talent Management Measures and the Professional and Technical Expert Management Measures, we have established talent cultivation systems including the "Kunpeng Plan" (for young talents), "Kunyu Plan" (for professional and technical talents), and "Rainbow Plan" (for operational skilled talents). We effectively develop training resources in line with the needs of employees, and promote the comprehensive and long-term development of internal talents.

Actively implement precise training

Kunlun Energy focuses on the development needs of the primary operations, improving the innovative thinking of management personnel, and the ability to apply new technologies. We focus on cultivating talent in high-end business, new energy, and digital intelligence, and strengthening core technology research. The scientific and reasonable setting of training projects highlights problem orientation and resource inclination, resolutely reduces non-rigid and non-essential training, and enhances training effectiveness.

Carrying out graded and classified training

The Company implements a graded and classified training mechanism and a line responsibility system, which is coordinated by the human resources department and organized by the business departments. The annual training plan divides the training authority according to the management level and is divided into the parent company level (category A/B) and the company level (category C/D). Category C is a key project that must be submitted by departments, reviewed by human resources, and approved by leaders. Category D refers to temporary professional training. Full coverage and precise empowerment are achieved through hierarchical implementation and differentiated management.

In addition, Kunlun Energy conducted various specialized training sessions during the year, including personnel management, internationalization capability, corporate governance, compliance, and integrity, to meet our pursuit of high-quality development and the needs of our employees' job functions. We have continuously enriched and expanded our training resources, using the "CNPC e-Learning" online platform, external training groups, university lecturers, and other training channels to fully mobilize all employees to participate in learning and help them grow further.

Key Performance

2024

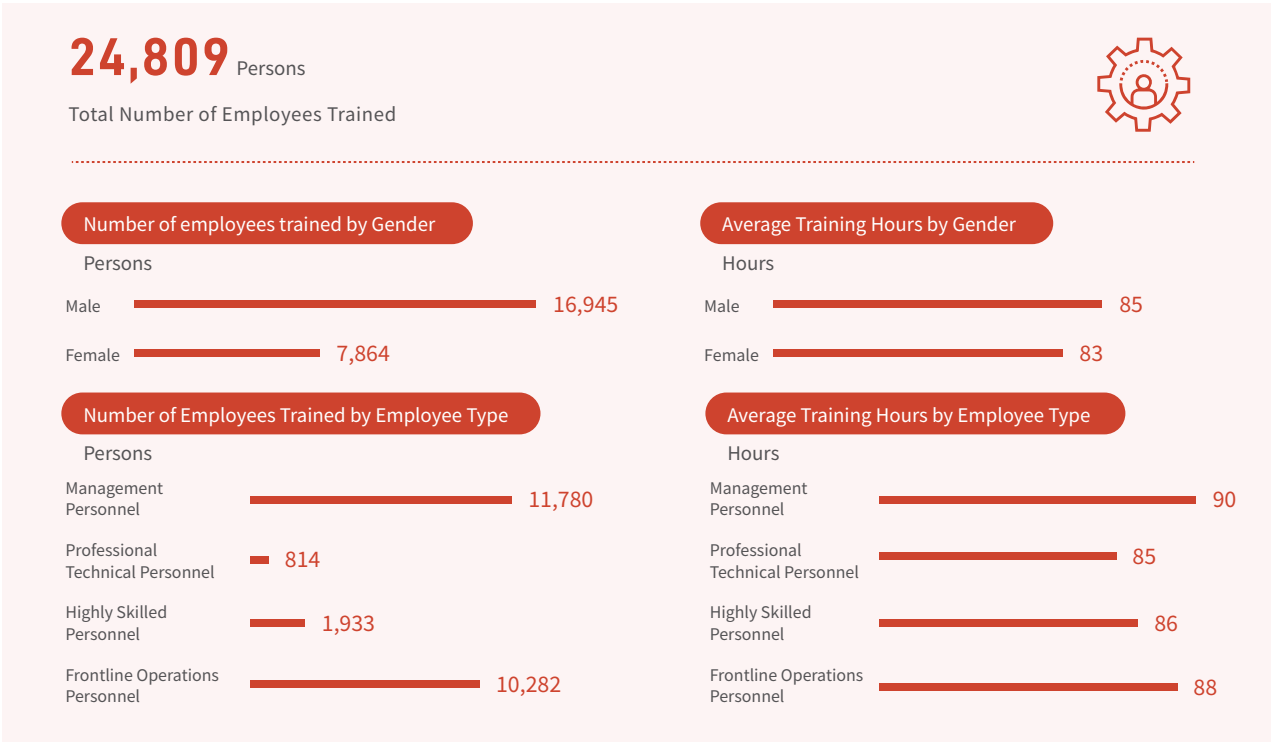
84 hours

Annual Training Hours per Employee

100 %

Front-line Employee Training Ratio

FY2024 Employee Training Performance Disclosure



Kunlun Energy systematically promotes the professional capacity building of employees and the cultivation of sustainable development talent by constructing a multilevel platform for skill competitions. In 2024, the Company held the first technical skills competition of Kunlun Energy and hosted the third technical skills competition of the parent company. This formed an industry benchmark practice of “promoting learning through competition and cultivating talent through competition,” injecting innovative momentum into the construction of an echelon of highly skilled talent for the energy industry.

Case: Organization of the First Innovation Competition

The Company held the first Innovation Competition of Kunlun Energy. With the theme of "Led by Science and Technology, Innovate with Quality," this competition aimed to improve the quality of innovation and foster and incubate new productivity forces. It achieved a simultaneous increase in the "value", "novelty content" and "green content", and was a practical review of Kunlun Energy's efforts in enhancing the innovation capabilities of talents, stimulating the innovation vitality of talents, gathering and forming an innovative joint force, and promoting the project of strengthening the enterprise with talents. More than 80 gas innovation elites from 18 provincial companies participated in the competition with 39 innovation projects, and the competition produced 3 first prizes, 5 second prizes, and 8 third prizes.

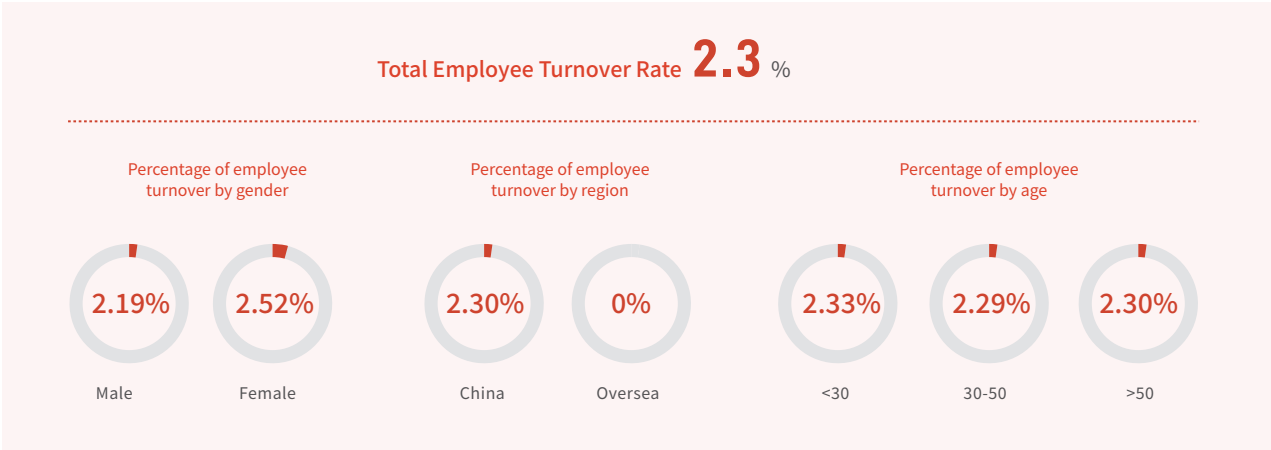
The first-prize project of this competition participated in the finals of the 3rd Innovation Competition Grand and won the first prize for the team in the finals. Kunlun Energy won the second prize for the group, once again setting a new record for the best performance in the innovation competition.



> Enhancing Employee Satisfaction

The Company attaches importance to employees' opinions and suggestions and is committed to improving employee satisfaction and increasing their sense of belonging. The Company regularly conducts employee satisfaction surveys and opinion collection, listens carefully to the voices of employees, and provides timely feedback based on the results of the surveys to provide employees with a positive corporate culture, create a favorable working environment, help employees achieve self-identification, and improve the situation of employee turnover.

Kunlun Energy's 2024 Workforce Turnover Analysis



Case: "Small childcare" to support the "great happiness" of employees

The trade union of Guangdong Company focuses on the problem of employees' childcare. It builds a custodianship model based on employees' needs, which is supported by the company, coordinated by the trade union, and participated in by the employees. The trade union promotes the upgrading of the union activity room into a child-friendly space, signs a childcare safety liability letter, collaborates with the administrative department to customize nutritious meals, and sets up a supervisory mechanism of "trade union cadres+ parents+ volunteers". Moreover, the childcare facility irregularly organizes the viewing of scientific and educational documentaries and corporate animations themed on energy. By integrating vocational awareness and the enlightenment of energy knowledge into the childcare service, it deepens the families' recognition of the corporate culture. This initiative effectively enhances the employees' sense of fulfillment and happiness, and has received "five-star reviews."

Employee Care


Kunlun Energy has always regarded employees as the Company's most valuable asset and is committed to creating a warm and harmonious work environment. We focus on the career development and life balance of our employees, establish a sound employee care system, and provide our employees with a flexible work system and a healthy employee welfare program so that they can gain a sense of achievement and happiness at work. Our company also provides convalescent leave and financial benefits for long-service employees, as well as special funds for employees in difficulty, especially for those who suffer from sudden losses, significant illnesses, and other difficult situations.

> Building a Healthy Enterprise

In order to actively respond to the Outline of the “Healthy China 2030” Plan, Kunlun Energy has further implemented the comprehensive health initiative and accelerated the establishment of healthy enterprises. Adhering to the principle of “prevention first, combining prevention with treatment”, the Company strives to reduce the health risks of employees, and creates a healthy and safe working environment for them.

Focusing on Health Management

Kunlun Energy strictly abides by the relevant laws and regulations on occupational safety and health, such as the Law of the People's Republic of China on the Prevention and Control of Occupational Diseases, the Regulations on Work-Related Injury Insurance, and the Convention Concerning Occupational Safety and Health and the Working Environment. The Company continuously improves the occupational safety and health management system, promotes the construction and upgrading of healthy enterprises, upgrades the detailed construction rules and acceptance standards, conducts pilot projects to establish outstanding healthy grassroots teams and stations, and achieves a comprehensive improvement in the construction of healthy enterprises that extends horizontally to all aspects and vertically to all levels.



Entrust professional health service organizations to assist employees and their families in receiving treatment in Beijing

Cumulatively, outpatient registration and hospitalization services have been provided to more than 1,000 employees and their families of the Company, with a satisfaction rate of 100%.



Participate in the evaluation of local health enterprises

22 companies were awarded the title of local healthy enterprise



Selection of “Occupational Health Experts”

Selection of 8 “Occupational Health Experts”



Organize the acquisition of the aid certificate

Organized 3,495 people to obtain their aid certificates



In 2024, Kunlun Energy continued to enhance employees' health and well-being by actively promoting the "Year of Weight Management" campaign. The Company systematically disseminated the Weight Management Guidance Manual at all levels, conducted a comprehensive assessment of employees' Body Mass Index, and encouraged employees to recognize that "individuals are the primary persons responsible for their own health."

4,866 sets

Cumulative provision of health equipments and facilities, including blood pressure monitors and fitness equipments

728 locations

Establishment of fitness centers and exercise zones

984 sessions

Delivered wellness seminars and skill-building trainings



Occupational Risk Protection

We implement national laws, regulations, and system requirements for occupational health management to strengthen employee protection against occupational diseases. The Company conducts inspections and investigations to minimize potential occupational health hazards in the workplace and provides employees with personal protective equipment (PPE). We regularly conduct occupational health examinations for employees and verify the qualifications of all medical institutions in use.

In 2024, the Company comprehensively investigated the basic disease information of employees and conducted follow-up investigations on the results of physical examinations to reduce the probability of occupational diseases. The Company also conducted risk classification, assessment, and management of occupational disease hazards throughout the Company, implemented differentiated management and precise control for different levels of occupational disease risks, and improved the effectiveness of occupational health management.

Key Performance

The occupational health examination rate of Kunlun Energy's employees has remained at 100% for four consecutive years from 2021 to 2024.

2024

100 %

Occupational Health Examination Pass Rate

100 %

Occupational Hazard Factors Monitoring Rate

100 %

Occupational Health Risk Site Pass Rate

29 %

Decline in Non-Work-Related Deaths Compared to Previous Period

469 sessions

Organize training programs on the Occupational Disease Prevention and Control Law of the People's Republic of China and Workers' Occupational Health Literacy

218 sessions

Conduct Public Awareness Campaigns and Advisory Services

530 sessions

Organize emergency rescue operations for contingencies and noise-induced injury incident drills




Focusing on Physical and Mental Health

Kunlun Energy pays close attention to employee mental health management, provides employees with a wider range of health assistance and services, and improves their physical and mental health status.

Case: Focusing on Employees' Mental Well - being, the trade union of Kunlun Energy Held EAP Psychological Counsellor Seminar

In November 2024, Kunlun Energy carried out special training for EAP (Employee Assistance Program) counselors, focusing on the development of psychological capital and the improvement of organizational effectiveness. A team of senior experts, including researchers from the Institute of Psychology of the Chinese Academy of Sciences, was invited to establish a solution covering the entire process of mental health management through a combination of theoretical teaching, tool application and scenario simulation. The course system deeply integrates psychological theories with business management practices, systematically explaining the strategic value of EAP in stress management, teamwork and career development. The training introduces tools such as personality color analysis, DISC behavior model and non-violent communication techniques, combined with workplace scenario simulation exercises, to help participants master core skills such as psychological assessment, crisis intervention and effective communication.



> Care for Women

We respect our female employees and pay great attention to safeguarding their legitimate rights and interests. Through diversified measures, we deepen the care and protection for mothers and children, and organize a series of activities such as "Women's Achievements in the Workplace" campaign and care activities on International Women's Day. As of the end of 2024, the Company has taken the lead in establishing seven "Moms' Cabins" on a pilot basis. We will continue to innovate new modes and carriers of caring for female employees, promote the construction of family friendly workplaces, and effectively create a convenient and inclusive working environment for female employees.



> Diversified Cultural and Sports Activities

The Company highly values employees' needs for cultural and sports activities. An online reading service was launched for all employees, and 353 physical book houses were established, creating favorable conditions for employees to enjoy reading, read quality books, and develop good reading habits. To celebrate the 75th anniversary of the founding of New China, the Company organized a calligraphy, painting, and photography competition, collecting 400 entries. Additionally, 23,000 employees participated in an online walking challenge, and teams representing the Company achieved excellent results in various ball games and dance competitions. Through the vigorous promotion of cultural and sports activities, the Company continuously enhances employees' cultural and athletic qualities while strengthening team cohesion.



Case: "Youth Home - Youth Evening School" empowers the comprehensive development of young people

The Inner Mongolia Company focuses on the development needs of young people, designs courses through a "precise demand" mechanism, and jointly revitalizes venue resources such as trade union service centers with the Youth League Committee and public welfare institutions to flexibly offer practical courses such as mobile photography and tea culture. The "Youth Night School" innovatively implements a cost-sharing mechanism of "young people contribute a little, self-financing contributes a little, and the Company makes up the difference" to achieve sustainable operations. It also makes use of weekday evenings and weekend off-peak hours for classes to resolve work-study conflicts. Since its launch in June 2024, the project has held six courses on traditional culture learning and art popularization, serving more than 200 people, and has become a new cultural vehicle for enhancing corporate cohesion.

Stringent Safety Management

Kunlun Energy has firmly established the concept of safety development, comprehensively promoted the implementation of Healthy China, vigorously constructed healthy enterprises, and continuously improved the management level of employee health and safety. In 2024, we released the first Occupational Health and Safety Management White Paper (2024 Edition), aiming to comprehensively, accurately, and objectively reflect the Company's occupational health and safety governance model, strategic approach, risk management mechanism, and specific performance to provide more comprehensive information for stakeholders.

Strategic objectives

zero injury, zero pollution, zero accident, zero defect, reduction of energy consumption.

Management philosophy

people-oriented, quality first, safety first, environmental protection priority

Approach

Honesty and trustworthiness, strive for perfection, full compliance, and continuous improvement.



Occupational Health and Safety
Management White Paper (2024 Edition)²⁵

Robust Management System

The Company has thoroughly studied, implemented, and put into practice the critical exposition on production safety. With risk management and control as the core, by applying the PDCA cycle management method, we have effectively integrated quality, occupational health, safety, and environmental management standards, established and implemented the Quality, Health, Safety and Environment (QHSE) management system to meet the relevant regulations, standards, and the company's requirements, and promoted the sustainable development of the Company.

The Company has obtained and continuously passed the Q/SY08002.1 Health, Safety, and Environment Management System Certification and GB/T45001-2020 (ISO45001:2018, IDT) Occupational Health and Safety Management System Certification, achieving 100% coverage of business operations. We ensure the construction of the company's health and safety with a systematic and standardized management framework and processes.

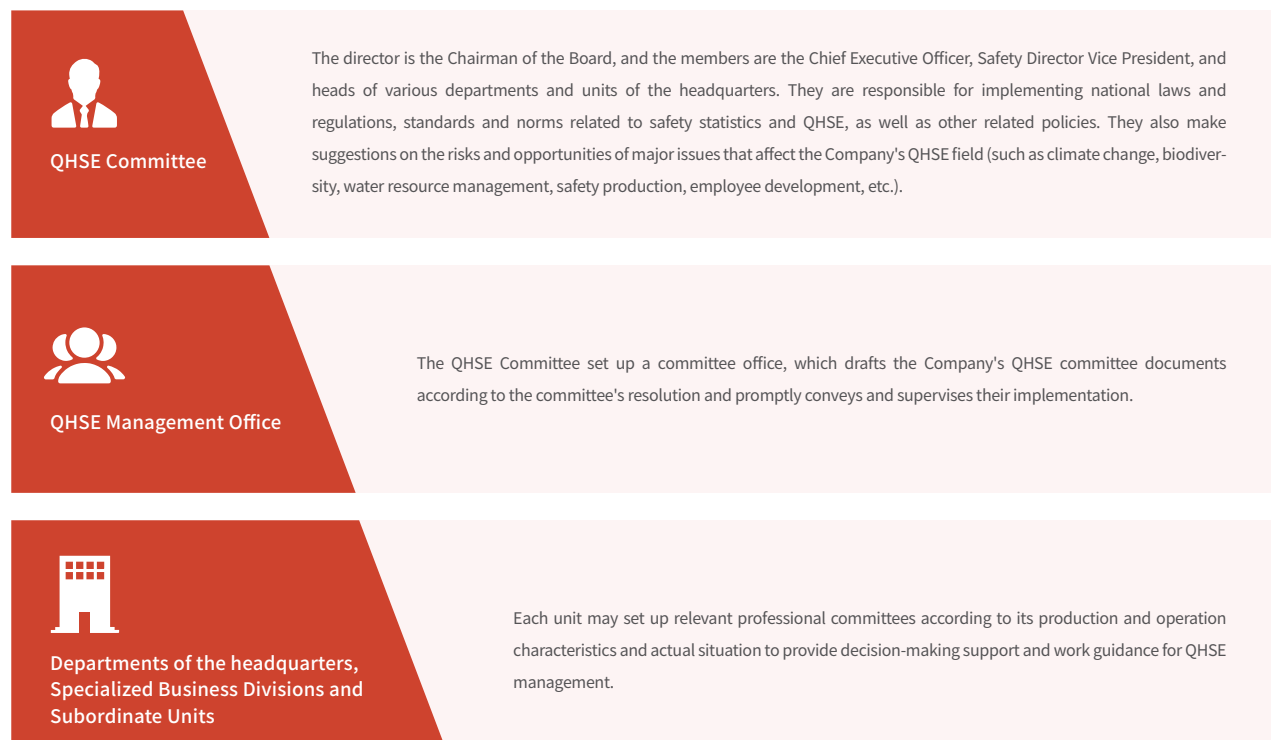


Health, Safety, and Environment Management
System Certification of Kunlun Energy

²⁵Occupational Health and Safety Management White Paper (2024 Edition) download link:
https://www.kunlun.com.hk/r/s1/pdf/20241023aqgl_tc.pdf

> Organizational Framework

The Company has established a "QHSE Committee" as the highest decision-making body for QHSE affairs management, with a QHSE management office under it, and a leading group and task force headed by management leaders will be set up for significant safety and environmental protection work. The Company has four QHSE Supervision Centers covering the national business scope, which are responsible for supervising and inspecting units, projects, and stations at all levels, implementing the separation of supervision and management, and conduct supervision by different entities, strengthening the promotion and implementation of QHSE work, and strictly enforcing national regulations, policies, and standards.



> Responding to Risks and Opportunities

When planning the QHSE management system, the Company thoroughly considered the influence of the internal and external environment, the current situation of the Company's management, and the needs and expectations of related parties. Based on the results of risk and opportunity identification, the Company has formed specific management measures, and the dedicated department implements graded prevention and control management of QHSE risks, formulates specific hazard identification and risk evaluation methods and guidelines, and supervises, inspects, and guides the risk control situation of each professional system. Meanwhile, the Company consistently adheres to fundamental principles, including "Safety First," "Four Comprehensives" (comprehensive coverage, comprehensive participation, comprehensive process control, and comprehensive responsibility implementation), "Priority on Safety Investment," and the "Three Simultaneities" (simultaneous design, construction, and operation of safety facilities and the main project). We rigorously implement the safety production responsibility system, fortifying dual defense lines: the first line comprises preventive controls of business departments, and the second line is reinforced by the oversight of safety supervision departments. This systematic approach continuously enhances modern governance capabilities in occupational safety management.

Highlights

Highlighted Achievement: Two Lines of Defense for QHSE

First line of defense: security risk prevention

- Establish and improve the safety risk management mechanism of "two reports, two lists, one tip, and one platform," organize the development of an operational risk database, create an intelligent management platform for work permits, and improve the ability to prevent and control risks accurately;
- Adhere to the combination of risk prevention and control and emergency management, enhance and perfect the three-tier emergency management system, and actively play the role of government-enterprise linkage to form a set of coordinated, efficient, and powerful emergency response mechanisms.

Second line of defense: security oversight enforcement

- Formation of a mechanism for regular meetings of the three primary specialties: safety supervision, safety production, and safety engineering;
- Organize all branches and subsidiaries to strengthen the construction of safety supervision teams from various aspects, such as staffing, business capacity improvement, work quality verification, etc., and optimize the function of the supervision center;
- Introduce and apply intelligent scientific and technological means to promote the transformation of the production safety supervision mode to "digitalization, intensification, specialization and intelligence".

Strengthening Security Defenses

Kunlun Energy adheres to the principle of "prevention first, combining prevention with control" and pursues the goal of "zero accidents." We spare no effort to prevent safety production accidents resulting in fatalities at the general level or above and occupational health incidents at the second level or above. We continuously reduce the total number of accidents in production and safety, as well as the number of non-production fatalities among employees. We constantly optimize the performance in occupational health and safety, implement risk management in occupational health and safety, strengthens the defense line of occupational health and safety, and make every effort to reduce health risks, so as to create a healthy and safe working environment for our employees and contractors.

Key Performance

2021~2024

0 person
Number of employee fatalities
due to work-related causes

0 case
Number of work safety incidents involving
employees at general level and above



Kunlun Energy Safety Production Progress²⁶

Indicator	Unit	2022	2023	2024
Lost Time Injury Rate (LTIR) per million hours worked ²⁷	/	0.0133	0.0132	0.0134
Total Recordable Incident Rate (TRIR) ²⁸	/	0	0.0659	0.0268
Number of workdays lost due to work-related injuries	Days	48	42	63
Time Lost Work Rate (TLWR) ²⁹	/	5.1	4.4	6.8

²⁶The reported data covers third-party contractors.

²⁷Lost Time Injury Rate (LTIR) per million hours worked=Number of accidents/total actual working hours) × 1,000,000.

²⁸Total Recordable Incident Rate (TRIR)=(Total recordable injury rate/total actual working hours) × 1,000,000.

²⁹Time Lost Work Rate (TLWR)=(Total worktime lost/total actual worktime) × 1,000,000.

> Strengthening Responsibility for Safety Production

The Company has strictly implemented the requirements for safety production, deepens the implementation of the “two lines of defense” accountability mechanism, coordinated and promoted the special governance of the operation of urban gas pipelines with existing problems and the tackling of fundamental issues. This has effectively built a major risk prevention and control system. In 2024, the Company identified and controlled 170,000 risks and eliminated 265 major hidden dangers, and the number of general accidents decreased by 50% year-on-year.



> Promote Emergency Management

Kunlun Energy has compiled the Special Emergency Plan for Pipeline Emergencies, which classifies gas pipeline leakage incidents and clarifies the responsibilities of emergency response organizations and on-site disposal measures. In 2024, the Company conducted 9,616 emergency drills and organized training for more than 100 technical operators on pipeline protection, maintenance, and repair.

Case: Joint Emergency Drill for Pipeline Incident Response

On October 16, 2024, Kunlun Energy, in collaboration with the Administrative Committee of Fushun High-Tech Zone in Liaoning Province and undertaken by the Northeast Company, conducted a joint emergency drill for pipeline incident response. The drill integrated multiple resources to achieve systematic “planning” exercises; it simulated the entire emergency response process in a full-scale real-world scenario, ensuring “realistic” exercises. Advanced unmanned equipments, such as detection robots and drones, were utilized to quickly secure the site, precisely locate the leakage point, and implement sealing measures, demonstrating “professional” exercises. Additionally, emergency, firefighting, public security, and medical forces were efficiently coordinated to ensure rapid and orderly evacuation, achieving “collaborative” exercises. This drill not only showcased the improvement in emergency response capabilities brought by digital and intelligent transformation but also provided valuable experience in areas such as command coordination, professional response, information sharing, and technological application.



Deepen Safety Awareness

The Company carries out QHSE cultural education in various forms, with the aim of creating a favorable situation where “everyone talks about safety, everyone wants safety, and everyone knows safety.” Kunlun Energy’s subsidiaries have formulated annual safety production education and training plans, established employee training and assessment mechanisms, and carried out safety education and training at least once a month to ensure that employees have the safety knowledge, responsibilities, and skills required for the position when they are hired. In 2024, the total number of people participating in safety training reached 73,011, achieving 100% coverage of safety training and employee knowledge of the main hazards and protective knowledge of the position for four years.

For special positions, the Company has established a list of special positions requiring certificates and regularly conducts training and education to obtain certificates, ensuring that 100% coverage of special positions with certificates required.

Case: Safety Accompanies Us, Mission on Our Shoulders - 2024 Safety Production Month Activity

On June 16, 2024, the Company held a series of activities for the safety publicity and consultation day, which covered the entire system and all regions across the country. The Hazhongqing Company, which has the largest number of gas users, served as the main venue for the event. Simultaneously, enterprises in regions such as Hefei in Anhui Province, Kunming in Yunnan Province, Yibin in Sichuan Province, Tianshui in Gansu Province, and Dagang in Tianjin City were linked up. Through a nationwide live broadcast via online media, the event solidly promoted safety education and publicity actions from the perspective of the public. During the event, Hazhongqing Company tried for the first time to carry out a “mobile classroom” for gas safety education and publicity, sending publicity staff to communities, schools, and users to educate the public about gas safety and emergency response knowledge. The company is striving to change the way safety knowledge is learned from “going to school” to “delivering education,” and actively creating a good atmosphere in the jurisdiction where everyone can “learn safety, understand safety, and practice safety.”



Ensuring Stable Gas Supply

Ensuring safe and stable gas supply is a core task of Kunlun Energy in fulfilling the social responsibility. By leveraging digital intelligence technologies to empower our business systems, we implement precise allocation of gas resources to meet differentiated gas consumption demands. Simultaneously, we strengthen the quality control system across the entire process while improving customer service systems and rights protection mechanism. This enables us to ensure safe and stable gas supply during the winter, smooth operations during peak summer demand, and fulfill our role as a "pillar of energy supply security."

Stable Supply of Clean Energy

Kunlun Energy adheres to the principle of "ensuring livelihood, public utility, and key priorities." By focusing on our core responsibilities and business and leveraging the integrated advantages of our industrial chain, the Company ensures high-quality and reliable gas supply for key regions, critical periods, and essential industries, achieving seamless peak demand management.



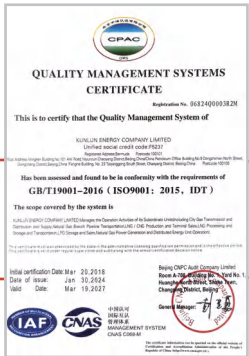
Case: Volunteer Efforts Safeguard the Flame of the Asian Winter Games

Kunlun Energy's subsidiary Harbin Zhongqing Gas Company undertook the construction of the gas supply system for the "Snow Rhapsody Lilac" main torch of the Asian Winter Games. To address Harbin's extreme cold conditions, the project team innovatively implemented an intelligent electric heating system and low-temperature simulation testing technology, successfully overcoming equipment performance degradation challenges at -30°C to ensure continuous and stable torch combustion. The customized high-capacity pressure regulating station, with a flow rate of 4,000 cubic meters per hour, incorporated a dual-supply automatic switching mechanism to guarantee zero interruption in gas delivery. For critical supply points, the company established a comprehensive three-tier protection system through intelligent monitoring and rotational duty arrangements to dynamically eliminate potential risks: Tier 1 facilities maintain 24-hour dedicated personnel coverage; Tier 2 and 3 facilities implement leadership responsibility by designated zones; and a dual-mode inspection system combining laser detection with manual verification covers 17 kilometers of pipeline infrastructure.



Stenghtening Quality Management

Kunlun Energy has always adhered to the quality policy of "Honesty and Trustworthiness, Pursuit of Excellence." Relying on scientific management systems and advanced technical methods, we strictly enforce procedures, enhance process control, standardize operational practices, and pursue zero defects in quality. This commitment ensures the provision of high-quality products and satisfactory services to customers.



> Quality Management Enhancement

Kunlun Energy has obtained ISO9001 Quality Management System Certification and continuously improved the foundational construction of our quality management system. The Company has issued the Quality Management Manual, which specifies quality management and control requirements for the entire process, including design, construction, operation, procurement, storage, and sales, ensuring implementation at all levels. Additionally, the Company has refined the Quality Supervision Checklist and developed specialized checklists such as the Courtyard Network Quality Inspection Form and the Indoor Installation Project Quality Inspection Form, effectively guiding the quality management and control of urban gas hazard remediation projects.

Key Performance

1,900 items
Newly identified quality risks

19 items
Major level and above quality risks designated for key control by evaluation

185 items
Proactively engage staff in quality improvement campaigns yielding demonstrated achievements

20 awards
Awarded Parent Company QC Achievement & Trustworthy Team Certification

12 awards
Provincial/Ministerial-level or higher QC award winner

5 awards
Municipal-level or above advanced quality award-winning entities

> Quality Supervision and Inspection

In accordance with the quality management objectives set each year, Kunlun Energy conducts special inspections of material quality. A total of 96,000 low-temperature, high-pressure flanges, valves, and pipe fittings were inspected, along with blind plates and gaskets, addressing 2,647 hidden issues. At both the company and provincial levels, 331 batches of gas meters were sampled, achieving a 100% pass rate.

Key Performance

100 %
2024 Gas Quality Testing Plan Implementation Rate

100 %
Pass Rate of Gas Quality Sampling Inspection

100 %
First-time Acceptance Rate for Category III+ Projects

100 %
First-time Success Rate of Commissioning & Startup

100 %
Pass Rate in Random Inspection of Procured Materials

100 %
Mandatory Inspection Rate for Incoming Materials

100 %
On-Site Manufacturing Supervision Rate for Critical Equipment




Premium Customer Service

Kunlun Energy practices a service philosophy of "starting with customer needs, achieving customer satisfaction, and exceeding customer expectations," striving to provide convenient and safe gas services. Through multi-channel communication mechanisms, the Company actively collects customer feedback and makes improvements to meet diverse customer needs.

> Customer Feedback and Response


Enhancing Customer Service Skills:Kunlun Energy is committed to delivering high-quality service to customers. The Company has established a customer service quality management system and developed service manuals such as the Guidance Manual on Standardized Service Business Process for Natural Gas Customers and the Standardization Manual on Business Processes for LPG Terminal Retail. These manuals detail 51 customer service business processes and 16 key indicators, laying a solid foundation for standardized and unified customer service quality management.

Customer Service Channels



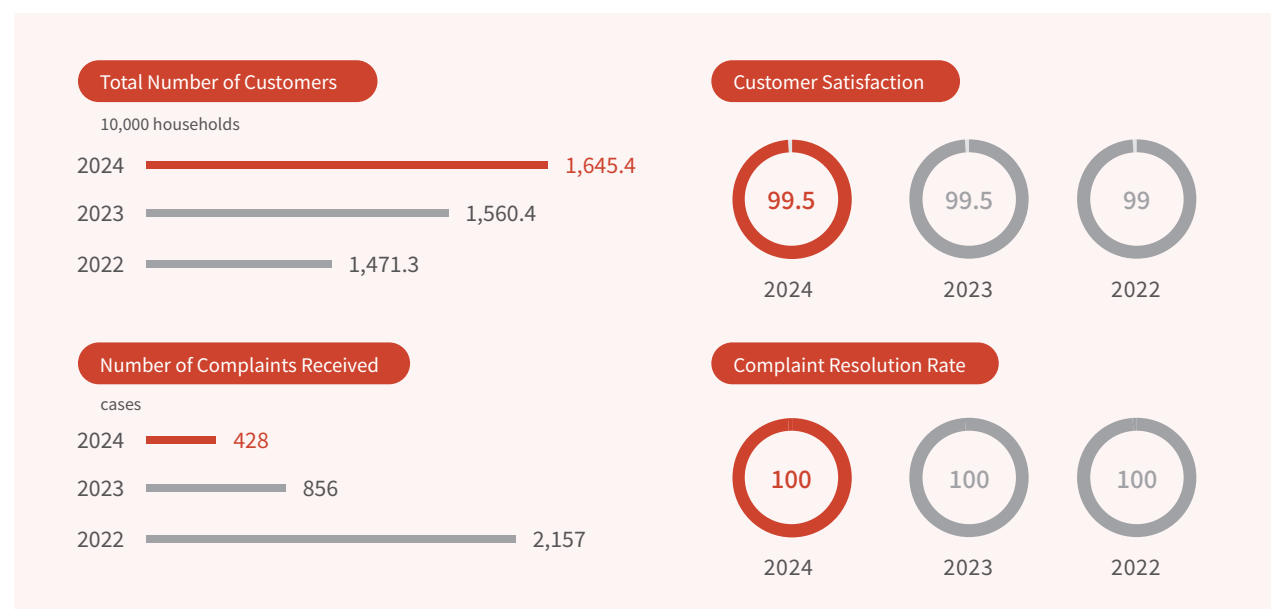
Unified customer service hotline
956100

"Kunlun HuiXiang+": The unified external service
WeChat official account of Kunlun Energy >>



The Company provides customers with 24-hour round-the-clock service and has established a comprehensive customer complaint handling mechanism. Upon receiving complaints, customer service staff assess the content and promptly forward valid complaints to relevant departments for resolution. After the issue is resolved, follow-up calls are conducted to ensure proper handling and achieve a closed-loop complaint management process. In 2024, Kunlun Energy received 428 complaints, with an average resolution time of one working day (excluding cases where follow-up calls were unanswered).

Kunlun Energy's Customer Service Key Indicators



Customer Rights Protection

Kunlun Energy fully discloses facts related to products and services to consumers and ensures customer safety and rights through home safety inspections and the promotion of safe gas usage.

Responsible Marketing

Kunlun Energy strictly complies with the Consumer Rights Protection Law of the People's Republic of China, the Advertising Law of the People's Republic of China, and the Anti-Unfair Competition Law of the People's Republic of China. The Company transparently discloses product and service characteristics, prices, and quality within our business scope, avoiding misleading or ambiguous product information and excessive promises.

Customer Safety Protection

Kunlun Energy prioritizes user safety and takes all necessary measures to ensure the safety and reliability of gas supply. The Company conducts user safety inspections in strict accordance with the Gas Service Guidelines (GB/T 28885) and has established the User Safety Inspection Management Measures, which stipulates the management, control and supervision of daily management, organizational responsibilities, maintenance, follow-ups, and publicity related to user safety inspections.

Moreover, the Company actively promotes safe gas usage concepts and knowledge, standardizing customer gas usage behavior. Safety brochures are distributed during home inspections, and the "Safety Classroom" module of the "Kunlun HuiXiang+" WeChat official account is updated weekly to educate customers on basic gas usage knowledge.

Key Performance



2024

12.38 million households

Number of Kunlun Energy Household Users Gas Safety Inspection Records

92 %

Household Users Gas Safety Home Inspection Coverage Rate

100 %

Commercial & Industrial Users Gas Safety Inspection Coverage Rate



> Improving Customer Experience

We always prioritize our customers, placing great importance on customer experience. By continuously optimizing service processes, the Company provides customers with more convenient products and services, thereby enhancing their satisfaction.

Optimizing Service Processes



Kunlun Energy is committed to offering more convenient and professional services. We actively deepen terminal customer services to meet the needs of diverse categories, regions, and timeframes. For new customers, Kunlun Energy implements a "one-on-one service, full-process assistance," providing timely and proactive on-site support, effectively achieving "zero visits of customers" for gas installation.

In 2024, Kunlun Energy established a digital and intelligent customer service ecosystem, leveraging technological innovation to elevate customer service capabilities. Through three core initiatives, the Company achieved full-chain service optimization:

Digital Service Coverage Across All Domains

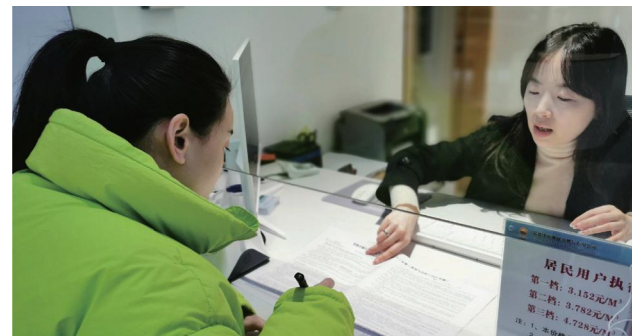
Successfully deployed the "Kunlun HuiXiang+" gas service platform, enabling online service integration for 162 urban gas enterprises and reaching over 1.33 million users.

Upgraded Intelligent Work Order Scheduling

Deeply integrated the 956100 customer service hotline with the A10 intelligent system, precisely delivering 334,000 service work orders throughout the year, improving work order processing efficiency by 40%.

Integrated Service Terminal Operations

Adopted the A10 system APP for on-site services, integrating home service modules into the unified APP, achieving 100% standardized operations coverage for urban gas enterprises.



Additionally, Kunlun Energy has established a monthly customer service quality evaluation mechanism, using metrics such as on-time work order completion rate, on-time response rate, and customer satisfaction rate to continuously improve management and promote service quality enhancement.

Customer Satisfaction Survey and Enhancement



In 2024, Kunlun Energy conducted a comprehensive customer satisfaction survey covering 50,000 users, including residential users, industrial and commercial users, opinion leaders, business halls of project companies of our own terminals, the 12345 government service platform, and users from competing gas enterprises. The survey utilized methods such as telephone interviews, online questionnaires, on-site appointment interviews, and mystery shopper investigations to gather insights from multiple dimensions. Based on the survey results, Kunlun Energy analyzed customer service quality and implemented corrective measures to continuously optimize service levels.

Key Performance



2024

99.5 %

Kunlun Energy achieved a customer satisfaction rate

Collaborative Management with Business Partners

Kunlun Energy strictly abides by the Bidding Law of the People's Republic of China. The Company has improved the management specifications for business partners³⁰ and the construction of sustainable resilience of the supply chain in accordance with the law and regulations, actively practiced green procurement, and strengthened the supervision, assessment, and withdrawal mechanisms for suppliers, continuously reducing various environmental and social risks in the supply chain. In 2024, the Company further strengthened the ESG management of the supply chain in accordance with management documents such as the Management Measures for the Resource Database of Contractors, Suppliers and Service Providers, Management Measures for the Quality of Materials Supply, Management Measures for the Warehousing and Logistics of Materials Supply, and Regulations on Materials Supply Management.

Key Performance

At the end of 2024, Kunlun Energy had **1,597** suppliers.

494

service suppliers

839

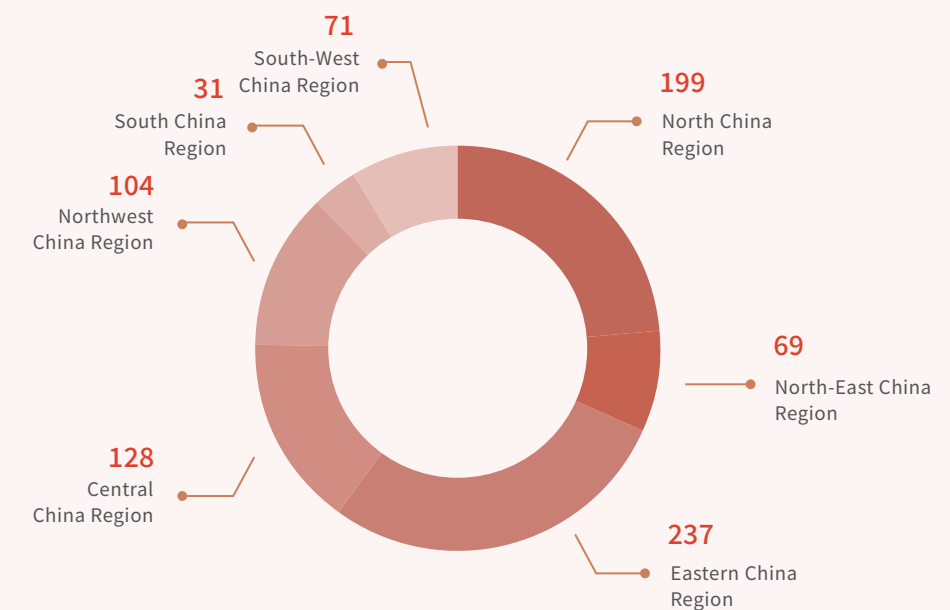
material suppliers

264

engineering suppliers



Number of Material Suppliers by Region



³⁰business partners: Business partners refer to contractors, suppliers and service providers.

Business Partners Access Management

At the supplier admission stage, on the basis of unified and strict admission requirements, Kunlun Energy has also taken into account the service characteristics of different types of suppliers, and revised the Management Measures for the Resource Database of Contractors, Suppliers, and Service Providers to establish targeted admission requirements.

I The following conditions shall be met for the admission of suppliers:

Kunlun Energy's qualification as an independent legal entity (established for more than 3 years), industry qualification certification, effective operation of quality/health, safety, and environmental protection system, no major illegal disputes, safety and environmental protection accidents (no accidents at general level and above in the past three years), performance capability and performance guarantee, technical equipment support, and good social

I Differentiated qualification reviews are implemented for different industries:

Kunlun Energy enterprises in the hazardous chemicals industry need to provide safety production licenses and hazardous chemicals business operation licenses; those in the pressure piping industry have to obtain special equipment manufacturing licenses; explosion-proof products and fire-fighting equipment need mandatory certifications and inspection reports, etc., to ensure compliance across the entire supply chain. For service providers, the business departments will formulate entry standards according to actual needs to achieve precise control.

Suppliers' Supervision and Appraisal

The Company follows up on and evaluates the performance of the suppliers. In 2024, Kunlun Energy revised the management measures, including the Regulations on Supply Management, Implementing Rules for Supplier Management, and Management Measures for Green Procurement, to guide the evaluation of the sustainability performance of the suppliers in terms of health, safety, environmental protection, and compliant operations. Relevant daily performance is an essential basis for the annual assessment and evaluation of suppliers.

I Responsibility for supervision:

Kunlun Energy has established a multilevel supplier supervision system to strengthen compliance management. The Detailed Rules for the Implementation of Materials Supplier Management make it clear that the Engineering Materials Management Department of the Company adopts online spot checks and on-site inspections to supervise the supplier management process dynamically and that supervisory bodies at all levels perform their supervisory functions in accordance with their responsibilities. Five major types of non-compliance situations are clearly defined, including signing contracts with suppliers that have been penalized for violations, selecting suppliers outside the approved inventory, concealing quality hazards, tampering with management evidence, accepting bribes, etc. Graded accountability measures, ranging from criticism and education to disciplinary sanctions, will be imposed on the responsible persons.

I Green procurement:

Kunlun Energy coordinates economic and environmental benefits in the procurement process and implements green management throughout the supply chain. Green Procurement Management Measures have been formulated to incorporate environmental protection and low-carbon indicators into the supplier assessment system. Based on the evaluation results, procurement decisions are optimized to urge suppliers to fulfill their low-carbon responsibilities. Green standards are strictly implemented during the procurement process, with priority given to energy-saving and environmentally friendly materials and services. Environmental benefits, resource recycling, safety, and health factors were all considered. The entire process, from design and selection to disposal at the end of the product life, incorporates the concept of sustainable development, promoting the collaborative implementation of green practices across the supply chain and improving resource utilization efficiency. In addition, the Green Procurement Management Measures also makes detailed provisions for aspects such as warehousing and logistics, material disposal, and information management, comprehensively promoting the fulfillment of environmental responsibilities by the Company's suppliers and internal material management processes.

Requirements of the Green Procurement Management Measures

Procurement Object

- The product is not on the national list of highly polluting and environmentally high-risk products
- The product or service should prioritize high efficiency, energy conservation, environmental protection, and low carbon emissions
- Product suppliers that are key energy users should have an energy management system certification
- The supplier and product meet pollutant discharge standards, energy consumption, and other environmental performance standards
- The supplier's entire process of material production, transportation, and storage complies with the Green Procurement Management Measures

Procurement Behavior

- Increase the use of electronic methods in the tendering process to reduce resource consumption
- Include green procurement responsibilities in contracts or agreements
- Procure in moderation to reduce waste

I Assessment system:

Kunlun Energy has built a scientific and systematic assessment system for material suppliers to strengthen ESG governance in the supply chain. Given the quality, compliance, and sustainability risks in supplier management, the Company follows the "hierarchical responsibility, classification and implementation" principle. We implement a multidimensional appraisal for the first-tier and second tier of material manufacturers with business dealings. First-tier suppliers are assessed using three types of indicators weighted by daily appraisal (coordinated response, arrival timeliness, etc.), annual appraisal of the enterprise (product quality, contract compliance, etc.), and appraisal of the authorized procurement team (innovation ability, integrity management, etc.). The subordinate units quantitatively score second-tier suppliers according to seven indicators, such as product quality and price level, and then calculate the weighted scores. The evaluation results are automatically classified into four categories (A, B, C, and D) by the system.

I Exit mechanism:

Kunlun Energy shall warn suppliers who fail to resolve problems in a timely manner or take inappropriate measures. The Company will terminate the business relationship with suppliers who have issues such as qualification fraud, commercial bribery, serious dishonesty, major quality/safety/environmental accidents, violations of international business standards, and those who fail the annual assessment. In 2024, the Company terminated the business relationship with 50 suppliers, including 46 secondary material suppliers that had no transactions for three years, and four that failed the on-site inspection assessment.

Contractor Safety Promotion

Kunlun Energy attaches great importance to the safety production capabilities of contractors. Adhering to the QHSE management principle of “implementing unified health, safety, and environmental standards for contractor management,” we incorporate contractors into our unified management system. The Company implements unified QHSE standards and management requirements, strengthens safety management across all operational stages of contractors, and ensures that contractors fulfill their primary responsibilities for safety production.

I Contractor health and safety supervision:

The Company implements a management system with comprehensive supervision by the headquarters, professional supervision by provincial companies, and full responsibility by the project companies. We have formulated the Management Measures for Contractor Safety Supervision and the Detailed Rules for the Annual Evaluation of Maintenance Contractors. Contractors are required to have all their employees sign the Safety Operation Post Commitment Letter. Contractors who have had a quality and safety accident or have been blacklisted will receive an unsatisfactory evaluation to strengthen contractors’ health and safety management.

Management Objective

100 %

Occupational health check-up rate



I Contractor health and safety training:

To strengthen the supervision and management of contractor safety and to prevent and reduce the occurrence of contractor accidents, Kunlun Energy has set up a special chapter titled "Safety Training and Education Management of Contractors" in the Management Measures for Contractor Safety Supervision and, and has implemented a unique training mechanism for key personnel of external contractors.

Contractor Key Personnel

- The main person in charge of the successful tender of the contractor engaged in engineering and construction, installation and equipment inspection, and maintenance services
- The person in charge of safety management
- Head of safety management department
- The person in charge of the construction project
- Other key position holders identified in conjunction with the project

Contractor Key Personnel Training Requirements

- The duration of the training shall not be less than 16 hours
- A certificate of competence should be issued after passing the examination and be valid for 2 years

In addition, the construction (general contracting) unit shall, after signing the contract with the contractor and before the commencement of the project, organize and supervise the contractor's key personnel to participate in exceptional safety training. All training shall be undertaken by the training organization with relevant qualifications.

Key Performance

5 sessions

QHSE Certification Training for Key Contractor Personnel

568 person-times

Participant Attendances

24 persons

Individuals failing the examination shall be placed on a blacklist for further monitoring

Innovation-Driven Technology Development

We place "innovation" at the center of overall development and promote scientific and technological innovation and digital empowerment. We optimize the allocation of innovation resources and build a dynamic and open innovation ecosystem.

Leading the Way in Innovation

In 2024, the Company revised the Management Measures for Scientific and Technological Projects and the Management Measures for Scientific and Technological Awards. Adhering to the goal-oriented, problem-oriented, and result-oriented approach, and closely focusing on the "deployment of innovation chain in the industrial chain, relying on the innovation chain to enhance the value chain," we revised and completed the scientific and technological development plan in line with the scientific and technological innovation needs of our company's main business, thus forming the technology system of Kunlun Energy. The technology system contains seven technical fields, 18 technical directions, and 42 leading technologies, which comprehensively cover all links of the Company's industrial chain, highlighting the Company's natural gas market forecasting, lean marketing, production and operation, safety management and control, and other primary business needs, and effectively guides the Company's scientific and technological innovation work.

Intellectual Property Protection



Kunlun Energy pays attention to the protection of intellectual property and patents, abides by the Patent Law of the People's Republic of China, the Copyright Law of the People's Republic of China and other laws and regulations. We manage intellectual property in accordance with the parent company's Management Regulations on Intellectual Property Rights, Management Regulations on Trademarks, and Management Measures for Science and Technology of Kunlun Energy Company Limited. to prevent any infringement.

Key Performance

2024

9 cases

Utility Model Patent Right Officially Granted

2 cases

Identification of Technical Secrets

1 case

Software Copyright

27 cases

Receipt of Patent Application Acceptance Notice from China National Intellectual Property Administration

19 cases

Invention Patents

8 cases

Utility Model Patents



In terms of soft science research, the Company further improved the management process of soft science research, adjusted the leading organization for soft science research management, and revised the Company's Management Measures for Soft Science Research. Focusing on key issues such as the policy path for promoting the marketization of natural gas prices, market-oriented trading models and innovations, and carbon management, research on 14 topics was promoted as planned. For the first time, an evaluation of the results of soft science research projects was conducted, and the sharing of research results within the Company was promoted.

Case: Establishment of Carbon Neutral Research Centre

In July 2024, the Company actively integrated into the trend of low-carbon development. We promoted the establishment of a Carbon Neutral Research Centre with the Tianjin Emission Right Trading Centre to promote the Company's "Carbon Control - Carbon Reduction - Low Carbon - Carbon Neutral" measures and committed to becoming an industry benchmark in leading the green transformation of the natural gas sector.



In 2024, the Carbon Neutral Research Centre verified the Company's full business greenhouse gas emissions from 2022 to 2024. It advanced the research on topics such as "Study on the Impact of the Carbon Price Mechanism on the Company's Transformation and Development and Counter-measures" and "Study on the Carbon Asset Investment Carried out by Kunlun Energy." Meanwhile, through multi-scenario modeling analysis, the Carbon Neutral Research Centre screened and proposed net-zero emission paths for LPG, urban gas pipeline network, and feeder pipeline business, providing the scientific basis and decision-making support for Kunlun Energy to implement the net-zero emission target of the three business lines in 2035.

Developing Standards System

Kunlun Energy actively participates in the formulation and revision of national, industry, and group standards to enhance the Company's technical discourse power and market influence. In 2024, the Company made breakthrough progress in standard formulation. We took the lead in compiling the standard titled Design and Testing of LNG Loading Arms for Conventional Onshore Receiving Stations for the Oil and Gas Industry, which filled a gap in the industry. The Company also participated in the compilation of the national mandatory standard Electromagnetic Gas Emergency Shutoff Valve, which regulates aspects such as product manufacturing, selection, testing, and application, to improve the intrinsic safety of gas for urban gas users.

Key Performance

2024

- | | | |
|---|--|---|
| 1
led in compiling international standard | 1
participated in compiling international standard | 6
released national standards |
| 6
released group standards | 6
released parent company standards | 25
released corporate standards |

In 2024, Kunlun Energy led the establishment of the Natural Gas Sales Professional Standardization Technical Committee, which is under the Standardization Committee of the Parent Company, to promote the standardized development of the natural gas sales business through a systematic governance structure. During the establishment process of the committee, 44 experts from 29 units and business divisions were recruited to form a decision-making network.

Highlights

Gas safety is of paramount importance. Standards lead to innovation and development.

Kunlun Energy, as the chairman unit of the Standardization Committee of the China Gas Association, has fulfilled the management functions of the association's standardization work. We organized and convened the Annual Meeting of the Committee for 2024 and the Seminar on the Safe Operation and Smart Construction of Gas. More than 600 guests from the government, industry associations, gas companies, equipment manufacturers, universities, research institutes, etc. attended the meeting to promote the sustainable and high-quality development of the gas industry and contribute to national energy security and economic and social progress.

Driving the Digital Future

In 2024, Kunlun Energy carried out the reinforcement project of the informatization platform, actively promoting digital transformation and intelligent development, with the following leading results:

> Upgrade infrastructure

In 2024, the Company promoted the construction of the Kunlun ERP and established a sound ERP system at all levels, ranging from the Company's headquarter to the project companies. We strengthened business standardization, implemented the Parent Company's public data and common business process standards, completed blueprint plan confirmation, business scenario validation, function development, public data standardization, integration testing, and key user training. We selected three initial typical units, including the Gansu Company, to carry out the implementation and verification the localization of the ERP system.

> Enhancement of science and technology to promote security

We have been continuously making efforts to enhance the level of ensuring safety through science and technology. Adhering to the problem-oriented approach and focusing on solving the bottlenecks that restrict the intelligent management and control of safety production, we have strengthened the iteration development of ensuring safety through science and technology. We have actively promoted continuous efforts to address the management weaknesses and technical bottlenecks, giving rise to new driving forces for safe development. We have made every effort to build intelligent urban gas systems, intrinsically safe filling stations, digital pipelines, and intelligent LNG factories, continuously promote digital transformation, make every effort to encourage the application of AI-based video operation risk management and control technology, and incorporate all kinds of operations into the three-tier production regulation and supervision.

The intelligent management application for bottled LPG of Kunlun Energy has completed the construction of the pilot project. It has vigorously addressed issues such as hazardous cylinders, inactive cylinders, and overdue-for-inspection cylinders. Standardized management has been implemented for the household safety inspection process, and traceability supervision has been carried out for the key nodes of cylinder circulation. These measures have effectively eliminating potential risks and hazards, enhancing the safety of terminal LPG sales operations. The application was fully launched and put into use by the end of June 2024.

In 2024, the Company comprehensively promoted the application of all elements of the pipeline integrity module and carried out the design for the function upgrade to version 2.0. Online management was conducted for tasks such as the identification of high-consequence areas of pipelines, risk classification, mobile inspection, leakage detection, corrosion protection, and the management of third-party construction. Real-time monitoring of key areas and critical links was performed using intelligent terminal equipment, such as intelligent valve wells, intelligent cathodic protection posts, AI cameras, and PPB inspection vehicles. A total of 16,000 sets of leakage monitoring devices along the pipeline were maintained and kept in application.

> Advancing digital transformation

Kunlun Energy adheres to the transformation path of pilot projects before promotion and continues to intensify digital transformation by creating digital transformation promotion templates, such as Shandong Company and Jingtang LNG Company. This resulted in a replicable Kunlun Energy digital transformation promotion template that includes 5 intelligent scenarios, 14 sub-scenarios, 59 business scenarios, 13 applications, 126 functional modules, 68 business processes, and 92 intelligent hardware standards.

Case: Building a Digital Prototype and Implementing a Replicable Digital Transformation

Shandong Company's digital transformation pilot project successfully passed the acceptance of inspection and was rated as outstanding. It has realized the integrated comprehensive analysis and display of resources, markets, operations, operations, and customer service, constructed a digital map of Shandong Company's 12,000 kilometers of pipelines, 38,000 pieces of equipment managed by one code and one file, 1.12 million users with one code per household, promoted the application of 817,000 IoT meters, and realized the access of 34 SCADA systems at sites and more than 1,500 video surveillance systems to the provincial control center. A simulation of the pipeline network was constructed, and the efficiency of pipeline incident handling was improved by 20%. Online video customer service was implemented, and customer satisfaction was improved to 98%. The first draft of the feasibility study report for the digital transformation of the eight provincial companies in the first phase of the digital transformation has been completed, and the successful experience of the transformation will be further promoted.

> Innovative AI applications

Kunlun Energy has carried out in-depth research on the current situation and development trend of the application of artificial intelligence in the field of natural gas sales. Focusing on four aspects of natural gas, namely, the safe production, metering operation, intelligent customer service, and intelligent operation, we have completed the planning and design of large models for 16 scenarios. We set up a special team for natural gas sales, and promoted the construction of Kunlun's large model L3 level scenarios with high quality and high efficiency, among which the market intelligence analysis scenario has entered the second batch of typical business scenarios construction list of the parent company. The pilot application for going live has now been completed, which has effectively improved the efficiency of obtaining and analyzing natural gas market policies and market information.



Proactive Social Responsibility Commitment

Kunlun Energy is deeply aware of our responsibilities and missions. We have been consistently fulfilling our commitments in aspects such as promoting the collaborative progress of the industry, facilitating regional economic development, and participating in community development. By pursuing the coordinated development of economic value and social benefits, we have demonstrated the corporate responsibility in the new era and made contributions to the prosperity and progress of society.

Synergy Industry Development

Kunlun Energy pays attention to the industry's development trend, actively organizes and participates in industry seminars and customer networking events, drives industry partners to gain insight into the sustainable development trend, and promotes the industry's progress to a higher level.

Active Participation in Industry Networking Sessions

- In 2024, Kunlun Energy delivered a keynote speech on "PetroChina's LNG Business Status and Development Outlook" at the China LNG Engineering, Construction, and Operation & Maintenance Technology Exchange Conference, introducing the LNG industry chain links of "production, transportation, sales, storage and trade in details." We took the initiative to share our research results with industry partners and continue to promote the high-quality development of the LNG engineering and equipment manufacturing industry.
- In 2024, Kunlun Energy held three customer exchange activities in Suzhou, Chongqing and other places, and held discussions with many well-known domestic enterprises in the industrial and power fields, such as Huadian Group, Huaneng Group, Datang Group, State Power Investment Corporation, and Tianjin Chentang Thermal Power. All parties jointly discussed topics such as energy supply guarantee, win-win cooperation, and green development, aiming to reach a consensus on ensuring the natural gas supply, promoting the integration of natural gas and electricity, and achieving green and low-carbon transformation, so as to drive sustainable development.



Working Together in the Community

While providing high-quality services and stable energy, Kunlun Energy has continuously involved in community construction and development. Over the years, the Company has integrated its own development into the sustainable development of the region. In the course of business operation in various regions, we have actively shouldered social responsibilities and given back to society through our actions.

> Passing on the warmth and giving back to the community

The Company adheres to the corporate value pursuit of "Green Development, Energy Dedication: Driving Customer Growth and Empowering People's Happiness", as well as the main theme of "Powering the Beautiful China Initiative, Illuminating a Brighter Life for the People." We actively carried out volunteer service activities and encouraged employees to participate, striving to create a favorable public welfare cultural atmosphere.

Key Performance

580 sessions

Carry out Social welfare services

8,321 person-times

Total participation

6,964 person-times

Number of beneficiaries reached

4,351 hours

Total service hours reached



Case: "Igniting" Childhood with Big Hands Holding Small

In May 2024, Kunlun Energy held the "Igniting" Childhood Family Day event, inviting more than 20 media reporters, including Xinhua News Agency and China Daily, to explore gas safety with employees and their children in Beijing. Participants wore protective equipment to visit the equipment in the process area on site. The station manager systematically explained the gas production process and emergency response methods, and deepened safety awareness through immersive experiences such as watching the animation "The Wonderful Journey of a Piece of Gas" and simulation drills. The event included parent-child development projects such as the "Gas Miles" and fun ways to convey the corporate culture, such as transporting energy balls and a safe race, to strengthen public awareness of gas safety and promote family emotional connection.



> Coordinate resources to revitalize the countryside

Kunlun Energy actively responds to the national rural revitalization strategy, makes full use of the Company's business advantages, and provides more accessible gas services to towns and villages through "gasification of towns and villages," contributing to the improvement of the energy structure and people's quality of life. In 2024, the Company provided counterpart support in Xinjiang, Shandong, Shaanxi, Jiangxi, and other regions, and provided economic construction and social development through industrial support, employment, public welfare donations, and infrastructure construction.

The Company relied on the "Kunlun HuiXiang+" platform to comprehensively implement consumer assistance empowerment initiatives. Provincial companies actively connected with local poor counties and cities and assisted in the qualification review of goods for sale. This enabled the main platform and the sub-stores of 21 provincial companies in Hunan, Hainan, Ningxia, Zhejiang, Hebei, and other provinces to launch special local products function modules of the "Kunlun HuiXiang+" WeChat official account and mini program, which helps local special products sell well across the country.

Key Performance



2024

2,225.02 ten thousand yuan

Total Consumption-based Poverty Alleviation Expenditure

187.46 ten thousand yuan

The amount of social welfare donations includes contributions for rural revitalization/new rural construction, etc

Case: Industry-teaching integration empowers local talent revitalization

Kunlun Energy, together with Karamay Vocational and Technical College and other three parties, has implemented the "Oil Seedlings Plan" to establish a support system featuring "school-enterprise collaboration, targeted talent cultivation, and employment guarantee." Since 2010, it has been providing targeted training for students majoring in oil and gas storage and transportation, urban gas, and other related fields. In total, more than 200 students have been hired.

The "Oil Seedling Plan" specially recruits 100 students from disadvantaged families to form "order classes" for full-time study, customizing eight professional courses and achieving a 100% certification rate of vocational qualifications to ensure that graduates fully serve the natural gas terminal business of Kunlun Energy. The establishment of the Green Energy Industry College further deepens the integration of the education chain and the industrial chain, promotes the cultivation of talents in the field of green energy, and forms a sustainable support model integrating skills-based poverty alleviation, industrial empowerment, and community co-construction, injecting talent-driven impetus into local development.



Future Outlook

As the global economy gradually recovers and the demand for clean energy continues to grow worldwide, natural gas, as a critical clean energy source, plays a pivotal role in the context of carbon peaking and carbon neutrality. Kunlun Energy is committed to becoming an internationally renowned and domestically leading comprehensive green energy provider, driving strategic, growth-oriented, and value-driven initiatives in the natural gas industry to accelerate industrial transformation and upgrading. The year 2025 marks the conclusion of China's 14th Five-Year Plan. Kunlun Energy will further deepen ESG strategy by accelerating integration with renewable energy, speeding up digital transformation, optimizing sustainable decision-making mechanisms, strengthening the "Comprehensive Safety" framework, continuing to safeguard public welfare, and contributing to the society. The Company will collaborate with partners to share the fruits of sustainable development.

Kunlun Energy aims to build industry leadership in the Zero-Carbon Transition. Kunlun Energy will continue to build the demonstration project of "zero-carbon stations" and accelerate low-carbon transformation across the entire industry chain. By deeply integrating natural gas operations with renewable energy, the Company plans to deploy photovoltaic power generation and wind-solar hybrid projects at existing LNG processing plants and storage/transportation facilities and explore hydrogen energy coupling applications to create an integrated energy solution featuring "Gas-PV-Hydrogen" energy solution.

Kunlun Energy aims to enhance transparency and drive sustainable decision-making. Kunlun Energy will improve the calculation of Scope 3 carbon emission in methodology and coverage, with third-party verification of data quality; diversify the Board of Directors by appointing members with diverse professional backgrounds and rich experience to enhance decision-making expertise, ensuring a deep synergy between ESG goals and business strategies; strengthen business ethics training and audits to set industry benchmarks for integrity.

Kunlun Energy aims to establish a robust safety foundation for operations. The Company will elevate QHSE standards to underpin high-quality development; focus on grassroots operations and critical processes to solidify the "Comprehensive Safety" framework; Flexibly utilize safety management tools, carry out risk prompts throughout the whole process, and effectively enhance the ability to prevent and control dynamic risks; deploy intelligent safety management platforms for full-risk coverage, ensuring "zero major incidents."

Kunlun Energy aims to drive a green leap through digital intelligence. The Company will upgrade production management systems and establish an integrated platform to enhance automation and intelligence in operations; develop large-scale AI models for applications in safety management and smart customer service; and boost core competitiveness through technological innovation and management optimization.

Kunlun Energy aims to reshape value through steady growth. Guided by the ESG performance goals, through strategic measures in multiple dimensions such as optimizing resource allocation, promoting green and low-carbon transformation, deepening corporate governance, and driving the transformation and upgrading of the industry, we will continuously improve the quality of

customer service, jointly promote sustainable development with suppliers, focus on talent cultivation, and enhance the well-being of the people. This, in turn, will drive the green valuation premium in the capital market and enable us to share long-term value with all our partners.

"A year's plan starts with spring." Kunlun Energy remains true to the original aspiration, strengthens confidence, fortifies integrity, fulfills public trust, and unites collective resolve to comprehensively advance a high-quality green and low-carbon transition.



Expert Comments

In the 2024 ESG report of Kunlun Energy, I noticed that the Company has actively responded to the new regulations of the HKEX on climate-related information disclosure and took the lead in conducting the accounting work of Scope 3 greenhouse gas emissions, which is ahead of the common practices in the industry. Kunlun Energy has incorporated the climate change issue into the scope of responsibilities of the Board and the Sustainability Committee, and has made overall arrangements for the implementation of the climate strategy, forming a complete framework from top-level design to implementation, effectively ensuring the advancement of climate-related work.

In addition, Kunlun Energy released its first "Occupational Health and Safety Management White Paper (2024 Edition) " in 2024, which fully reflects the Company's proactive actions and clear commitment in occupational health and safety management. It not only creates a safer and healthier working environment for employees but also sets a good example for the sustainable development of the industry.

In terms of corporate governance, in 2024, Kunlun Energy continued to optimize its governance structure by adding a female director and setting goals for further improvement at the governance level in 2025, demonstrating the Company's emphasis on gender diversity and governance modernization.

In terms of green and low-carbon transformation, Kunlun Energy has steadily promoted the construction of a green enterprise. Focusing on the four major directions of "carbon reduction, pollution reduction, green expansion, and growth", it has actively and orderly promoted the realization of the goals of carbon peak and carbon neutrality.

In terms of suggestions, Kunlun Energy should continuously strengthen the accounting work of Scope 3 carbon emissions, systematically carry out the identification, assessment, management, and formulation of response measures for climate-related risks; formulate clear medium- and long-term sustainable development strategic goals; and at the same time, pay more extensive attention to the concerns of diverse stakeholders to promote the enterprise's sustainable development process at a higher level.

Dr. SHI Han

Founding Director of the ESG Centre of the HKU Institute for China Business
Non-resident Senior Fellow at the Centre on Contemporary China and the World of the University of Hong Kong

The 2024 ESG report of Kunlun Energy, with its professionalism and systematic nature, has set a benchmark for sustainable development reports in the energy industry. From the three core dimensions of corporate governance, environmental protection, and social responsibility, the Report comprehensively showcases the enterprise's strategic layout, target management, and outstanding achievements in the ESG field.

Kunlun Energy has a highly forward-looking layout in the environmental field. Focusing on the "carbon peak and carbon neutrality" goal, it has actively laid out clean energy, earnestly promoted energy conservation and carbon reduction actions, and solidified the foundation for green development. Meanwhile, the growth in natural gas sales has assisted in the transformation of the national energy structure, making it a mainstay in the wave of green energy transformation.

Additionally, Kunlun Energy has always been concerned about social welfare. Using energy as a link, it has helped boost regional economic development and improve people's livelihoods, promoted social fairness and inclusion, and continuously exerted efforts in fields such as education and employment, demonstrating the enterprise's sense of responsibility. In terms of scientific and technological innovation, by leveraging digital means, it has comprehensively empowered the improvement of operational efficiency and safety levels.

Kunlun Energy is steadily moving from "compliance-oriented ESG" to "value-creating ESG" with solid transformation capabilities and firm determination. This transformation not only sets a good example for the ESG development of the energy industry but also holds great significance for promoting the sustainable development of the industry.

Edmund YEUNG Lui-ming

Executive Director and Chief Financial Officer of Towngas

As a benchmark enterprise in the comprehensive utilization of natural gas terminals in China, Kunlun Energy has fully and transparently demonstrated its practical achievements in environmental, social, and corporate governance. The 2024 ESG report is rich in content, comprehensive in data information, and rigorous in logic, pointing out a clear path for the high-quality and sustainable development of the enterprise.

The Report closely aligns with the national "Carbon Peak and Carbon Neutrality" strategy. By establishing the "Dive-sphere Integrated" development system, it fully reflects the strategic resilience and innovative responsibility of state-owned energy enterprises. Its development path, which takes technological innovation as the core and industrial upgrading as the key, precisely meets the needs of China's energy structure transformation. Especially in the important transitional energy field of natural gas, by establishing a "Carbon Neutrality Research Center" to strengthen the construction of carbon management capabilities, it demonstrates a forward-looking layout. This model not only ensures energy security, but also promotes low-carbon development, providing a replicable practical paradigm for the green transformation of traditional energy enterprises and possessing significant industry demonstration values.

The Report also reveals the potential for further enhancing risk management capabilities in the future. It is recommended that, based on its existing achievements, Kunlun Energy further improve the climate scenario stress testing mechanism, enhance its ability to withstand systemic risks, and further identify and manage the carbon footprint of the entire industrial chain of the LNG industry. As a leading enterprise in the industry, Kunlun Energy is expected to continue to play a demonstration role, actively explore innovative practices in climate finance, provide more referenceable solutions for Chinese enterprises to participate in the global carbon market, and contribute more Chinese wisdom to addressing global climate change.

XIE Wenhong

Head of China Programme at Climate Bonds Initiative (CBI)

The 2024 ESG Report of Kunlun Energy comprehensively presents the Company's practices and achievements in environmental protection, social responsibility, and corporate governance. As China's largest natural gas distribution company by sales volume, Kunlun Energy courageously shoulders its social responsibilities. By implementing a series of measures, it has been continuously moving towards the practice of green energy transformation and sustainable development, and stands as a vanguard of green development among central state-owned enterprises.

Kunlun Energy has established a clear governance structure, well-defined strategic objectives, standardized management processes, transparent data disclosure, and a continuous improvement mechanism, which provide clear direction and guidance for the development of the Company's ESG practices and the construction of new-quality productive forces.

In response to the national "Carbon Peak and Carbon Neutrality" target, Kunlun Energy has taken green and low-carbon development as its core strategic direction and is committed to promoting the Company's sustainable development by optimizing the energy structure, improving energy utilization efficiency, and other means. In terms of the environment, Kunlun Energy has specified specific goals and measures for energy conservation and emission reduction. In terms of social responsibility, the Company emphasizes the fulfillment of social obligations and the development of its employees. In terms of corporate governance, the Company focuses on enhancing its governance level and transparency.

It is recommended that in its future development, Kunlun Energy should continue to demonstrate its strong ESG strategic determination and execution ability, deeply implement the development concepts of innovation, coordination, greenness, openness, and sharing, continuously enhance its sustainable development capabilities, and make greater contributions to promoting the national energy transformation and achieving the "Carbon Peak and Carbon Neutrality" target.

WANG Xin

Chief Executive Officer of China Inspection Company Limited

Sustainability Performance

> Economic Performance

Indicator Category	Indicator	Unit	2022	2023	2024
Economic Performance	Revenue	billion yuan	171.94	177.35	187.05
	Total assets	billion yuan	138.89	143.52	143.39
	Sales volume of natural gas	billion cubic meters	44.99	49.28	54.17
	Annual sales volume of LPG	10,000 tonnes	561.6	576.8	578.4
	Number of users	10,000 households	1,471.3	1,560.4	1,645.4

> Environmental Performance

Indicator Category	Indicator	Unit	2022	2023	2024
Emissions	Sulfur Dioxide (SO ₂) Emissions	Tonnes	18.2	20.0	19.9
	Nitrogen Oxide (NO _x) Emissions	Tonnes	452	400	205
	Amount of recycled associated gas in oil field	100 million cubic meters	3.47	4.59	2.87
	Discharged amount of industrial wastewater	100 million cubic meters	35.00	22.42	21.33
	Recycled amount of industrial wastewater	100 million cubic meters	6.0	6.8	3.3
	Total volume of domestic wastewater discharge	100 million cubic meters	84	84	102
	Total volume of domestic wastewater recycling	100 million cubic meters	1.9	1.9	4.8
	Total volume of general solid waste	Tonnes	29,151	7,452	1,902
	Intensity of general solid waste	Tonnes/100 million cubic meters	67.8	15.12	3.51
	Total volume of hazardous solid waste	Tonnes	454	693	756
	Intensity of hazardous solid waste	Tonnes/100 million cubic meters	1.01	1.41	1.40
	Direct GHG Emissions (Scope 1)	Tonnes CO ₂ e	460,708	373,839	489,665
	Indirect GHG Emissions (Scope 2)	Tonnes CO ₂ e	1,096,106	1,094,381	1,104,390
Climate Change	Methane Emissions	Tonnes	7,091	7,150	6,863
	Reduced BOG emissions by optimising process measures and process control	100 million cubic meters	6.0	6.3	3.2
	Total GHG Emissions (Scope 1+Scope 2)	Tonnes of CO ₂ e	1,556,814	1,610,370	1,594,055

Indicator Category	Indicator	Unit	2022	2023	2024
Climate Change	Total GHG emission intensity (by gas sales)	Tonnes of CO ₂ e/10,000 cubic meters	0.346	0.328	0.294
	Total GHG emission intensity (by revenue)	Tonnes of CO ₂ e/Ten thousand yuan in revenue	0.091	0.093	0.085
	Greenery coverage percentage in plants	%	14.7	22.0	18.4
	Total number of trees planted in plants	Trees	97,919	119,559	231,995
Use of Resources	Total amount of Water Consumption	10,000 cubic meters	481.50	501.00	481.25
	Water Consumption intensity	Cubic meter/Ten thousand yuan of value Added	2.03	2.03	1.93
	Total amount of energy conservation	10,000 tonnes of standard coal	0.23	0.24	0.17
	Total value of energy conservation	Ten thousand yuan	955.10	960.80	677.90
	Total amount of water conservation	10,000 cubic meters	0.80	0.80	6.60
	Total value of water conservation	Ten thousand yuan	2.20	2.20	18.48
Energy Consumption	Total Energy Consumption	MWh	2,832,199.58	2,889,323.85	3,159,286.64
	Energy Consumption Intensity	MWh/10,000 cubic meters	0.63	0.59	0.58
	Gasoline Consumption	Tonnes	3,753	4,223	4,077
	Diesel Consumption	Tonnes	498	875	881
	Natural Gas Consumption	10,000 cubic meters	10,167	11,378	11,879
	LPG Consumption	Tonnes	112	82	23
	Total Direct Energy Consumption	MWh	1,153,658.64	1,186,925.58	1,345,161.05
	Direct Energy Consumption Intensity	MWh/10,000 cubic meters	0.26	0.24	0.25
	Purchased Electricity	MWh	167,666.80	1,689,893.58	1,814,125.50
	Purchased Steam	MWh	1,872.95	12,504.68	10,864.89
	Total Indirect Energy Consumption	MWh	1,678,540.95	1,702,398.26	1,824,990.39
	Indirect Energy Consumption Intensity	MWh/10,000 cubic meters	0.37	0.35	0.34

> Social Performance

Indicator Category	Indicator	Unit	2022	2023	2024
Anti-Corruption	Number of adjudicated embezzlement cases filed against the Company	Cases	0	0	0
	Number of adjudicated embezzlement cases filed against company employees	Cases	0	0	0

Indicator Category	Indicator	Unit	2022	2023	2024
Anti-Corruption	Anti-Corruption Training Coverage	%	100	100	100
	Number of Anti-Corruption Training Sessions	Sessions	609	6	9
Work Safety	Work-Related Fatalities	Persons	0	0	0
	Number of workdays lost due to work-related injuries	Days	48	42	63
	Time Lost due to Work Injury Rate (TLWR)	/	5.1	4.4	6.8
	Lost Time Injury Rate (LTIR) per million hours worked	/	0.0133	0.0132	0.0134
	Total Recordable Injury Rate (TRIR)	/	0	0.0659	0.0268
	General and above-level work safety liability accidents	Incident(s)	0	0	0
	Accident case education	Units	1,754	2,036	3,446
	Participates in watching warning videos	Person-times	30,377	45,035	72,712
	Safety skills competition	Sessions	59	196	129
	Safety knowledge lectures	Sessions	455	1,623	1,442
	Number of employees participated in safety training	Person-times	157,857	162,107	73,011
	Total hours of safety-related training	Hours	88,518	92,315	94,077
	Emergency drills held by the Company	Sessions	20,288	14,000	9,616
	Participates in the emergency drills	Person-times	146,680	84,000	89,562
	Equipment Availability Rate	%	above 99	above 99	above 99
Product Quality	Length of pipeline with internal inspection conducted	Kilometer	886	652	737
	Urban Gas Pipeline Integrity Coverage Rate	%	100	100	100
	Branch Pipeline Integrity Coverage Rate	%	100	100	100
	Branch Pipeline High-Consequence Zone Identification Rate	%	100	100	100
	Branch Pipeline Flood/Geological Disaster Protection Coverage	%	100	100	100
	Residential Safety Inspections (Households)	10,000 households	1,078.0	1,083.7	1,238.0
	Residential Safety Inspection Rate	%	86	94	92
	Non-Residential Safety Inspections (Households)	10,000 households	14.46	13.58	17.50

Indicator Category	Indicator	Unit	2022	2023	2024
Product Quality	Non-Residential Safety Inspection Rate	%	100	100	100
	Critical Operational Monitoring Rate	%	100	100	100
	Emergency Information Reporting Rate	%	100	100	100
Supplier Management	Total Suppliers	Suppliers	1,850	1,447	1,597
	Material Suppliers	Suppliers	1,073	805	839
	Service Suppliers	Suppliers	582	437	494
	Engineering Suppliers	Suppliers	195	205	264
	Suppliers Signed "Sunshine Procurement" Commitment	%	/	100	100
	Suppliers Signed Social Responsibility Commitment	%	/	100	100
Customer Service	Number of Complaints Received (Products/Services)	Cases	2,157	856	428
	Complaint Resolution Rate	%	100	100	100
	Customer Satisfaction Rate	%	99	99.5	99.5
Employment	Number of Employees	Persons	30,916	27,138	24,809
	Number of female senior manager	%	14.3	36.4	38.2
	Number of male senior manager	%	85.7	63.6	61.8
	Male Employees	%	67.9	68.0	68.3
	Female Employees	%	32.1	32.0	31.7
	Chinese Employees	%	99.3	99.2	99.4
	Overseas Employees	%	0.7	0.8	0.6
	Full-Time Employees	%	99.8	100	100
	Part-Time Employees	%	0.2	0	0
	Employees with bachelor' s degree or above	%	50.3	55.3	59.6
	Employees with college diploma	%	26.7	25.1	23.6
	Employees with other educational qualifications	%	23.1	19.6	16.8
	<30 years old	%	10.0	10.9	9.3
	30-50 years old	%	73.4	71.5	72.6

Indicator Category	Indicator	Unit	2022	2023	2024
Employment	>50 years old	%	16.6	17.6	18.1
	Newly hired employees	Persons	110	274	494
	Employees with disabilities	Persons	114	117	116
	Turnover Rate	%	2.8	2.9	2.30
	Turnover rate of male employees	%	2.8	3.0	2.19
	Turnover rate of female employees	%	2.9	2.7	2.52
	Turnover rate of Chinese employees	%	2.9	2.9	2.30
	Turnover rate of Overseas employees	%	0	0	0
	Turnover rate of employees aged < 30	%	5.6	3.5	2.33
	Turnover rate of employees aged 30-50	%	2.6	3.0	2.29
	Turnover rate of employees aged > 50	%	2.4	2.0	2.30
Occupational Health	Coverage for occupational health check-ups	%	100	100	100
	Qualified rate of occupational health check-ups	%	100	100	100
	Coverage for occupational hazard factor inspection	%	100	100	100
Employee Training	Qualified rate of occupational hazard factor inspection	%	100	100	100
	Front-line Employee Training Ratio	%	100	100	100
	Corporate-Level Training Programs	Programs	25	55	137
	Employees Trained at Corporate Level	Person-times	2,730	6,767	1,778
	CNPC Corporate-Level Training Program	Sessions	64	115	113
	CNPC Corporate-Level Staff Training	Person-times	26,547	34,571	31,604
	Total number of employees trained	Persons	25,455	27,138	24,809
	Number of male employees trained	Persons	17,279	18,454	16,945
	Number of female employees trained	Persons	8,176	8,684	7,864
	Percentage of male employees trained	%	67.9	68.0	68.3
	Percentage of female employees trained	%	32.1	32.0	31.7
	Average training hours for male employees	Hours	78	86	85
	Average training hours for female employees	Hours	76	84	83

Indicator Category	Indicator	Unit	2022	2023	2024
Employee Training	Total number of employees trained by employee type - management personnel	Persons	11,611	11,235	11,780
	Total number of employees trained by employee type - professional technicians	Persons	825	896	814
	Total number of employees trained by employee type - highly skilled personnel	Persons	1,685	2,117	1,933
	trained by employee type - front-line operators	Persons	11,334	12,890	10,282
	Percentage of employees trained by employee type - management personnel	%	45.6	41.4	47.5
	Percentage of employees trained by employee type - professional technicians	%	3.2	3.3	3.3
	Percentage of employees trained by employee type - highly skilled personnel	%	6.6	7.8	7.8
	Percentage of employees trained by employee type - front-line operators	%	44.5	47.5	41.4
	Average training hours by employee type - management personnel	Hours	82	88	90
	Average training hours by employee type - professional technicians	Hours	72	80	85
	Average training hours by employee type - highly skilled personnel	Hours	73	82	86
	Average training hours by employee type - front-line operators	Hours	73	83	88
Social Investment	Hours of social volunteer service	Hours	/	2,789	4,351
	Number of social volunteer activities sessions	Sessions	775	817	580
	Participants in social volunteer activities	Person-times	1,382	17,254	8,321
	Total number of beneficiaries	Person-times	18,152	7,095	6,964
	Amount of donation	Ten thousand yuan	178	149	187.46
	Total amount of consumption assistance	Ten thousand yuan	1,350.00	1,373.14	2,225.02

Diclosure Indexes

HKEX ESG Appendix C2

HKEX Environmental, Social and Governance Reporting Code

Mandatory Disclosure Requirements	Page Number
Governance Structure	P11
Reporting Principles	P2
Reporting Scope	P1

Level	Content	Page Number
A1 Emissions	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air emissions, discharges into water and land, and generation of hazardous and non-hazardous waste. Note: Air emissions include NOx, SOx, and other pollutants regulated under national laws and regulations. Hazardous wastes are those defined by national regulations.	P61-63
	A1.1 The types of emissions and respective emissions data.	P61-63
	A1.3 Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P63
	A1.4 Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P63
	A1.5 Description of emission target(s) set and steps taken to achieve them.	P63
	A1.6 Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve.	P63
	General Disclosure Policies on the efficient use of resources, including energy, water and other raw materials. Note: Resources may be used in production, in storage, transportation, in buildings, electronic equipment, etc.	P52-60
A2 Use of Resources	A2.1 Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in ' 000s) and intensity (e.g. per unit of production volume, per facility).	P53
	A2.2 Water consumption in total and intensity (e.g. per unit of production	P60
	A2.3 Description of energy use efficiency target(s) set and steps taken to achieve them.	P53-56

Level	Content	Page Number
A2 Use of Resources	A2.4 Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	P61-63
	A2.5 Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	Not applicable as the company' s business nature does not involve product packaging.
A3 The Environ- ment and Natural Resources	General Disclosure Policies on minimising the issuer' s significant impacts on the environment and natural resources.	P57、65
	A3.1 Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	P58-59、65-66
B1 Employment	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	P69-71、77
	B1.1 Total workforce by gender, employment type (for example, full- or part-time), age group and geographical region.	P69-70
	B1.2 Employee turnover rate by gender, age group and geographical region.	P74
B2 Health and Safety	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	P78-81
	B2.1 Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	P80
	B2.2 Lost days due to work injury.	P80
	B2.3 Description of occupational health and safety measures adopted, and how they are implemented and monitored.	P75-76、80-81
B3 Development and Training	General Disclosure Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities. Note: Training refers to vocational training. It may include internal and external courses paid by the employer.	P72-73
	B3.1 The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	P73

Level	Content	Page Number
B3 Development and Training	B3.2 The average training hours completed per employee by gender and employee category.	P73
B4 Labour Standards	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour.	P69
	B4.1 Description of measures to review employment practices to avoid child and forced labour.	P69
	B4.2 Description of steps taken to eliminate such practices when discovered.	P69
B5 Supply Chain Management	General Disclosure Policies on managing environmental and social risks of the supply chain.	P85-86
	B5.1 Number of suppliers by geographical region.	P84
	B5.2 Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored.	P84-87
	B5.3 Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	P85
	B5.4 Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	P86
B6 Product Responsibility	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	P82-83, 92
	B6.1 Percentage of total products sold or shipped subject to recalls for safety and health reasons.	Not applicable as the company's business nature does not involve product recalls.
	B6.2 Number of products and service related complaints received and how they are dealt with.	P92-96
	B6.3 Description of practices relating to observing and protecting intellectual property rights.	P88
	B6.4 Description of quality assurance process and recall procedures.	P82
	B6.5 Description of consumer data protection and privacy policies, and how they are implemented and monitored.	P33-34

Level	Content	Page Number
B7 Anti-Corruption	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	P30-32
	B7.1 Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	P31
	B7.2 Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored.	P30-31
	B7.3 Description of anti-corruption training provided to directors and staff.	P31
B8 Community Investment	General Disclosure Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	P97-98
	B8.1 Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	P97-98
	B8.2 Resources contributed (e.g. money or time) to the focus area.	P97-98
D Climate-Related Disclosures Governance	Governance (a) the governance body(s) (which can include a board, committee or equivalent body charged with governance) or individual(s) responsible for oversight of climate-related risks and opportunities. (b) management's role in the governance processes, controls and procedures used to monitor, manage and oversee climate-related risks and opportunities.	P21, 37
D Climate-Related Disclosures Strategy	Climate-related risks and opportunities.	P37-42
	Business model and value chain.	
	Strategy and decision-making.	
	Financial position, financial performance and cash flows.	
	Climate resilience.	
D Climate-Related Disclosures Risk Management	Risk Management (a) The processes and related policies it uses to identify, assess, prioritise and monitor climate-related risks. (b) The processes the issuer uses to identify, assess, prioritise and monitor climate-related opportunities (including information about whether and how the issuer uses climate-related scenario analysis to inform its identification of climate-related opportunities). (c) The extent to which, and how, the processes for identifying, assessing, prioritising and monitoring climate-related risks and opportunities are integrated into and inform the issuer's overall risk management process.	P43-46

Level	Content	Page Number
D Climate-Related Disclosures Metrics and Targets	Greenhouse gas emissions.	P47-48
	Climate-related transition risks.	
	Climate-related physical risks.	
	Climate-related opportunities.	
	Capital deployment.	
	Internal carbon prices.	
	Remuneration.	
	Industry-based metrics.	
	Climate-related targets.	
	Applicability of cross-industry metrics and industry-based metrics.	

Reference of ESG Indicators System for ESG Reports of Listed Companies Controlled by Central Enterprise

Disclosure		Relevant Chapters
Environmental scope indicators		
E.1 Consumption of resources	E.1.1 Water resources	E.1.1.1 Fresh water usage (recommended disclosure) P60
		E.1.1.2 Recycled water usage (recommended disclosure) P61
		E.1.1.3 Percentage of recycled water use (recommended disclosure) /
		E.1.1.4 Water consumption intensity (recommended disclosure) P60
	E.1.2 Materials	E.1.2.1 Consumption of non-renewable materials (recommended disclosure) /
		E.1.2.2 Consumption of toxic and hazardous materials (recommended disclosure) /
		E.1.2.3 Intensity of material consumption (recommended disclosure) /
		E.1.3.1 Fossil energy consumption (basic disclosure) P53
	E.1.3 Energy	E.1.3.2 Non-fossil energy consumption (basic disclosure) P53
		E.1.3.3 Proportion of non-fossil energy use (disclosure recommended) P53
		E.1.3.4 Total energy consumption (disclosure recommended) P53
		E.1.3.5 Energy intensity (recommended disclosure) P53
	E.1.4 Packaging materials	E.1.4.1 Packaging material use (recommended disclosure) /
		E.1.4.2 Lightweighting and reduction of packaging materials (disclosure recommended) /
E.2 Pollution prevention and control	E.2.1 Wastewater	E.2.1.1 Wastewater discharge compliance (recommended disclosure) P61
		E.2.1.2 Wastewater management and abatement measures (recommended disclosure) P61
		E.2.1.3 Wastewater discharge (basic disclosure) P61
		E.2.1.4 Wastewater pollutant discharges (basic disclosure) /
		E.2.1.5 Wastewater pollutant discharge concentrations (recommended disclosure) /

Disclosure		Relevant Chapters
E.2 Pollution prevention and control	E.2.2.1 Waste gas emission compliance (basic disclosure)	P62
	E.2.2 Exhaust gases	
	E.2.2.2 Emissions of exhaust pollutants (disclosure recommended)	P62
	E.2.2.3 Waste gas pollutant emission concentrations (recommended disclosure)	P62
	E.2.3.1 Legal compliance for solid waste disposal (basic disclosure)	P63
	E.2.3.2 General industrial solid waste management (disclosure recommended)	P63
	E.2.3 Solid waste	
	E.2.3.3 Volume of general industrial solid waste disposed of (recommended disclosure)	P63
	E.2.3.4 Hazardous waste management (basic disclosure)	P63
	E.2.3.5 Hazardous waste disposal volumes (basic disclosure)	P63
E.3 Climate change	E.3.1.1 Sources and types of greenhouse gases (basic disclosure)	P47-48
	E.3.1.2 Management of greenhouse gas emissions (disclosure recommended)	P47-48
	E.3.1 Greenhouse gas emissions	
	E.3.1.3 Scope I emissions (recommended disclosure)	P48
	E.3.1.4 Scope II emissions (recommended disclosure)	P48
	E.3.1.5 Scope III emissions (recommended disclosure)	P48
	E.3.1.6 Greenhouse gas emission intensity (recommended disclosure)	P48
	E.3.2 Management of emission reductions	
	E.3.2.1 Management of GHG emission reductions (disclosure recommended)	P49-56
	E.3.2.2 Greenhouse gas emission reductions (recommended disclosure)	P15
	E.3.3.1 Participation in the carbon emissions trading market (recommended disclosure)	/
	E.3.3 Trading of environmental interests	
	E.3.3.2 Participation in markets for trading energy, water and sewage rights (recommended disclosure)	/
E.4 Biodiversity	E.3.3.3 Participation in green power trading (disclosure recommended)	P51
	E.3.4 Climate risk management	
	E.3.4.1 Climate risk management (disclosure recommended)	P43-46
E.4.1 Impacts of production, services and products on biodiversity	E.4.1.1 Impacts of production, services and products on biodiversity (disclosure recommended)	P57-59

Disclosure		Relevant Chapters
E.5 Resource and environmental management system measures	E.5.1 Low-carbon development goal-setting and strategic measures	
	E.5.1.1 Low-carbon development goal-setting and strategic measures (disclosure recommended)	P49
	E.5.2.1 Water use management (basic disclosure)	P60
	E.5.2 Resource management measures	
	E.5.2.2 Material Use Management (Recommended Disclosure)	/
	E.5.2.3 Energy use and energy conservation management (basic disclosure)	P53-56
	E.5.3 Energy-saving and Carbon Reduction Statistics Monitoring and Assessment Reward and Punishment System	
	E.5.3.1 Energy saving and carbon reduction monitoring, statistical reporting and assessment system (recommended disclosure)	P37
	E.5.4.1 Cleaner production (disclosure recommended)	P54
	E.5.4.2 Green technologies and recycling (disclosure recommended)	P54
E.5 Resource and environmental management system measures	E.5.4 Green Actions and Measures	
	E.5.4.3 Green Building Retrofits (Recommended Disclosure)	P52、64
	E.5.4.4 Green office and operations (recommended disclosure)	P64
	E.5.4.5 Green procurement and green supply chain management (disclosure recommended)	P86
	E.5.4.6 Environmental public welfare activities (disclosure recommended)	P65-66
	E.5.5.1 Environmental management system certification (disclosure recommended)	P57
	E.5.5 Green low-carbon certification	
	E.5.5.2 Green low-carbon enterprise certification (disclosure recommended)	/
	E.5.5.3 Certification of green and low-carbon products and services (disclosure recommended)	/
	E.5.6.1 Emergency response plan for environmental emergencies (recommended disclosure)	P57-59
Social scope indicators		
S.1 Employee Rights and Benefits	S.1.1 Staff Recruitment and Employment	
	S.1.1.1 Corporate recruitment policy and implementation (basic disclosure)	P71
	S.1.1.2 Employee structure (basic disclosure)	P70
	S.1.1.3 Avoidance of child or forced labour (disclosure recommended)	P69

Disclosure		Relevant Chapters
S.1 Employee Rights and Benefits	S.1.2.1 Compensation Philosophy and Policy (Basic Disclosure)	P70
	S.1.2 Employee Compensation and Benefits	
	S.1.2.2 Working hours and rest and holidays (disclosure recommended)	P70
	S.1.2.3 Security of remuneration and benefits (basic disclosure)	P70
	S.1.2.4 Democratic management of employees (basic disclosure)	P71
	S.1.3.1 Employee OHS Management (Basic Disclosure)	P75-76
	S.1.3.2 Employee Security Risk Prevention and Control (Basic Disclosure)	P79-80
	S.1.3 Employee health and safety	
	S.1.3.3 Response to safety incidents and workplace injuries (basic disclosure)	P80-81
	S.1.3.4 Employee care and support (recommended disclosure)	P74-77
	S.1.4.1 Employee Incentive and Promotion Policy (disclosure recommended)	P72
	S.1.4 Staff development and training	
	S.1.4.2 Employee Education and Training (Basic Disclosure)	P72-73
	S.1.4.3 Employee Career Planning and Job Change Support (Recommended Disclosure)	P71
	S.1.5.1 Employee satisfaction surveys (disclosure recommended)	P74
	S.1.5 Employee satisfaction	
	S.1.5.2 Labour disputes (disclosure recommended)	/
	S.1.5.3 Employee turnover (disclosure recommended)	P74
S.2 Product and Service Management	S.2.1.1 Policies and measures for the management of production norms (recommended disclosure)	P79
	S.2.1 Product safety and quality	
	S.2.1.2 Quality management (basic disclosure)	P78
	S.2.1.3 Product Recalls and Withdrawals (Recommended Disclosure)	/
	S.2.1.4 Negative product or service events (recommended disclosure)	P95
	S.2.2.1 Customer satisfaction (disclosure recommended)	P96
	S.2.2 Customer service and entitlements	
	S.2.2.2 Customer Complaints and Handling (Recommended Disclosure)	P93-94
	S.2.2.3 Customer information and privacy protection (recommended disclosure)	P33
	S.2.3.1 R&D and innovation management system (basic disclosure)	P88
	S.2.3 Innovative development	
	S.2.3.2 R&D investment (disclosure recommended)	/
	S.2.3.3 Innovations (recommended for disclosure)	P88-89
	S.2.3.4 Intellectual Property Protection (disclosure recommended)	P88

Disclosure		Relevant Chapters
S.3 Supply Chain Security and Management	S.3.1 Vendor management	
	S.3.1.1 Supplier selection and management (basic disclosure)	P85
	S.3.1.2 Number and distribution of suppliers (disclosure recommended)	P84
	S.3.2.1 Supply Chain Management Policies and Practices (recommended disclosure)	P85-87
	S.3.2 Supply chain link management	
	S.3.2.2 Supply Chain Security Assurance and Emergency Response Plan (recommended disclosure)	/
	S.3.2.3 Significant Risks and Impacts (Supply Chain) (disclosure recommended)	/
S.4 Social contribution	S.4.1 Payment of taxes and fees	
	S.4.1.1 Payment of taxes and fees (recommended disclosure)	/
	S.4.2 Community Co-Construction	
	S.4.2.1 Policy Measures for Participation in Local Communities (Recommended Disclosure)	/
	S.4.2.2 Contributions and impacts on local communities (disclosure recommended)	P97-98
	S.4.3.1 Policy measures to engage in socially beneficial activities (recommended disclosure)	/
	S.4.3 Social welfare activities	
	S.4.3.2 Inputs and effectiveness of participation in social welfare activities (recommended disclosure)	P97-98
	S.4.3.3 Accessibility (recommended disclosure)	/
	S.4.4.1 Industrial transformation (disclosure recommended)	P49-56
S.4.4 National strategic response	S.4.4.2 Rural revitalization and regional synergistic development (disclosure recommended)	P98
	S.4.4.3 Belt and Road and Overseas Performance (recommended disclosure)	/
	S.4.4.4 Industry characteristics and other social responsibility fulfilment (recommended disclosure)	P97-98
Governance scope indicators		
G.1 Governance Strategy and Organizational Structure	G.1.1.1 Governance strategy development (foundation disclosure)	P21
	G.1.1 Governance Strategies and Processes	
	G.1.1.2 Governance Strategy Oversight Process (Foundation Disclosure)	P10
	G.1.1.3 Governance Strategy Approval and Review Process (Foundation Disclosure)	P21
	G.1.1.4 Party Leadership (Recommended Disclosure)	/
	G.1.2.1 Ownership responsibilities (disclosure recommended)	/
	G.1.2 Organizational composition and functions	
	G.1.2.2 Organizational structure and functions of the board of directors, supervisory board and management (basic disclosure)	P22-24

Disclosure			Relevant Chapters
G.1 Governance Strategy and Organizational Structure	G.1.2 Organizational composition and functions	G.1.2.3 Appointment procedures and composition of the board of directors, supervisory board and management (basic disclosure)	P23-24
	G.1.3 Remuneration management	G.1.3.1 Remuneration plan for directors and supervisors (basic disclosure)	P25
		G.1.3.2 Transparency of board remuneration (disclosure recommended)	P25
		G.1.3.3 Reasonableness of management remuneration (disclosure recommended)	P25
G.2 Regulating governance	G.2.1 Internal controls	G.2.1.1 Internal audit (basic disclosure)	P30-31
		G.2.1.2 Internal control and control structures, mechanisms and processes (basic disclosure)	P28-29
	G.2.2 Integrity building	G.2.2.1 Institutional norms for integrity building (basic disclosure)	P30-31
		G.2.2.2 Effectiveness of integrity building measures (basic disclosure)	P30-31
	G.2.3 Fair competition	G.2.3.1 Norms for a fair competition regime (basic disclosure)	P32
		G.2.3.2 Effectiveness of fair competition measures (basic disclosure)	P32
G.3 Investor Relations Management and Shareholders' Equity	G.3.1 Investor relations management	G.3.1.1 Investor relations management strategy (basic disclosure)	P26-27
		G.3.1.2 Investor communications (basic disclosures)	P26-27
		G.3.1.3 Construction of investor relations management unit (basic disclosure)	/
	G.3.2 Shareholders' equity	G.3.2.1 Status of shareholders' (general) meetings (basic disclosure)	P25-26
		G.3.2.2 Shareholder communications (basic disclosure)	P25-26
		G.3.2.3 Shareholders' right to information and participation in decision-making (basic disclosure)	P25-26
	G.3.3 Creditors' interests	G.3.3.1 Creditworthiness (recommended disclosure)	/
		G.3.3.2 Bond market compliance (recommended disclosure)	/
G.4 Transparency of information disclosure	G.4.1 Information disclosure system	G.4.1.1 Financial disclosure (basic disclosure)	P06
		G.4.1.2 Non-financial disclosures (basic disclosures)	P05
	G.4.2 Quality of information disclosure	G.4.2.1 Regular monitoring, auditing and evaluation of all disclosures (basic disclosure)	P30
G.5 Compliance and Risk Management	G.5.1 Compliance with regulations	G.5.1.1 Compliance system (basic disclosure)	P28
		G.5.1.2 Compliance system development (basic disclosure)	P28
		G.5.1.3 Compliance Review Specific Processes (Base Disclosure)	P29
	G.5.2 Risk management	G.5.2.1 Risk identification and early warning (basic disclosure)	P29
		G.5.2.2 Risk control and tracking (base disclosure)	P29
		G.5.2.3 Risk reporting and management (basic disclosures)	P29

IFRS S2 Climate-related Disclosures

Suggested Disclosures		Relevant Chapters
Governance	The governance body(s) (which can include a board, committee or equivalent body charged with governance) or individual(s) responsible for oversight of climate-related risks and opportunities.	P21、37
	Management's role in the governance processes, controls and procedures used to monitor, manage and oversee climate-related risks and opportunities.	P37
Strategy	The climate-related risks and opportunities that could reasonably be expected to affect the entity' s prospects.	P38-42
	The current and anticipated effects of those climate-related risks and opportunities on the entity' s business model and value chain.	P38-42
	The effects of those climate-related risks and opportunities on the entity' s strategy and decision-making, including information about its climate-related transition plan.	P38-42
	The effects of those climate-related risks and opportunities on the entity's financial position, financial performance and cash flows for the reporting period, and their anticipated effects on the entity's financial position, financial performance and cash flows over the short, medium and long term, taking into consideration how those climate-related risks and opportunities have been factored into the entity's financial planning; and	P45-46
	The climate resilience of the entity's strategy and its business model to climate-related changes, developments and uncertainties, taking into consideration the entity's identified climate-related risks and opportunities.	P43-44
	The processes and related policies the entity uses to identify, assess, prioritise and monitor climate-related risks.	P38-42
Risk Management	The processes the entity uses to identify, assess, prioritise and monitor climate-related opportunities, including information about whether and how the entity uses climate-related scenario analysis to inform its identification of climate-related opportunities; and	P38-42
	The extent to which, and how, the processes for identifying, assessing, prioritising and monitoring climate-related risks and opportunities are integrated into and inform the entity's overall risk management process.	P38-42
Metrics and Targets	Information relevant to the cross-industry metric categories.	/
	Industry-based metrics that are associated with particular business models, activities or other common features that characterise participation in an industry; and	P47-48
	Targets set by the entity, and any targets it is required to meet by law or regulation, to mitigate or adapt to climate-related risks or take advantage of climate-related opportunities, including metrics used by the governance body or management to measure progress towards these targets.	P47-49

GRI Standards

Usage Statement	Kunlun Energy has prepared this Report with reference to the Global Reporting Initiative (GRI) standards for the reporting period from 1 January 2024 to 31 December 2024.
GRI used	GRI1: Foundation 2021 GRI11: Oil and Gas Industry 2021

Material Topic	GRI Standard	Disclosure	Industry Standard Reference Number	Page Number
Topic 11.1 GHG emissions	GRI3: Material Topics 2021	Disclosure 3-3 Management of Material Topics	11.1.1	P47-48, 53-56
	GRI302: Energy 2016	Disclosure 302-1 Energy consumption within the organization	11.1.2	P53
		Disclosure 302-2 Energy consumption outside of the organization	11.1.3	P53
		Disclosure 302-3 Energy intensity	11.1.4	P53
		Disclosure 305-1 Direct (Scope 1) GHG emissions	11.1.5	P48
	GRI305: Emissions 2016	Disclosure 305-2 Energy indirect (Scope 2) GHG emissions	11.1.6	P48
		Disclosure 305-3 Other indirect (Scope 3) GHG emissions	11.1.7	P48
		Disclosure 305-4 GHG emissions intensity	11.1.8	P48
	GRI3: Material Topics 2021	Disclosure 3-3 Management of Material Topics	11.2.1	P15, 18, 37, 47
	GRI201: Economic Performance 2016	Disclosure 201-2 Financial implications and other risks and opportunities due to climate change	11.2.2	P38-42
Topic 11.2 Climate Adaptation, Resilience, and Transition	GRI305: Emissions 2016	Disclosure 305-5 Reduction of GHG emissions	11.2.3	P15
Topic 11.3 Air Emissions	GRI3: Material Topics 2021	Disclosure 3-3 Management of Material Topics	11.3.1	P61-62
	GRI305: Emissions 2016	Disclosure 305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	11.3.2	P62
	GRI416: Customer Health and Safety 2016	Disclosure 416-1 Assessment of the health and safety impacts of product and service categories	11.3.3	P62
	GRI3: Material Topics 2021	Disclosure 3-3 Management of Material Topics with additional industry recommendations	11.4.1	P57-59, 65-66
Topic 11.4 Biodiversity	GRI304: Biodiversity 2016	Disclosure 304-1 Operational sites owned, leased, managed in, or adjacent to protected areas and areas of high biodiversity value outside protected areas	11.4.2	P65
		Disclosure 304-2 Significant impacts of activities, products, and services on biodiversity	11.4.3	/

Material Topic	GRI Standard	Disclosure	Industry Standard Reference Number	Page Number
Topic 11.4 Biodiversity	GRI304: Biodiversity 2016	Disclosure 304-3 Habitats protected or restored	11.4.4	P65
		Disclosure 304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	11.4.5	P65
Topic 11.5 Waste	GRI3: Material Topics 2021	Disclosure 3-3 Management of Material Topics	11.5.1	P63
	GRI306: Waste 2020	Disclosure 306-1 Waste generation and significant waste-related impacts	11.5.2	P63
		Disclosure 306-2 Management of significant waste-related impacts	11.5.3	P63
		Disclosure 306-3 Waste generated	11.5.4	P63
		Disclosure 306-4 Waste diverted from disposal	11.5.5	P63
		Disclosure 306-5 Waste directed to disposal	11.5.6	P63
Topic 11.6 Water and Effluents	GRI3: Material Topics 2021	Disclosure 3-3 Management of Material Topics	11.6.1	P60-61
	GRI303: Water and Effluents 2018	Disclosure 303-1 Interactions with water as a shared resource	11.6.2	/
		Disclosure 303-2 Management of water discharge-related impacts	11.6.3	P61
		Disclosure 303-3 Water withdrawal	11.6.4	P60
		Disclosure 303-4 Water discharge	11.6.5	P61
		Disclosure 303-5 Water consumption	11.6.6	P60
	GRI3: Material Topics 2021	Disclosure 3-3 Management of Material Topics	11.9.1	P75-76, 78-81
Topic 11.9 Occupational Health and Safety	GRI403: Occupation-al Health and Safety 2018	Disclosure 403-1 Occupational health and safety management system	11.9.2	P78-79
		Disclosure 403-2 Hazard identification, risk assessment, and incident investigation	11.9.3	P81
		Disclosure 403-3 Occupational health services	11.9.4	P75-76
		Disclosure 403-4 Worker participation, consultation, and communication on occupational health and safety	11.9.5	P75-76
		Disclosure 403-5 Worker training on occupational health and safety	11.9.6	P75-76
		Disclosure 403-6 Promotion of worker health	11.9.7	P75-76
		Disclosure 403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	11.9.8	P75-76

Material Topic	GRI Standard	Disclosure	Industry Standard Reference Number	Page Number
Topic 11.9 Occupational Health and Safety	GRI403: Occupational Health and Safety 2018	Disclosure 403-8 Workers covered by an occupational health and safety management system	11.9.9	P75-76
		Disclosure 403-9 Work-related injuries	11.9.10	P80
		Disclosure 403-10 Work-related ill health	11.9.11	P76
Topic 11.10 Employment Practices	GRI3: Material Topics 2021	Disclosure 3-3 Management of Material Topics	11.10.1	P70-74
	GRI401: Employment 2016	Disclosure 401-1 New employee hires and employee turnover	11.10.2	P74
		Disclosure 401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	11.10.3	P70
	GRI404: Training and Education 2016	Disclosure 404-1 Average hours of training per year per employee	11.10.6	P72
		Disclosure 404-2 Programs for upgrading employee skills and transition assistance programs	11.10.7	P72-73
	GRI414: Supplier Social Assessment 2016	Disclosure 414-1 New suppliers that were screened using social criteria	11.10.8	P85
		Disclosure 414-2 Negative social impacts in the supply chain and actions taken	11.10.9	P86
	GRI3: Material Topics 2021	Disclosure 3-3 Management of Material Topics	11.11.1	P69-77
	GRI202: Market Presence 2016	Disclosure 202-2 Proportion of senior management hired from the local community	11.11.2	/
	GRI401: Employment 2016	Disclosure 401-3 Parental leave	11.11.3	P77
Topic 11.11 Anti-Discrimination and Equal Opportunities	GRI404: Training and Education 2016	Disclosure 404-1 Average hours of training per year per employee	11.11.4	P72
	GRI405: Diversity and Equal Opportunity 2016	Disclosure 405-1 Diversity of governance bodies and employees	11.11.5	P73
		Disclosure 405-2 Ratio of basic salary and remuneration of women to men	11.11.6	/
	GRI406: Non-Discrimination 2016	Disclosure 406-1 Incidents of discrimination and corrective actions taken	11.11.7	/
	GRI3: Material Topics 2021	Disclosure 3-3 Management of Material Topics	11.14.1	P5-6, 97-98
Topic 11.14 Economic Impacts	GRI201: Economic Performance 2016	Disclosure 201-1 Direct economic value generated and distributed	11.14.2	P6
	GRI202: Market Presence 2016	Disclosure 202-2 Proportion of senior management hired from the local community	11.14.3	/

Material Topic	GRI Standard	Disclosure	Industry Standard Reference Number	Page Number
Topic 11.14 Economic Impacts	GRI203: Indirect Economic Impacts 2016	Disclosure 203-1 Infrastructure investments and services supported	11.14.4	P97-98
		Disclosure 203-2 Significant indirect economic impacts	11.14.5	P97-98
	GRI204: Procurement Practices 2016	Disclosure 204-1 Proportion of spending on local suppliers	11.14.6	/
Topic 11.15 Local Communities	GRI3: Material Topics 2021	Disclosure 3-3 Management of Material Topics	11.15.1	P48
	GRI413: Local Communities 2016	Disclosure 413-1 Operations with local community engagement, impact assessments, and development programs	11.15.2	P98
		Disclosure 413-2 Operations with significant actual or potential negative impacts on local communities	11.15.3	/
	GRI413: Local Communities 2016	Disclosure 3-3 Management of Material Topics	11.19.1	P32
Topic 11.19 Anti-Competitive Behavior	GRI206: Anti-Competitive Behavior 2016	Disclosure 206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	11.19.2	/
	GRI3: Material Topics 2021	Disclosure 3-3 Management of Material Topics	11.20.1	P30-32
Topic 11.20 Anti-Corruption	GRI205: Anti-Corruption 2016	Disclosure 205-1 Operations assessed for risks related to corruption	11.20.2	P30
		Disclosure 205-2 Communication and training about anti-corruption policies and procedures	11.20.3	P31
		Disclosure 205-3 Confirmed incidents of corruption and actions taken	11.20.4	/

Table of Abbreviations And Full Forms

Abbr.	Full Form
AI	Artificial Intelligence
BOG	Boil Off Gas
CDP	Carbon Disclosure Project
CNAS	China National Accreditation Service for Conformity Assessment
CNG	Compressed Natural Gas
DJSI	Dow Jones Sustainability Indices
ESG	Environmental, Social and Governance
ERP	Enterprise Resource Planning
GS	Goal Setting
IEA	International Energy Agency
IFRS S2	International Financial Reporting Standards S2 Climate-related Disclosures
IPCC	Intergovernmental Panel on Climate Change
ISO	International Organization for Standardization
IUCN	International Union for Conservation of Nature
KPI	Key Performance Indicator
LDAR	Leak detection and repair
LNG	Liquefied Natural Gas
LPG	Liquefied Petroleum Gas

Abbr.	Full Form
LTIR	Lost Time Incident Rate
OECMs	Other Effective area-based Conservation Measures
PDCA	Plan Do Check Act
PPb	Part per billion
QC	Quality Control
QHSE	Quality Health Safety and Environment
SDGs	Sustainable Development Goals
SSPs	Shared Socioeconomic Pathways
TLWR	Total Lost Worktime Rate
TRIR	Total Recordable Incident Rate

Independent Assurance Statement



Verification Statement

Scope and Objective

Hong Kong Quality Assurance Agency ("HKQAA") was commissioned to conduct an independent verification of the Sustainability Disclosures (the "selected disclosures") stated in the Environmental, Social and Governance Report 2024 ("the Report") for KunLun Energy Company Limited ("KunLun Energy"). The selected disclosures covered the period from 1st January 2024 to 31st December 2024 and represented the sustainability performance of KunLun Energy.

The objective of this verification is to provide an independent opinion with a limited level of assurance on whether the selected disclosures are prepared in accordance with the following reporting criteria:

- the Environmental, Social and Governance Reporting Guide ("ESG Guide") set out in Appendix C2 of the Listing Rules of The Stock Exchange of Hong Kong Limited (version effective from 31 December 2023, which remains applicable to annual reports for financial years commencing before 1 January 2025).

The verification team also reviews the disclosures in the Report by making reference to the following disclosure frameworks, as the Report has been prepared with references to:

- the Global Reporting Initiative's Sustainability Reporting Standards ("GRI Standards")

Level of Assurance and Methodology

HKQAA's verification procedure has been conducted with reference to the International Standard on Assurance Engagements 3000 (Revised), Assurance Engagements Other than Audits or Reviews of Historical Financial Information ("ISAE 3000") issued by the International Auditing and Assurance Standards Board. The evidence gathering process was designed to obtain a limited level of assurance as set out in the ISAE 3000 by using a risk-based approach.

Our verification procedure included, but not limited to:

- Sampling the sustainability information stated in the Report, e.g. claims and performance data for detail verification;
- Verifying the raw data and supporting information of the selected samples of the sustainability information;
- Interviewing responsible personnel; and
- Checking the internal control mechanism

Roles and Responsibilities

KunLun Energy are responsible for the organization's information system, the development and maintenance of records and reporting procedures in accordance with the system, including the calculation and determination of sustainability information and performance. HKQAA verification team is responsible for providing an independent verification opinion on the selected disclosures for KunLun Energy's reporting period. The verification was based on the verification scope, objectives and criteria as agreed between KunLun Energy and HKQAA.



Independence

HKQAA did not involve in collecting and calculating data or compiling the reporting contents. Our verification activities were entirely independent and there was no relationship between HKQAA and KunLun Energy that would affect the impartiality of the verification.

Limitation and Exclusion

The following limitations and exclusions were applied to this verification due to the service scope, nature of verification criteria, and characteristics of the verification methodology.

- Our verification scope is limited to examining the raw data or information for the selected disclosures, e.g., Claims and Performance Data stated in the Report. The identified sustainability information may be subject to inherent uncertainty because of incomplete scientific and technical knowledge.
- Evaluating the quality of execution and implementation effectiveness of the ESG practices, the appropriateness of the assumptions made, and the estimation techniques applied are outside the scope of our verification.
- The verification of raw data or information is based on the use of a sampling approach and reliance on the client's representation. As a result, errors or irregularities may occur and remain undetected.
- Any information outside the established verification period has been excluded.

Conclusion

Based on the evidence obtained and the results of the verification process, it is the opinion of the verification team that, with a limited level of assurance, nothing has come to the team's attention that the Report has not been prepared, in all material respects, in accordance with the ESG Guide set out in Appendix C2 of the Listing Rules of The Stock Exchange of Hong Kong Limited (former version, which remains applicable to annual reports for financial years commencing before 1 January 2025).

Signed on behalf of Hong Kong Quality Assurance Agency

Kado Zhang

Assistant Director, Business Development
April 2025

Ref: 14957493- VER

Reader Feedback

Thank you for reading Kunlun Energy Environmental, Social, and Governance (ESG) Report 2024. To provide you and other stakeholders with more valuable information and promote Kunlun Energy's ability and level of ESG management, we sincerely welcome your comments and suggestions on the report and feedback to us in the following ways:

39/F, 118 Connaught Road West, Hong Kong
Website: <http://www.kunlun.com.hk/>
Email: info@kunlun.com.hk

1. What is your overall assessment of this report?

- ☐ Excellent ☐ Good ☐ Satisfactory ☐ Poor

2. To what extent do you think about the clarity, accuracy, and completeness of the information, data, and indicators disclosed in this report?

- ☐ Excellent ☐ Good ☐ Satisfactory ☐ Poor

3. In your opinion, does this report fully reflect Kunlun Energy’ s ESG performance?

- ☐ Excellent ☐ Good ☐ Satisfactory ☐ Poor

4. To what extent do you find the presentation of this report clear and easy to understand?

- ☐ Excellent ☐ Good ☐ Satisfactory ☐ Poor

5. To what extent do you think the layout of this report helped you understand the information?

- ☐ Excellent ☐ Good ☐ Satisfactory ☐ Poor

6. What do you consider to be the most important element for improvement in this report?

- ☐ Governance ☐ Security ☐ Services ☐ Supply chain ☐ Staff ☐ Environment ☐ Society

7. What other comments and suggestions do you have regarding Kunlun Energy's ESG management and reporting?

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