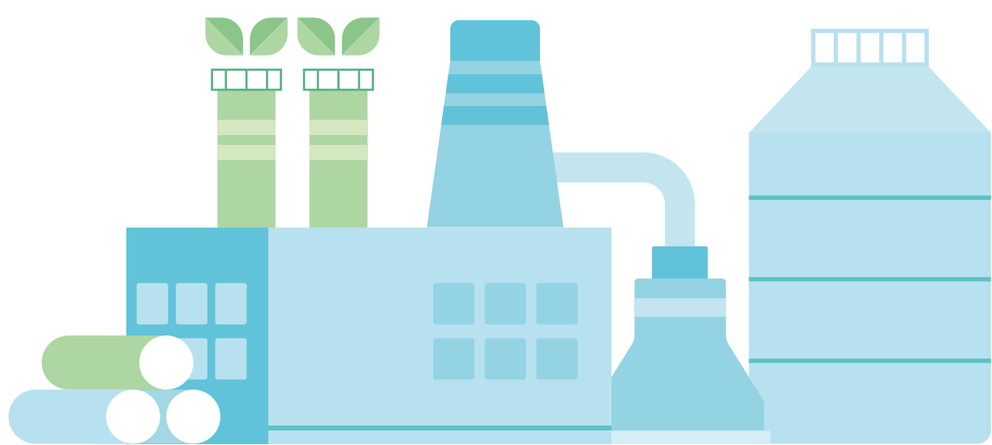
KunLun Energy Company Limited
昆 侖 能 源 有 限 公 司
(於百慕達註冊之有限公司)
(股份代號：00135.HK)

2023

Environmental, Social and Governance Report

Contents



About This Report

Purpose of The Report

This report is the "2023 Environmental, Social and Governance Report" (referred to as "this Report" or "Report") issued by Kunlun Energy Company Limited (referred to as "Kunlun Energy" or "the Company" or "We"). The purpose of this Report is to disclose Kunlun Energy's environmental, social, and governance performance in 2023 openly and transparently, to truly reflect the enterprise's strategy and practice of sustainable development and to investigate and respond to critical issues of concern to stakeholders. This Report was reviewed and approved by the Company's Board of Directors, with close supervision of its contents.

Reporting Period

This Report is prepared on an annual basis, and the reporting period is from January 1, 2023, to December 31, 2023 (referred to as "this Year"). To improve the report's comparability and forward-looking nature, part of the content has included information gathered from previous and following includes information gathered from previous and subsequent years.

Reporting Scope

This Report covers the Company's environmental, social, and governance management systems, objectives, commitments, key projects, and measures related to ESG matters and activities relating to the Company's operation. For the list of the Company's subsidiaries covered in the Report, please refer to note 36 "Principal Subsidiaries" in the consolidated financial statements set out in the Company's Annual Report 2023.

Basis of Preparation

This Report is prepared by the "Environmental, Social, and Governance Reporting Guide" (referred to as "ESG Reporting Guide") in Appendix C2 to the "Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited" (referred to as "Hong Kong Stock Exchange"). The Report is also compiled with reference to "GRI Sustainability Reporting Standards" (referred to as "GRI Standards") published by the Global Sustainability Standards Board (referred to as "GSSB"), "IFRS Sustainability Disclosure Standard" (referred to as "IFRS S2"), "Index System for ESG Reports on listed State-Owned Enterprises" (referred to as "Index System") issued by the State-owned Assets Supervision and Administration Commission (referred to as "SASAC"), as well as disclosure requirements set forth by ESG rating agencies.

Reporting Principles

This Report adheres to the reporting principles outlined in "ESG Reporting Guide", ensuring materiality, quantitative, balance and consistency, as well as the "mandatory disclosure" requirements and "comply or explain" provisions.

- **Materiality:** By conducting a materiality assessment, we have identified the importance of ESG issues to different stakeholder groups. The Company intends to prioritise responses to those ESG issues with higher materiality.
- **Quantitative:** This Report has presented ESG key performance indicators (referred to as "KPIs") measurably and disclosed calculation standards and statistical scope of quantitative parameters.
- **Balance:** This Report provides objective facts and discloses both positive and negative indicators, presenting an unbiased view of the Company's ESG performance.
- **Consistency:** Unless otherwise stated, this Report uses a consistent statistical methodology, as in prior years, to ensure a meaningful comparison with historical data. Any changes in the statistical scope will be annotated and explained accordingly in this Report.

Information Preparation

All information disclosed in this Report is derived from the Company's internal documents, statistical data, summaries, and statistics on the fulfilment of responsibilities by the Company's subsidiaries. This Report is prepared by the ESG Compiling Group, reviewed by the management, and approved by the Sustainability Committee and the Board. Unless otherwise stated, all amounts stated in this Report are in Renminbi (referred to as "RMB").

Report Verification

Hong Kong Quality Assurance Agency carried out an impartial third-party verification of Kunlun Energy's ESG report in 2023 in accordance with the pertinent standards of Kunlun Energy.

The main objectives are as follows:
1) to examine the Report's materiality, completeness, and responsiveness following the Report verification standard;
2) to examine the Report's disclosed economic, environmental, and social performance indicators for completeness and consistency;
3) to evaluate the Report in accordance with the quality control principle of balance, comparability, accuracy, timeliness, clarity, and reliability.

Feedback and Contacts

The Company looks forward to hearing your valuable opinions and suggestions, on how to improve the sustainable development performance and ESG capability. If you have any questions about this report or require a printed version, please contact us through email at info@kunlun.com.hk or by telephone at (852) 25222282.

About Kunlun Energy

Company Profile

Kunlun Energy Company Limited is incorporated in Bermuda and listed on the main board of the Hong Kong Stock Exchange (stock code: 00135.HK). The Company has been included in twelve indexes as of the date of this Report's publication, including Hang Seng SCHK China Central SOEs 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 SOEs ESG Enhanced Index, as well as China SOEs ESG Index.

Kunlun Energy' s businesses focus on four segments: natural gas sales, sales of LPG, LNG processing and terminals, and exploration and production, which makes the Company one of the largest enterprises engaged in natural gas utilisation and sales of LPG in the People's Republic of China (referred to as "PRC").

Key performance

In 2023, the Company's natural gas business expanded to cover 29 provinces, autonomous regions, and municipalities across the country. The annual sales volume reached 49.28 billion cubic meters, marking a year-on-year increase of 9.6%. The Company now serves a total of 15.604 million natural gas users.

Operating Performance

Kunlun Energy is committed to its core values of promoting environmentally friendly practices, providing reliable energy solutions, and supporting the growth and well-being of its customers. The Company leverages its business synergy advantages to effectively coordinate production, supply, storage, and sales, focusing on resource optimisation and enhanced customer service. The Company leverages both domestic and international resources and markets to construct a comprehensive natural gas industry chain and a diversified business value chain. Our commitment lies in delivering safe, reliable green energy supply and offering top-notch, efficient customer service to a wide range of clients. The Company strives to position itself as a leading sustainable energy provider with a robust domestic presence and international acclaim.

Indicator	Unit	2021	2022	2023
Sales revenue	RMB in 100 million	1,385.5	1,719.4	1,773.5
Total assets	RMB in 100 million	1,325.8	1,388.9	1,435.2
Sales volume of natural gas	100 million cubic metres	420.0	449.9	492.8
Annual sales volume of LPG	10,000 tonnes	598.6	561.6	576.8
Numbers of natural gas users	10,000 users	1,384.6	1,471.3	1,560.4

Corporate Culture

The corporate culture of Kunlun Energy is deeply rooted in the petroleum industry and has evolved over time through the Company's ongoing efforts in the natural gas business. This has resulted in a unique and vibrant cultural system that drives the Company's commitment to high-quality development.

Corporate vision

Contribute to the building of Beautiful China and improve people' s well-being.

Enterprise mission

Devote to green energy and empower better life.

Development goal

Build an internationally renowned and China' s first-class integrated green energy provider.

Development strategy

Innovation, resource, market, internationalisation, green and low carbon

Integrity philosophy

Fairness in power, integrity in profession

Compliance philosophy

Law as top priority, compliance first, integrity and trust, justice and rights

Quality, health, safety and environment philosophy

People focus, quality foremost,safety first, environmental protection priority

Customer service philosophy

Start from the customer needs, aim for customer satisfaction, exceed customer expectations

Talent development philosophy

Embrace knowledge, honour talent, empower dreamers to achieve success

International cooperation philosophy

Mutual benefit, collaborative development

Message from Chairman

It is my great honour to present this report to you. I would like to express my sincere gratitude for your unwavering care and support towards Kunlun Energy.

In 2023, China's economy and society were back on track thanks to the effective implementation of macro-policies. As a result, the national economy experienced a significant rebound, and it returned to positive growth in China's natural gas consumption. Kunlun Energy fully adheres to the industrial policies prioritising the special rectification of urban gas safety, the integration of "One City, One Enterprise" in the urban gas industry, and the linkage of natural gas prices. It endeavours to cultivate a cooperative and mutually advantageous atmosphere for development while considering the sustainable expansion of the sector. The Company leverages its resources, management, and scale advantages to drive the development of a diversified business structure, marketing framework, digital intelligence support system, and modern governance network. This enables the Company to grow in its urban gas scale continuously, optimise the customer structure, and experience rapid growth in emerging businesses.

Over the past year, our Company has been committed to strengthening its main business operations, enhancing its competitive edge, and ultimately achieving a notable improvement in overall performance. Kunlun Energy has successfully achieved sustainable growth and enhanced the quality of its terminal operations through efforts to strengthen the development of multiple gas sources, improve industrial chain integration, and thrive in the competitive market. In 2023, China's economy and society were back on track thanks to the effective implementation of macro-policies. As a result, the national economy experienced a significant rebound, returning to positive growth in China's natural gas consumption. Kunlun Energy fully adheres to the industrial policies prioritising the special rectification of urban gas safety, the integration of "One City, One Enterprise" in the urban gas industry, and the linkage of natural gas prices. It endeavours to cultivate a cooperative and mutually advantageous atmosphere for development while considering the sustainable expansion of the sector. The Company leverages its resources, management, and scale advantages to drive the development of a diversified business structure, marketing framework, digital intelligence support system, and modern governance network. This enables the Company to grow in its urban gas scale continuously, optimise the customer structure, and experience rapid growth in emerging businesses. In terms of LNG storage, transportation, and sales, the Company consistently improves the capacity to generate efficiency through dedication to professional development, market-driven operations, lean management, and integrated planning. The scale of the terminal market maintained a momentum of steady growth, with the total number of users exceeding 15.604 million, and the total sales of natural gas reaching 49.28 billion cubic meters. As for the LPG sales business, Kunlun Energy has enhanced its marketing strategy, broadened the resource channels, and optimised the resource structure. These efforts have improved the quality and efficiency of the operating projects and accordingly decreased the costs of the terminal industrial chain. The volume of LPG sold amounted to 5,768 thousand tons. In 2023, the Group achieved a total revenue of RMB 177.35 billion, representing a 3.1% increase compared to the previous year, which indicates a substantial improvement in the operational efficiency of the Group.

Over the past year, we consolidated high-quality development, increased development efficiency, and promoted excellent development through the implementation of lean management. Kunlun Energy has consistently enhanced its operational stability and transparency while also proactively fostering a constructive and participatory investor relationship with the aim of attaining long-term market recognition. Kunlun Energy has included ESG governance performance indicators in the annual performance evaluation of its management team, emphasising the importance of intelligent, high-end, green, safe governance practices as well as Company development. Meanwhile, Kunlun Energy enhanced digital infrastructure for the "Four in one" flow of logistics, capital information, and value. This involves the implementation of management, sales, operations, and stations, as well as customer service with intelligence. The Company is actively improving both international and domestic standards by leveraging innovative digital technology to enhance ESG performance and promote high-quality development. Kunlun Energy has been recognised as "outstanding" among "Double-Hundred Enterprises" by the State-owned Assets Supervision and Administration Commission. It has been included in various indexes, such as the Hang Seng SCHK China Central SOEs Index. Additionally, Kunlun Energy has maintained a BBB level in the MSCI ESG rating results. The acknowledgement of the capital market highlights the positive results of Kunlun Energy in terms of market value performance, valuation enhancement, stock liquidity, and sustainable development.

Over the past year, we have established a solid foundation, exerted every effort to control concealed threats, and developed a bottom line for security risk prevention. Kunlun Energy prioritises safety as the cornerstone of the Company's growth. We are committed to implementing a safety-focused approach, enhancing long-term mechanisms, and strengthening QHSE management across the entire value chain. Our aim is to elevate the level of intrinsic safety through higher standards, stricter requirements, and more effective measures. Kunlun Energy has put into place a "list system" for managing safety hazards, which is supplemented by an audit system to thoroughly identify concealed dangers. As a result, we have realised specialised safety management, concrete safety responsibilities, refined safety audits, and standardised safety construction. Always putting life and people first, Kunlun Energy has augmented risk management for urban gas consumers through enhanced quality assurance in security inspections, alongside intensifying public awareness initiatives concerning gas safety. We have further enhanced the implementation of pipeline digital maps and modernised and refurbished obsolete facilities in production procedures to assure complete gas consumption stability. Concurrently, the Company has enhanced LPG risk remediation, attained a 100% home security inspection rate, and introduced steel cylinders' coding filings.

Over the past year, we have fully implemented the concept of green development and welcomed new prospects in the industry climate by exploiting the advantages of resources and urban gas coverage. Confronted with a conflict between the need for carbon-neutral energy transformation and the steady growth of natural gas demand at present and in the future, Kunlun Energy started drafting a Peak Carbon Dioxide Emissions Carbon-Neutral Action Plan (2024 edition) and systematically set up a new path of low-carbon development. By sticking to the principle of "emission reduction and green power prioritised, offsets as a supplement", the Company addressed technology-enabled emission control and reduction while reinforcing the foundation of urban fuel business. Additionally, it navigated the possibility of introducing affordable green energy to encourage the integration of electricity and certification. In 2023, Kunlun Energy acquired an amount of 182,873,800 kWh of renewable electricity, which made up 10.85% of the total power consumption. Likewise, we have been actively expanding our comprehensive energy business, continuously enhancing the range of energy usage scenarios to meet the diverse energy demands of our users in areas such as gas, electricity, heat, and cooling. We have been strategically investing in the integration of wind, light, gas and electricity services, as well as expediting the development of a comprehensive supplier of environmentally-friendly energy solutions.

Over the past year, we engaged in collaborative efforts with a diverse array of partners to advance our common goals, surmount obstacles, develop credibility through outstanding service, and collectively build our brand's value. Kunlun Energy considers its employees' talents to be a vital source of innovation and growth. Hence, the Company values protecting the rights and interests of our staff, enhancing employee management, attending to the physical and mental well-being of employees, and other initiatives that foster a sense of accomplishment and belonging among staff. In 2023, the employee turnover rate has been controlled at 2.9%. We diligently executed the service philosophy of "start from the customer needs, aim for customer satisfaction, exceed customer expectations", managed quality with the utmost rigour, enhanced customer interaction and experience, and delivered differentiated and excellent services to improve customer experience continuously and increase customer loyalty with an expanded scope of service. The quality of customer service is widely acclaimed, customer complaints are resolved at a rate of 100%, and customer satisfaction stands at 99.5%. Kunlun Energy invested 13.73 million RMB in consumer assistance, 1.37 million RMB in rural revitalisation and counterpart support, and 1.49 million RMB in social welfare donations. The aforementioned is aimed to empower economic and social development, shape a responsible brand image with outstanding corporate values, and contribute to the building of Beautiful China and improving people's well-being. The Company also integrated its own development into the kinetic energy for advancement in its business location.

When the wind is calm, navigate and conquer the waves. When we look back on the past year, we are proud of how we have managed to stay true to our corporate mission of "serving the national strategy, industry development, and customer growth" and to our strong sense of responsibility towards society, shareholders, and customers. We have also applied the five development strategies of "innovation-driven, resources-based, market-oriented, international, and low carbon" with a determined effort to set new performance records. With an eye on the future, we shall commence afresh, progress into an uncharted era, and persistently compose new chapters. We will keep enhancing the framework of accountability for running businesses legally, preserving a steady supply of products on the market, supporting the livelihoods of the populace and the economy, and assisting with national energy security. Simultaneously, we will assess the entire trend, look for the overall situation, take action, and keep writing a new scenario of excellent development as integrated green energy suppliers.

Chairman and Executive Director

Fu Bin

Statement of the Board of Directors

The Board of Directors of Kunlun Energy is the supreme governing body responsible for making decisions and overseeing ESG matters within the Company. It is their duty to include ESG considerations in the Company's management policy and business decision-making process. The significance attributed by the Board of Directors to ESG was evident in all four meetings convened in 2023, wherein deliberations and resolutions regarding ESG matters were delivered. The Sustainability Committee under the Board of Directors is responsible for identifying and evaluating potential ESG risks and opportunities; developing and assessing ESG management policies, strategies, and frameworks; keeping an eye on and carrying out ESG management goals; recognising and assessing ESG opportunities and risks; and investigating and resolving significant matters that impact the Company's fulfilment of its ESG obligations.

The Board of Directors regularly listens to the professional consultants and the Sustainability Committee's recommendations regarding ESG strategy and operations, the impact of ESG risks and opportunities on the Company, and the countermeasures. It also assesses and approves the ESG management objectives, examines the effectiveness and suitability of the Company's ESG structure and internal oversight system, and establishes clear guidelines for the ESG endeavours.

In 2023, the Company addressed and made decisions on ESG issues at four quarterly board meetings:

- In March 2023, the ESG report of the previous year was approved;
- In May 2023, the progress of ESG promotion was monitored;
- In August 2023, the progress of the Company's ESG rating was demonstrated;
- In December 2023, a key work plans and arrangements for ESG in 2024 were presented.

Kunlun Energy highly values stakeholders' expectations on ESG issues. Through annual stakeholder research activities, together with the themes of industrial characteristics as well as the degree of influence on the Company's operations, it examines, sorts, and screens the ESG concerns and identifies the main issues of the Company's ESG. The most recent stakeholder survey was conducted in January 2024, and the Board of Directors received, reviewed, and confirmed the relevant results in March 2024.

On March 25, 2024, the Board of Directors reviewed and approved this report.

ESG Highlights

Kunlun Energy is committed to the mission of "devote to green energy and empower better life" with a focus on key responsibilities of the economy, environment, and society. Aiming to become a leading global supplier of green energy, Kunlun Energy addresses the challenges of low-carbon transformation and development, contributes to the building of an ecological society, and strives to meet the energy needs of a better future. Through its actions, Kunlun Energy is committed to writing a new chapter in the ESG and making a significant, long-lasting difference through its initiatives.

Honors in 2023

Operating consistently under the guiding principle of "green and low carbon, high-quality, and ecological development," Kunlun Energy has steadfastly collaborated with all pertinent stakeholders to advance ESG management. Throughout the past year, the Company has progressively fortified its ESG management mechanism and information disclosure practices while actively promoting the adoption of ESG management measures. This concerted effort has led to significant enhancements in ESG performance, duly recognised and acknowledged by the capital market.

Awarded "Outstanding" in the State Council's rating of 'Double-Hundred Enterprise' in state-owned enterprise reform.	Shortlisted in China Central SOEs ESG · Pioneer 50 Index.	Shortlisted in China ESG Listed Company Pioneer 100.

Won Institutional Investor awards in the Asian Power sector such as "Most Honoured Company", "Best Investor Relations Company", "Best ESG", "Best Investor Relations Team", and "Best Board of Directors".

Shortlisted in 12 indexes such as Hang Seng SCHK China Central SOEs Index, Hang Seng SCHK China Central SOEs ESG Leaders Index, Hang Seng SCHK Central SOEs Value Index, Central SOEs Low Volatility Index, Central SOEs Select Index, SOEs Value Index, SOEs Low Volatility Index, SOEs Momentum Index, SOEs Select Index, China Central SOEs ESG 40 Index, China Central SOEs ESG Enhanced Index, China SOEs ESG Index, etc.[1] Market value management has been further advanced.

Won "Best Public Utility Company" at the Golden Hong Kong Stocks organised by the financial media Zhitong Finance.	Won the "Annual Special-2023 Best Listed Company award in the China Securities Golden Bauhinia Award".	Maintained BBB in MSCI[2] ESG rating.

1. In February 2024, Kunlun Energy was shortlisted in China Central SOEs ESG 40 Index, China Central SOEs ESG Enhanced Index, as well as China SOEs ESG Index.
2. The full name of MSCI is Morgan Stanley Capital International, originally known as Morgan Stanley Capital International. MSCI ESG ratings aim to assist investors, companies, and other industry stakeholders in identifying the most relevant ESG risks and opportunities for financial performance by enhancing transparency and providing dynamic data and analytical insights.

ESG Goals and Progress

To actively respond to the United Nations Sustainable Development Goals (SDGs), we align ourselves with leading global companies, tailor our approach by considering the Company's current status and unique characteristics, and establish a comprehensive and specialised ESG indicator and target management system that reflects Kunlun Energy's distinctiveness. We draw upon advanced industry practices both domestically and internationally, as well as widely accepted benchmarks, to develop our standards through research and practical analysis. This enables us to create an ESG indicator repository that guides our ongoing management and disclosure of ESG performance. Each year, the Company maintains and updates sustainability goals to ensure they remain challenging and adaptable. This drives continuous improvement in our environmental, social, and governance disclosures and management capabilities, which lay a solid foundation for Kunlun Energy to emerge as a globally renowned and domestically leading green energy provider committed to sustainable development.

In 2023, Kunlun Energy updated its ESG goals, focusing on five major themes: green and low-carbon development, health and safety, talent development, product responsibility, and compliant governance. This strategic move effectively addresses the significance of ESG within Kunlun Energy, breaking down specific objectives and actions to key responsible departments, thereby facilitating scientific planning, innovative practices, and clarified action across departments to achieve the targets as scheduled.

Building a Performance Indicator System

Outline the preliminary formulation of ESG target indicators based on domestic and international ESG standards and guidelines, ESG rating criteria, and materiality issues' assessment.

Internal Communication

Communicate with relevant departments for analysing the feasibility of goal setting and refining the ESG indicator system.

Improve the Target Mechanism

Develop an Action Plan for integrating target management into ESG daily operations, dynamically update ESG goals based on performance progress, and integrate them into the information management system in the future.

Performance Tracking and Disclosure

Regular review, evaluation of progress, and external disclosure of latest performance to promote continuous improvement in ESG performance.

Green and Low-Carbon Development

Objectives for 2023	2023 Objectives	2023 Highlight Actions	2024 Objectives
• By 2040, to lower CO_2 emissions by 40% compared to 2020. • By 2030, to lower methane emission intensity by 20%; by 2040, to lower methane emission intensity by 40% compared to 2020. • By 2023, to conserve energy no less than 1,100 metric tons of standard coal. • By 2023, to conserve water of 5,000 metric tons. • By 2050, to achieve "net zero" emissions.	• In 2023, lowered CO_2 emissions intensity by 15% compared to 2020. • In 2023, lowered methane emissions intensity by 32% compared to 2020. • In 2023, conserved 2,400 metric tons of standard coal 2023. • In 2023, conserved water for 8,000 metric tons.	• Application of clean production audit results: The Huanggang and the Tai'an Factory have effectively applied the findings from their clean production audits by implementing measures such as process optimisation, parameter adjustments, and installation of energy-saving equipment, resulting in significant energy conservation and emission reduction effects. • Reduce BOG emissions: LNG receiving terminals and factories minimised emissions by employing precise measurement techniques, optimising process parameters, installing dedicated equipment for recovering BOG under abnormal conditions, thus mitigating flare gas emissions. • Explore the introduction of affordable green electricity: Procured 182,873,800 kWh of green electricity and obtained 22 green energy certificates. • Methane Emissions Control: Implemented methane leak detection and repair work utilising advanced technologies such as cloud-based laser methane detection warning systems and unmanned aerial vehicle leak detection. • Accelerate the strategic deployment of new energy and integrated energy projects, with cumulative photovoltaic power generation reaching 976,000 kWh.	• In 2024, to lower methane emissions intensity by 3% compared to 2023. • In 2024, to lower CO_2 emissions intensity by 3% compared to 2023. • In 2024, conserve energy no less than 1,100metric tons of standard coal. • In 2024, conserve water of 5,000 metric tons.

Health and Safety

Objectives for 2023	2023 Objectives	2023 Highlight Actions	2024 Objectives
• By 2023, to maintain 0 incidents of general Class A accidents (or above).	• In 2023, maintained 0 incidents of general Class A accidents (or above).	• Refined responsibilities for departments, monitored departments' list of responsibilities, and enhanced awareness of safety responsibilities' execution.	• In 2024, maintain 0 incidents of general Class A accidents (or above).
• By 2023, to achieve 100% for the coverage and rectification of safety inspections.	• In 2023, achieved 100% for the coverage and rectification of safety inspections.	• Invested 500 million RMB in addressing potential hazards.	• In 2024, achieve 100% for the coverage and rectification of safety inspections.
• By 2023, to maintain 100% coverage of the digital emergency plans, as well as that of safety emergency plan drills.	• In 2023, maintained 100% coverage of the digital emergency plans, as well as that of safety emergency plan drills.	• Over 44,000 safety commitment agreements have been signed by staff and contractors for their respective positions. • Continuously conducted QHSE system audits.	• In 2024, maintain 100% coverage of the digital emergency plans, as well as that of safety emergency plan drills.
• By 2023, to achieve 100% for the coverage of safety training.	• In 2023, achieved 100% for the coverage of safety training, with a total of 162,107 employees participated in terms of times.	• Innovated safety meetings, optimised safety inspection and supervision mechanisms, and reinforced safety risk prevention.	• In 2024, achieve 100% for the coverage of safety training

Health and Safety

Objectives for 2023	2023 Objectives	2023 Highlight Actions	2024 Objectives
• By 2023, to reach 100% for the coverage of occupational hazards detection.	• In 2023, reached 100% for the coverage of occupational hazards detection.	• Implemented differentiated health check-ups, established employee basic medical records, and completed the collection of information on six major categories of basic diseases such as hypertension.	• In 2024, achieve 0 newcases of occupational diseases.
• By 2023, to reach 100% for the coverage of occupational health checks.	• In 2023, reached 100% for the coverage of occupational health check.	• Established "Negative Health List for Positions" and "Negative List for Special Operations", and adjusted 53 individuals with occupational contraindications from certain positions.	• In 2024, reach 100% for the coverage of occupational hazards detection.
• By 2023, to decrease the non-production fatalities by 10% compared to 2022.	• In 2023, decreased the non-production fatalities by 21% compared to 2022.	• Organised promotion week for the "Occupational Disease Prevention and Control Law", selection of "Occupational Health Ambassadors", and provided staff with "Employee Dietary Guidelines"	• In 2024, reach 100% for the coverage of occupational health checks. • In 2024, decrease the non-production fatalities by 10% compared to 2023

Talent Development

Objectives for 2023	2023 Objectives	2023 Highlight Actions	2024 Objectives
• By 2023, to reach at least 90% for the vocational training coverage.	• In 2023, a total of 27,138 employees participated in vocational training, reaching 100% of participation.	• Relying on platforms such as the Junior Management Program, and the International Program, efforts were made to promote the development of leadership skills among employees and the construction of talent pools.	• In 2024, reach at least 90% for the vocational training coverage.
• By 2023, to reach at least 80 for the average vocational training hours.	• In 2023, the average time of vocational training was 81 hours.	• Advanced the construction of high-level expert talent teams. • Optimised the recruitment strategy for talent to attract individuals with expertise in key positions and emerging business sectors.	• In 2024, reach at least 85 hours for the average vocational training. • In 2024, reach at least 90% coverage rate of the employee satisfaction survey, with a satisfaction rating of no less than 90 points.
• By 2023, to maintain the number of child labour or forced labour cases at 0.	• In 2023, maintained 0 cases of child labour or forced labour.	• Strictly adhered to labour regulations, and established a self-inspection mechanism.	• In 2024, maintain the number of child labour or forced labour cases at 0.

Product Responsibility

Objectives for 2023	2023 Objectives	2023 Highlight Actions	2024 Objectives
• By 2023, to maintain customer satisfaction rate at 99% (or above). • By 2023, to maintain the resolution rate of customer complaints at 100%.	• In 2023, achieved customer satisfaction rate at 99.5%, with a year-on-year increase of 0.5%. • In 2023, maintained the resolution rate of customer complaint at 100%.	• Issued the guidance "Standardisation of Natural Gas Customer Service Business Processes" Version 2.0. • Ensured stable gas supply to customers, prepared emergency peak-shaving resources in advance, and formulated contingency plans. • Conducted a third-party customer satisfaction survey, incorporating methods such as on-site visits for discussions with mystery clients and major customers, to enhance feedback channels and insights.	• In 2024, maintain a customer satisfaction rate at 99% (or above). • In 2024, maintain the resolution rate of customer compliants at 100%. • In 2024, reach at least 85% of safety inspection rate for residential users, and 100% for non-residential users.
• By 2023, to maintain completion of product quality testing at 100%. • By 2023, to maintain the natural gas quality testing and sampling pass rate at 100%.	• In 2023, maintained completion of product quality testing at 100%. • In 2023, maintained the natural gas quality testing and sampling pass rate at 100%.	• Conducted gas sample self-inspection and random sampling, with a total of 3,248 gas quality sampling tests carried out throughout the year, and zero quality-related incidents occurred. • Equipped an online analysis cabin and established a CNAS-certified laboratory to enhance self-inspection capabilities.	• In 2024, maintain completion of product quality testing at 100%. • In 2024, maintain the natural gas quality testing and sampling pass rate at 100%.
• By 2023, to reach 100% coverage for the supplier evaluation, including topics on compliance, environment, business ethics, health and safety, quality, human rights etc.	• In 2023, reached 100% coverage for the supplier evaluation, including topics on compliance, environment, business ethics, health and safety, quality, human rights etc.	• Refined and improved the contractor and supplier management system. • Achieved 100% of new suppliers signed the "Admission Commitment Letter."	• In 2024, reach 100% coverage for the supplier evaluation, including topics on compliance, environment, business ethics, health and safety, quality, human rights etc. • In 2024, reach 100% coverage of incoming suppliers certified with the ISO 45001.

Compliant Governance

Objectives for 2023	2023 Objectives	2023 Highlight Actions	2024 Objectives
• To continuously improve the corporate governance system.	• Throughout the year, convened four regular board meetings, during which 38 agenda items were deliberated and approved. • Revised the "Company Regulations" which were approved during the annual shareholders' meeting in 2023.	• Revised the "Company Regulations" and other corporate specifications. • Conducted a thorough review of significant related-party transactions and their limits, with third-party financial advisors assessing reasonableness, followed by extensive communication with investors to actively gain their understanding, trust, and support.	• To continuously improve the corporate governance system. • To formulate and issue policies regarding related-party transactions and compensation clawback.
• By 2023, to reach 100% for the coverage of Board-level anti-corruption trainings, including seminars, centralised training, or distribution of training materials.	• In 2023, reached 100% for the coverage of Board-level anti-corruption trainings, including seminars, centralised training, or distribution of training materials.	• Board members participated in anti-corruption trainings and seminars.	• In 2024, reach 100% for the coverage of Board-level anti-corruption training, including seminars, centralised training, or distribution of training materials.

Compliant Governance

Objectives for 2023	2023 Objectives	2023 Highlight Actions	2024 Objectives
• By 2023, to reach 100% for the coverage of employees' compliance and anti-corruption training, and to continuously increase the coverage of anti-corruption training for contractors.	• In 2023, reached 100% for the coverage of compliance and anti-corruption training for employees (including part-time staff). • In 2023, conducted business ethics training for suppliers and contractors (including distributing training materials), with a coverage of 100%.	• Conducted compliance and anti-corruption training activities for all employees through specialised training sessions and quizzes. • Distributed training materials on anti-corruption to suppliers and contractors, accompanied by the dissemination of business ethics principles.	• In 2024, reach 100% for the coverage of compliance and anti-corruption training for employees (including part-time staff), suppliers, contractors, and service providers.

Feature I:
Comprehensive Coordination Ensuring Stable Gas Supply

Kunlun Energy, animated by the mission of "devote to green energy and empower better life", executes all-encompassing management throughout the gas supply, transportation, and end-user phases to guarantee the smooth and safe delivery of gas to commercial and residential establishments. We coordinate across production, supply, storage, and sales links, mobilise resources from multiple channels, and construct a diversified business value chain and the natural gas industry chain by leveraging our synergistic advantages in operations. Our commitment is to provide users with a safe, stable, and green energy supply, along with high-quality and efficient customer services.

Infrastructure Upgrades: Solidify Service Foundation

As the largest integrated natural gas utilisation enterprise in China, Kunlun Energy invests in projects for the construction of natural gas pipelines and LNG processing, storage, and transportation facilities, as well as the optimisation and renovation of existing facilities. With comprehensive business capabilities in urban gas, LNG processing and transportation, LPG sales, and integrated and new energy, Kunlun Energy has made significant contributions to the smooth operation of the natural gas industry chain.

LNG Processing and Transportation Facilities

Overview of Kunlun Energy's Natural Gas Infrastructure

Number of LNG receiving terminals: 2
Unloading capacity: 13 million tons per year
Gas storage capacity: 1.5 billion cubic meters

Number of LNG storage tanks: 1
Unloading capacity: 300,000 tons per year
Gas storage capacity: 25 million cubic meters

Number of operational LNG processing plants: 14
Natural gas processing capacity: 16.95 million cubic meters per day

LNG production capacity: 3.96 million tons per year
Gas storage capacity: 154 million cubic meters (gaseous)

Progress in Infrastructure Construction

In 2023, the completion number of construction for LNG storage station projects amounted to 2, with an additional storage capacity of 180 million cubic meters.

New investment in 1 LNG receiving station projects has resulted in an increased unloading capacity of 3 million tons per year.

8 new ground equity investment projects were initiated, contributing to a rise in terminal sales capacity by 900 million cubic meters.

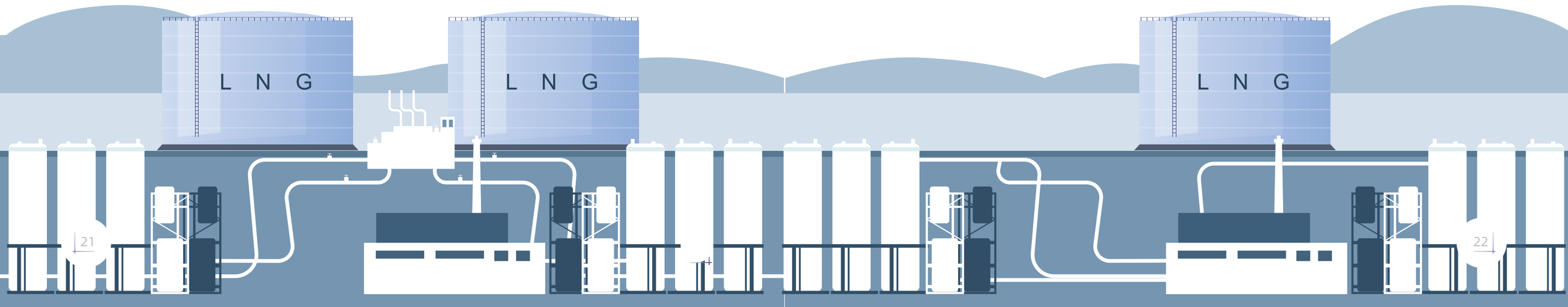
Gas Pipeline Facilities

Overview of Kunlun Energy's Natural Gas Infrastructure	Progress in Infrastructure Construction
Total length of main pipelines: 5,156 kilometers	In 2023, there were 4 new branch lines added, spanning a length of 260 kilometers.
Number of branch lines: 168 Length of urban gas pipeline network: 84,953 kilometers	The urban gas pipeline network saw an expansion of 1,643 kilometers during the year.
Business coverage: Nationwide, including 29 provinces (autonomous regions, municipalities directly under the central government) and the Hong Kong Special Administrative Region	

Overview of Kunlun Energy's Natural Gas Infrastructure Status and Construction

Case: Kunlun Energy's Large-Scale Urban Gas Emergency Peak-Shaving Project in Harbin

The Harbin Natural Gas Emergency Reserve Project is Kunlun Energy's first large-scale urban gas LNG emergency peak-shaving project, which was planned and constructed in recent years. It effectively meets the domestic gas safety needs of the provincial capital city. The project includes a 50,000 cubic meter LNG double-metal full containment tank and a gasification unit with a capacity of 100,000 cubic meters per hour, capable of meeting the peak demand and emergency requirements of Harbin for three days in winter. After the project was put into operation, it provided 30 million cubic meters of emergency peak-shaving natural gas, greatly enhancing the gas supply security of Harbin. It alleviated the contradiction of insufficient gas supply capacity during the winter peak time, which is of significant importance in empowering the development of regional livelihoods.



Operational Optimisation: Mitigate Potential Risks

Kunlun Energy closely monitors weather changes, such as strong winds and snowfall. Kunlun Energy's extreme weather warnings serve as directives, prompting intensified and frequent inspections of gas supply facilities, including pipelines and pressure regulation equipment. Key equipment and facilities undergo comprehensive inspections to ensure stable operational processes and prevent issues like freezing and blockages, thus safeguarding the stable supply of natural gas.

Case: Comprehensive Implementation of Preparedness for Typhoon Talim at the LNG Reserve Depot of Hainan Subsidiary

In response to the risk of severe wind and rain affecting gas supply due to Typhoon Talim making landfall in Hainan and other areas, Kunlun Energy's Hainan Subsidiary took proactive measures to ensure readiness and address potential challenges. Hainan Company closely monitored weather conditions and the impact of Typhoon Talim, deploying early preparations and actively implementing emergency plans. A 24-hour duty system was established, with key personnel on-site in advance. Communication channels were kept open, and patrols and monitoring of critical areas and pipelines were intensified. Furthermore, sufficient gas reserves and disaster prevention materials were prepared. A comprehensive approach to typhoon and flood prevention and disaster management was implemented to ensure the safe and stable supply of natural gas during the typhoon period.

Hainan Subsidiary LNG Reserve Depot preparing for Typhoon Talim

Coordinating Multiple Parties: Scientific and Stable Gas Supply

Kunlun Energy adheres to the principle of "ensuring livelihoods, public utilities, and key priorities", placing the guarantee of domestic gas supply as its top priority. The Company adopts a comprehensive perspective in scientific management and scheduling, closely monitoring market supply and demand dynamics. It actively engages with upstream natural gas suppliers to secure resource allocations, utilising LNG storage and transportation facilities to pre-emptively store gas and mitigate potential supply disruptions. Subsidiary companies tailor their approaches according to local conditions, establishing command and dispatch platforms and implementing natural gas supply-demand forecasting and early warning mechanisms. Precise forecasts of natural gas demand are made, and production operations are intensified and controlled to promptly alert potential supply-demand gaps and risks. Meanwhile, the Company scientifically schedules resources based on gas supply priorities to ensure a stable supply for domestic and uninterrupted industrial gas usage.

Case: Gansu Kunlun Gas Company Implemented a Variety of Measures to Ensure the Safe and Stable Supply of Natural Gas

In the winter of 2023, leveraging the operational Lanzhou Natural Gas Peak Shaving and Storage Centre, Gansu Kunlun Gas Company took measures to ensure a stable gas supply for Lanzhou and its surrounding areas. By dynamically reserving and rotating natural gas usage, the Company secured a peak gas supply of 24.5 million cubic meters, effectively alleviating potential supply constraints in the upstream gas transmission pipelines during the winter peak season. Moreover, the Company closely monitored weather patterns, particularly temperature fluctuations and gas demand dynamics, which enabled timely adjustments to gas quantities and ensured a reliable and consistent gas supply for both residential and commercial users. Additionally, Gansu Company conducted thorough statistical analyses of user gas consumption to gain a precise understanding of usage trends and accurate gas quantity assessments. In anticipation of cold wave conditions, the Company developed contingency plans and emergency repair protocols at various levels. It established comprehensive emergency response mechanisms, including 24-hour duty shifts and adequate emergency supplies. This strategic approach of proactive planning and effective response measures ensured the stability of gas supply for residents and businesses in the region, demonstrating the Company's commitment to community safety and well-being.

Feature II:
Take Multiple Measures to Establish Solid Safety Baseline

Kunlun Energy unwaveringly adheres to the concept of safe development, consistently upholding the QHSE principle of "people focus, quality foremost, safety first, and environmental protection priority". Pursuing the strategic goal of "zero harm, zero pollution, zero accident, zero quality defect and production energy consumption reduction",we pursue to achieve the leading level among domestic peers and the world-class level in terms of quality, safety and environmental management.

Key Performance

Invested approximately **500** million RMB in **238** safety hazard remediation projects.

Completed **1,780** tasks of special remediation work, and achieved a completion rate of **99.3%**.

The total hours for safety-related training amounted to **92,315** hours, with **162,107** employees in safety training sessions.

Enhance Long-term Mechanism

Kunlun Energy strictly abides by the laws and regulations of the People's Republic of China, including the "Safety Production Law" and the "Urban Gas Management Regulations". We have formulated 17 safety production regulations, including the "Safety Production Management Measures" and the "Safety Supervision Management Measures", applicable to all business operations and subsidiaries. These regulations ensure that safety production is implemented in all aspects and stages of production and operation.

Kunlun Energy has established Quality, Health, Safety, and Environmental Protection (QHSE) Committee, headed by the Chairman of the Company,as the highest decision-making body for the management of QHSE affairs. According to the "Rules for QHSE Committee Meetings", the QHSE Committee convenes quarterly meetings to analyze and assess risks for the current season. The Company set up a dedicated safety supervision mechanism to strengthen supervision and control over QHSE work. Additionally, the Company has obtained certification for the Q/SY08002.1, ensuring systematic and standardized management structures and processes to safeguard safety across the entire organization. In 2023, Kunlun Energys Hunan Hengdong Company was honoured as an advanced gas enterprise in standardised safety production and service by the Hengyang Municipal Government.


中国石油健康安全环境管理体系认证证书

注册编号：06824HSE0009R2M

兹 证 明

昆仑能源有限公司

建立的健康安全环境管理体系符合标准

Q/SY08002.1-2022和SY/T6276-2014

认证覆盖的范围包括

The Health Safety Environment Management System Certificate Obtained by Kunlun Energy

In 2023, the Company further refined its safety management mechanisms, consolidating the foundation of safety management.

Professionalisation of Management

- Divided into four major lines of urban gas, branch pipelines, LNG, and LPG.
- Organized specialized risk prevention and control studies for the four major professional lines.
- Established safety supervision teams for the four major lines.

Refinement of Auditing

- Established a mobile audit team to provide comprehensive supervision and guidance for subsidiaries conducting internal audit.
- Classified and grouped audits for the four major professional lines, scientifically allocating appropriate numbers of auditors with corresponding expertise.

Concrete Delineation of Responsibilities

- Established a dual review mechanism at grassroots companies.
- Required the Chief Safety Officer to spend 100 days working at the grassroots level.
- Introduced the supervisory centre to conduct the "Seven Mandatory Inspections" at grassroots companies.

Standardisation Construction

- Improved the grassroots QHSE standardisation construction, and create high-standard demonstration stations and excellent stations.

Measures Kunlun Energy Taken in 2023 to Optimize the Safety Management Mechanisms

Safety Production Progress of Kunlun Energy [3]

Indicator	Unit	2021	2022	2023
Lost Time Injury Rate (LTIR) per million work hour [4]	/	/	/	0.0396
Total Recordable Injury Rate (TRIR) [5]	/	/	/	0.0659
Lost Workdays Due to Work-Related Injuries	Day	287	48	42
Time Lost Work Rate (TLWR) [6]	/	29.9	5.1	4.4
Number of Fatalities Due to Work-related Incidents	Person	0	0	0
Number of General Class A accidents (or above)	Case	0	0	0

3. The statistical scope of production safety progress indicators for Kunlun Energy includes the safety production situation of Kunlun Energy and its main subsidiary companies' employees.
4. Lost Time Injury Rate (LTIR) per million work hours = (Number of lost-time work injuries / Total actual work hours) × 1,000,000.
5. Total Recordable Injury Rate (TRIR) = (Total number of recordable injuries / Total actual work hours) × 1,000,000.
6. Time Lost Work Rate (TLWR) = (Total lost work hours / Total actual work hours) × 1,000,000.

Two Bottom Lines for QHSE

Considering the flammability and explosiveness of gas, as well as the complexity of the groups and environments involved in urban gas operations, the risk control and supervision of QHSE at Kunlun Energy are vital. We consistently adhere to the principle of "safety first", thoroughly implement the safety production responsibility system, and establish the first bottom line for risk prevention and control within business departments, as well as the second line reinforced by supervision and oversight from the safety regulatory department. We continuously strive to improve our safety production standards.

Established and refined the "double reports, two lists, one reminder, one platform" safety risk management mechanism, organizing the development of an operational risk database and creating an intelligent management platform for operational permits to enhance the precision of risk prevention and control capabilities.

Adhere to the integration of risk prevention and emergency management, established and refined a three-tier emergency management system; actively leverage the coordination between government and enterprises, forming a comprehensive, orderly, and efficient accident emergency response mechanism to ensure effective emergency response.

Completed the task of training major responsible persons in urban gas with six ministries, including the Emergency Management Department and the Ministry of Housing and Urban-Rural Development; compiled materials such as the "Manual for Emergency Response to Gas Accidents", educational videos on safety knowledge for catering establishments, training test question banks, and exemplary practices for the special rectification of LPG.

Line 1: Prevention of Safety Risks

Established a mechanism for three major professional meetings: safety supervision, safety production, and safety engineering.

Organized subsidiaries to strengthen the construction of safety supervision teams from various aspects, such as personnel configuration, improvement of business capabilities, and validation of work quality while optimizing the functions of supervision centres.

Introduced and applied intelligent and smart technological means to promote the transformation of production safety supervision mode towards "digitization, intensification, specialization, and intelligence".

Line 2: Reinforcement of Safety Supervision

Key performance

In terms of safety risk prevention:

- Conducted rectification for four business lines of urban gas, branch pipelines, LNG, and LPG.
- Conducted on-site audits for the QHSE system, auditing **40** subsidiaries and branches.
- Conducted **5,006** emergency drills, including **141** drills with government-enterprise collaboration.

In terms of safety supervision reinforcement:

- Identified and rectified **4,878** issues in safety supervision, achieving a **100%** rectification rate.

Case: Ningxia Subsidiary Conducted a Joint Accident Emergency Rescue Drill with the Government

In November 2023, in collaboration with the local government, Ningxia Subsidiary conducted an accident emergency rescue drill at the natural gas comprehensive utilization station in Xixia District, Yinchuan City, Ningxia. The drill simulated a scenario of gas leakage during the natural gas filling process. This joint government-enterprise emergency drill tested and enhanced the emergency response capabilities of frontline employees.

Case: Kunlun Energy Conducted the "Safety Production Month" Activity in 2023

During the National "Safety Production Month" in June 2023, Kunlun Energy focused on enhancing risk awareness among all staff, improving hazard identification capabilities, and implementing the complete staff safety production responsibility system. Activities included the "I Speak for Gas Safety" safety gas usage promotion campaign, the "I Know Gas Safety" safety knowledge competition, the "I Discuss Job Risks" speech contest, and the "Snap Hidden Hazards" campaign to identify hazards in the surroundings. These series of activities aimed to further foster a safety culture.

Contractor Management

Kunlun Energy places great importance on the safety production capabilities of contractors. The Company not only requires all contractors to sign a "Safe Operation Commitment Letter" but also has formulated the "Contractor Safety Supervision and Management Measures" and the "Implementation Rules for Annual Evaluation of Inspection and Maintenance Contractors". Contractors involved in quality and safety accidents, environmental incidents, violations of discipline or law, severe breaches of trust, or already listed in blocklists will be evaluated as unqualified to strengthen contractor management. In 2023, the Company dismissed more than 30 unqualified contractors.

Key Performance

Organized contractors to sign over **20,000** copies of the "Safe Operation Commitment Letter"

Conducted Special Safety Rectification

Kunlun Energy vigorously promoted the annual action plan for strengthening safety management, conducting comprehensive rectification work across the four major professional lines: urban gas, branch pipelines, LNG, and LPG. The initiative yielded positive results.

Special Safety Rectification of Urban Gas

Kunlun Energy, with the fundamental goal of meeting customer demands, is committed to delivering high-quality services through practical actions. In 2023, Kunlun Energy intensified risk management at the urban gas user end. It formulated various schemes, including the "Special Safety Rectification Implementation Plan for Urban Gas", the "Program for the Enhancement of Special Safety Rectification in Urban Gas", and the "Compilation of Deployment and Requirements for Special Safety Rectification in Urban Gas", to guide the actions of urban gas safety rectification comprehensively. These efforts were aimed at preventing and mitigating accident risks.

Kunlun Energy's Urban Gas Safety Rectification Initiative

Safety Rectification of Self-Use Gas	• Compiled documents for different types of gas usage sites, formulated "Standards and Safety Operation Management Requirements for Self-Use Gas Equipment Configuration"; • Supervised and rectified issues such as non-standard design and installation of self-use gas, lack of inspection for self-use gas, and absence of flameout protection for stoves.
Rectification of Hazards at User End	• Established a quality spot-check and review mechanism for safety inspections and implemented on-site sampling and review by managers and safety directors of subsidiaries and branches . • Conducted household safety inspections to comprehensively assess the installation and usage of safety essentials of stoves, pipes, valves, and indoor safety devices. • Differentiated management for industrial, catering, hotels, schools, hospitals, nursing homes, government institutions, and special user groups such as the elderly, children, and the disabled, including increasing the frequency of safety inspections and promoting safe gas usage among these special user groups.
The Gas Odorization Project	• Investigated the basic situation of gas odorization, conducted research on odour concentration optimization and confirmation, and selected research on odorization and detection points. • Studied and solved issues such as inadequate terminal concentration, insufficient equipment for detection, and employees not following operational procedures for testing.
Safety Rectification of Valve Pit	• Released the "Gas Valve Pit Safety Management Manual" and "Valve Pit Design and Construction Guidelines"; • Compiled the total number of in-service valve pits in the Company and comprehensively carried out work in areas such as design and construction, inventory management, operation control, and emergency response.

Key Performance

In terms of self-use gas:

Identified and addressed over **170** issues related to self-use gas.

In terms of user end hazards:

Conducted safety inspections for **10.837** million households, achieving a successful inspection rate of **94%**.

Installed **2.25** million households with metal corrugated hoses, achieving a stainless steel corrugated hose usage rate of **81%**.

Supervised the replacement of **104,000** households' gas appliances that were nearing expiration.

In terms of valve pits:

Converted **1,824** valve pits to above-ground valve sets and performed direct burial valve transformations.

Inspected **67,144** households of particular residential users and **24,232** households of non-residential particular users.

Replaced **1.95** million households' traditional gas meters with IoT meters, achieving a **50%** IoT meter usage rate throughout the year.

Kunlun Energy Employees Conducted Household Safety Inspections

Special Rectification of Branch Pipelines by Kunlun Energy

In 2023, Kunlun Energy conducted a special rectification of branch pipelines focusing on integrity management and pipeline digital transformation. The key areas included cathodic protection, internal and external pipeline hazard inspections, and the construction of a digital intelligent pipeline system. These efforts aimed to support and ensure the business development and operational management of branch pipelines.

Special Rectification of Branch Pipelines by Kunlun Energy

Pipeline Facility Hazard Inspection

- Completed safety hazard management along the Liaotai Pipeline.
- Rectified hazards related to gas equipment and facilities at stations.
- Conducted inspections and rectified hazards related to pipeline pressure, pipeline corrosion, cathodic protection failure, and confined space crossings.

Pipeline Digital Transformation

- Pilot implementation of digital security and distribution pipeline construction.
- Promoted the implementation of intelligent monitoring and risk management measures in high-risk areas.

Preventing Third-Party Damage

- Strengthened third-party construction supervision and management, establishing procedures for third-party construction supervision.
- Utilized pipeline sentinels and AI recognition systems for real-time monitoring of construction sites, promptly obtaining warning information.

Key Performance

Rectified **198** instances of pipeline corrosion protection and cathodic protection failure hazards.

Identified and remediated **176** pipeline pressure occupation hazards and addressed **11** pipeline crossing confined space hazards.

Special Rectification of LNG Businesses

In 2023, Kunlun Energy undertook comprehensive actions to address issues such as ageing equipment, safety hazards and weak control in LNG facilities. The Company initiated a focused effort to upgrade and refurbish outdated equipment and facilities at LNG plants, which included continual enhancements to gas detection, emergency shutdown, video surveillance, and lightning warning systems at LNG storage facilities. These improvements aimed to optimize regulations, standards, and response mechanisms to enhance risk management at LNG storage sites, ensuring the elimination of major hazards. Additionally, Kunlun Energy accelerated the construction of new firefighting stations and supplemented firefighting equipment and gear to boost emergency response capabilities.

Key Performance

In 2023, rectification was carried out on **12** LNG plants to upgrade ageing equipment and facilities for the purpose of eliminating major safety hazards.

Special Rectification of LPG Businesses

In 2023, Kunlun Energy conducted a special rectification for its LPG business, focusing on three main areas: business risk hazards, cylinder management, and transportation and distribution management. Additionally, efforts were made to enhance safety awareness among LPG users.

Special Rectification of LPG Businesses by Kunlun Energy

Hazard Inspection	• Systematically inspected the entire business chain of LPG storage, loading and unloading, distribution, and household delivery. • Implemented suspension measures for users not meeting gas supply conditions.
Cylinder Management	• Conducted comprehensive inspections of all types of LPG cylinders. • Intensified efforts in coding and documenting cylinders, and entered data into the traceability system to achieve full-process cylinder traceability management.
Transportation Management	• Installed GPS systems on transport tankers to monitor transportation routes in real time. • Strictly enforced pre-entry and post-loading/unloading inspection and handover procedures for liquefied gas tankers. • Strictly addressed issues such as inadequate deployment and incomplete qualifications of dedicated driver and distribution vehicle escorts.
Safety Promotion	• Implemented the "mandatory safety inspection upon entry, and mandatory safety promotion during inspection" policy, reinforced safety gas usage awareness through methods such as distributing pamphlets indoors and posting promotional materials in communities.

Key Performance

In terms of hazard inspection

Inspected **295,000** users and **936,000** cylinders.

Identified **54,000** problem hazards during inspection, with a **100%** rectification rate.

In terms of cylinder management

Achieved a **100%** coding and documentation rate for in-use cylinders.

In terms of safety promotion

Distributed **177,004** copies of safety gas usage pamphlets and manuals.

Feature III:
Reduce Carbon Emissions
Embracing Climate Opportunities

In embarking on the new journey towards achieving "dual carbon" goals, Kunlun Energy adheres to the concept of "green development, low-carbon future", accelerating its comprehensive green development strategy and actively integrating into the construction of a new energy system. It coordinates efforts to promote low-carbon development and actively embraces new opportunities in climate change.

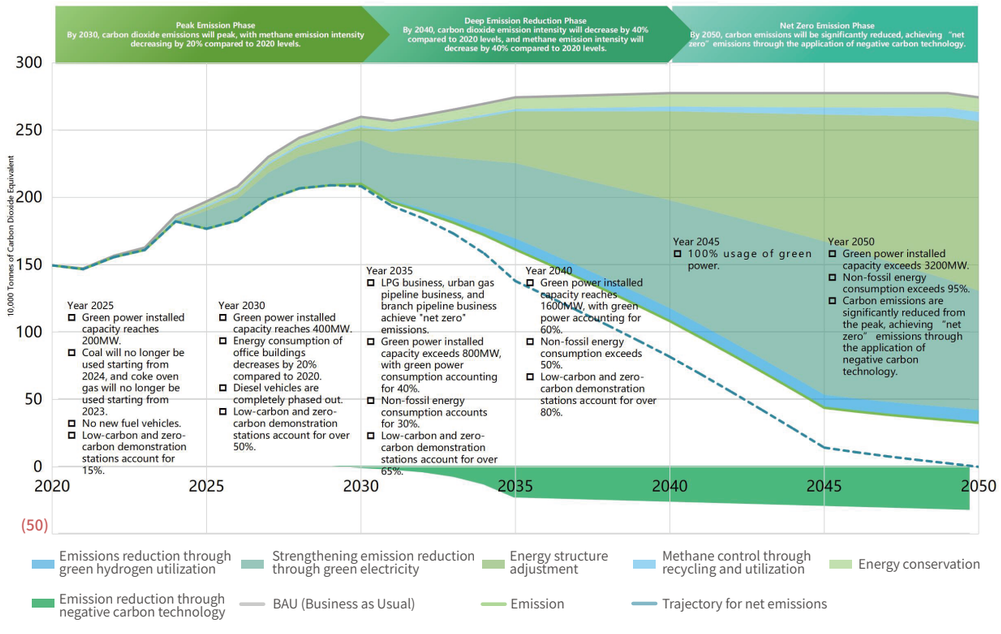
Climate Targets and Current Progress

In 2022, Kunlun Energy released the "Action Plan Towards Carbon Peaking and Carbon Neutrality (Version 1.0) ", for the fist time clearly stating the goal of "carbon dioxide peaking by 2030 and 'net zero' emissions by 2050". The systematic application of this action plan can enhance the installed capacity of green power, reduce the use of traditional energy in the operation chain, build low-carbon and zero-carbon demonstration stations, and explore the electrification of the energy-using end of the chain, so as to promote energy conservation and carbon reduction in the whole industrial chain, and form a highly efficient green energy system. Over the past year, the Company has further tracked greenhouse gas emissions, refined emission reduction and green transformation goals for sectors such as urban gas and LNG businesses, and identified key emission reduction actions in operational activities to promote a greener and more sustainable future.

Climate Targets

The Overall Low-Carbon Action Goals

Indicators and Targets	2020	2030	2040	2050
Carbon Dioxide Emissions Target	1,495,676 tonnes	Peak carbon dioxide emission	Carbon dioxide emissions intensity decreases by 40% compared to 2020.	Achieve "net zero" emissions
Methane Emissions Target	8,125 tonnes	Methane emission intensity decreased by 20% compared to 2020.	Methane emission intensity decreased by 40% compared to 2020.	



Current Progress

Kunlun Energy has identified carbon dioxide emissions and methane emissions as key indicators for achieving its long-term goals of "carbon dioxide peaking by 2030 and ‘net-zero’ emissions by 2050", and further clarified that its LPG business, urban gas pipeline network business and feeder pipeline business will be the first to achieve "net-zero" emissions by 2025. These emissions are closely monitored and tracked annually, and targets are detailed decomposition on a yearly basis to ensure the effective implementation of the Company's greenhouse gas reduction pathway.

Greenhouse Gas Emission Targets and Progress of Kunlun Energy in 2023

Indicators	2023 Targets	2023 Progress	Targets Completion
Carbon Dioxide	1.52 million tonnes	1.468 million tonnes	exceeded targets
Methane	8.5 thousand tonnes	7.2 thousand tonnes	exceeded targets

In 2023, we fully achieved the carbon dioxide and methane emission reduction targets, implementing the "Greenhouse Gas Emission Accounting Guidelines" to standardize the methods for calculating greenhouse gas emissions within Scope 1 and Scope 2. We continuously refined and organized the greenhouse gas emission data. Additionally, in 2023, it is the first time for initiated research into the methodology for verifying Scope 3 greenhouse gas emissions, aming to explore solutions for greenhouse gas response and reduction beyond the value chain.

Greenhouse Gas Emissions of Kunlun Energy in 2023[7]

Indicators	Unit	2021	2022	2023
Total GHG emissions	Tonne CO_2-e	1,467,679	1,556,814	1,618,370
GHG emission intensity[8]	Tonne CO_2-e/ 10,000 cubic metres	0.349	0.346	0.328
Direct GHG emissions (Scope 1)[9]	Tonne CO_2-e	480,112	460,708	373,839
Direct GHG emissions intensity (Scope 1)	Tonne CO_2-e/ 10,000 cubic metres	0.11	0.10	0.08
Indirect GHG emissions (Scope 2)[10]	Tonne CO_2-e	987,566	1,096,106	1,094,381
Indirect GHG emissions intensity (Scope 2)	Tonne CO_2-e/ 10,000 cubic metres	0.24	0.24	0.22
Methane emissions	Tonne	8,578	7,091	7,150
Reduced BOG emissions by optimising process measures and process control	100 million cubic metres	5.5	6.0	6.3

Climate Ambition and Practice

To support the Company's ultimate goal of "carbon neutrality", it has anchored the development goal of becoming an "internationally renowned and China’s first-class integrated green energy provider". The Company has strategically planned key measures for green and low-carbon transformation. Leveraging its existing business markets and technological advantages, the Company is focusing on accelerating the layout of new energy businesses, promoting the substitution of clean energy, expanding the application of pollution reduction and carbon reduction technologies, optimizing production and operation performance, and rigorously controlling greenhouse gas emissions. Through these efforts, the Company is striving to achieve its carbon neutrality goals, aligning itself with global climate actions.

7. In 2023, Kunlun Energy's greenhouse gas emission data were calculated based on Kunlun Energy and its major subsidiaries.
8. GHG Emission Intensity (Tonne CO2-e / 10,000 cubic meters)=Total GHG Emission / Natural Gas Sales.
9. The direct GHG emissions (Scope 1) include the greenhouse gas emissions from the consumption of gasoline, diesel, natural gas, and liquefied petroleum gas by the Company. The calculation of the aforementioned Scope 1 greenhouse gas emissions is based on the emission factors outlined in the "Guidelines for Greenhouse Gas Emission Accounting and Reporting for Chinese Petroleum and Natural Gas Production Enterprises (Trial) " .
10. The indirect GHG emissions (Scope 2) include the emissions from the purchased electricity and purchased steam by the Company. The calculation of the aforementioned Scope 2 greenhouse gas emissions is based on the emission factors outlined in the "Guidelines for Greenhouse Gas Emission Accounting and Reporting for Chinese Petroleum and Natural Gas Production Enterprises (Trial) " .

Green and Low-Carbon Transformation Practice of Kunlun Energy

Green and Low-Carbon Practice			Business
Energy saving, emission reduction, quality improvement, and efficiency enhancement	Energy-saving pipeline construction and energy-saving station promotion	• Implemented energy-saving design or renovation of long-distance and branch pipelines using data collection and monitoring control systems • Retrofitted energy-saving equipment, updated energy-saving processes, and implemented intelligent design at LNG receiving stations and factories	• LNG processing, Storage and Transportation • Natural Gas Pipeline
	Intelligent technology facilitated methane emissions control	• Conducted methane leak detection and repair work, such as the application of technologies such as turret-mounted laser methane detection warning systems and drone-based leak detection • Implemented precise metering, process optimization, and the installation of BOG recovery units at LNG receiving stations and multiple factories to strengthen BOG recovery and reduce flare gas emissions	• LNG processing, Storage and Transportation • Natural Gas Sales • Natural Gas Pipeline
	Intelligent management of energy and carbon footprint	• Enhanced operational management and optimized operational control to accelerate the Company's energy management informatization construction	• LNG processing, Storage and Transportation • Natural Gas Sales • Natural Gas Pipeline • Operations and Administration

Green and Low-Carbon Practice			Business
Low-carbon transformation of energy structure	Deploying clean energy in various application scenarios	• Explored the layout of integrated projects combining solar and conventional new energy projects • Gradually promoted clean energy substitution, utilizing resources such as rooftops and idle land at terminal stations and office premises to construct distributed photovoltaic, wind power, and other clean energy replacement projects, actively creating low-carbon and zero-carbon stations • Developed peak-shaving gas and power generation and combined heat and power projects according to local conditions, actively developed natural gas distributed energy projects • Tracked and studied various new energy projects such as station pressure difference power generation, biomass, charging piles, geothermal, cold energy utilization, solar thermal, and energy storage, and expanded the businesses at the appropriate time	• LNG processing, Storage and Transportation • Natural Gas Sales

Green and Low-Carbon Practice			Business
Low-carbon transformation of energy structure	Focus on green electricity and carbon market trading	• Kept track of China Certified Emission Reduction(CCER) and other carbon market dynamics; paid attention to spot trading of green electricity and explored feasible ways to participate	• LNG processing, Storage and Transportation
Establishing a green corporate brand	Clean fuel substitution	• After 2025, no new fossil fuel vehicles will be added, and by 2030, all diesel vehicles will be completely phased out. To advocate and encourage the use of renewable energy vehicles such as hydrogen and biomass fuels • To select other means of transportation lower in carbon emissions	• LNG processing, Storage and Transportation • Natural Gas Sales • Operations and Administration
	Low carbon buildings	• Implemented energy-saving measures such as replacing conventional lighting with LED lights and installing time-controlled switches to reduce building energy consumption	• Operations and Administration
Establishing a green corporate brand	Low carbon office	• Established an electronic document management system, adopted electronic signature technology, promoted the use of mobile office equipment, digitised meetings, and advocated for paperless office operations	• Operations and Administration
	Low carbon procurement	• Integrated low-carbon concepts throughout the lifecycle of materials and implemented green procurement practices	• Operations and Administration
	Low carbon sales	• Explored zero-carbon sales models that combine "carbon indicators + natural gas"	• Natural Gas Sales
	Low carbon cooperation	• Participated in industry standardization and communication to promote high-quality development	• Operations and Administration

Feature IV:
Digital Empowerment for Promoting Smart Development

As a modern integrated energy enterprise, Kunlun Energy leverages digital transformation in various aspects such as research and development, production and operation, business management, customer service, and industrial collaboration. This integration of digital technology with production and operation processes helps drive intelligent and high-quality development within the Company.

Digital Empowerment for Efficient Management

By actively promoting the digitalization of the management platform, Kunlun Energy has strengthened the integration between its businesses and finance and significantly enhanced the overall control capability and collaborative efficiency of the Enterprise. This lays a solid foundation for Kunlun Energy's sustainable development and high-quality transformation.

Case: Comprehensive Deployment of ERP System in Place to Promote Management Innovation at Kunlun Energy

Kunlun Energy promotes the implementation of an ERP (Enterprise Resource Planning) system to achieve comprehensive functional coverage from all dimensions. The goal is to promote deep integration between businesses and finance and to enhance the in-depth management of subsidiary companies. The introduction of this system greatly helps the enterprise effectively manage and integrate various financial processes and resources. It enables real-time data updates to enhance decision-making efficiency, simplify business processes, and reduce operational costs.

Digital Empowerment for Safe Production

In the field of safety production, Kunlun Energy achieved the deep integration of digital technology by upgrading monitoring systems in Beijing, Gansu Gas, Jiangsu, and Qinghai. Furthermore, substantial advancements were made in developing digital pipeline maps, significantly improving the capabilities of comprehensive monitoring, early warning, and emergency response. Concurrently, Kunlun Energy laid the groundwork for digital engineering, facilitating dynamic oversight across the complete project lifecycle, encompassing initial phases, design, construction, and acceptance. Digitization is facilitating the high-quality development of Kunlun Energy in project construction.

Case: Empowering Gas Station with Intelligent Technology in Businesses

Kunlun Energy's Anhui project focused on digitization for "stations" and "pipelines". Following an integrated intelligent management approach, it adopted a "centralization + application" management model, establishing an intelligent central hub and eight intelligent applications. For pipelines, it deployed AI monitoring devices, drone inspection platforms, and acoustic pipeline leak detection devices in the "two high" areas, forming a "triple digital sentinel" to ensure controlled pipeline operation risks. By adhering to the concept of "technological construction, cultural development, talent empowerment, and industry leadership," the Company created safe, smart, and environmentally friendly stations featuring round-the-clock monitoring, intelligent warnings, and precise disposal. The application of urban lifeline safety monitoring systems was expanded through the implementation of intelligent access control terminals, smart visual inspection devices, methane leak monitoring platforms, and environmental intelligent monitoring devices. The system facilitated the seamless exchange and integration of data, creating a comprehensive management platform encompassing industrial control, monitoring, early warning, and forecasting capabilities. This represented a significant change from monitoring by multiple individuals to monitoring by fewer at the stations.

Case: Digitalization of the Yongqing-Baoding Natural Gas Pipeline Project

Kunlun Energy implemented digital transformation measures for the Yongqing-Baoding project to enhance project management efficiency and safety. The Company established an intelligent pipeline service platform and implemented QR code management. It collected key process videos and utilized new technologies such as drones and video surveillance to refine project management, thereby improving construction safety and efficiency. Digital applications greatly enhanced the construction site's management capabilities and elevated the modernization level of project management.

Project Management Monitoring Screen

Digital Empowerment for Safety Supervision

In response to the need for safety supervision and management, Kunlun Energy is advancing its production management system's application and iterative development. Through actively exploring safety technology applications, the Company utilizes new technologies such as AI, cloud computing, big data, and robotics to promote research and application of digital technologies. Various progress was made in 2023, particularly in the research and development of enterprise safety profiles, emergency command modules, dual-prevention modules, and intelligent control technologies for operational risks. These advancements further enable digital empowerment for safety supervision at Kunlun Energy.

Case: Digital Technology Empowering New Safety Supervision Mode at Kunlun Energy's Henan Branch

In 2023, to ensure the safe operation of its pipeline network, Kunlun Energy's Henan branch deployed 6 video surveillance devices, achieving full coverage of "two-high" risk areas in the pipeline network. Additionally, the branch deployed 134 intelligent valve well leakage monitoring control terminal devices, covering leakage detection in medium-risk and above pipeline sections. Moreover, 142 intelligent cathodic protection monitoring terminal devices were set in place, achieving full coverage of steel pipeline monitoring. This technological upgrade enabled rapid response and early warning of abnormal conditions in the pipeline network, thereby mitigating potential hazards and addressing shortcomings in manual inspection and detection.

Digital Empowerment for High-Quality Service

Kunlun Energy achieved a deep integration of digital technology with its marketing and customer service through enhanced application of information systems. By building a comprehensive digital sales platform and an omnichannel intelligent customer service system covering millions of end customers, Kunlun Energy significantly improved service efficiency under the "smart connectivity, intelligent households" guideline. This application enhanced the quality of customer service at Kunlun Energy and innovated various sales models. With the comprehensive coverage of the natural gas retail system and the introduction of new features, customer experience and satisfaction have been notably enhanced. Furthermore, the development of intelligent management applications has effectively enhanced business control capabilities, which provided strong support for the Company's transition in marketing models.

Case: Applying Intelligent Technologies to Build an "Internet + Sales" Model

In 2023, Kunlun Energy actively embraced an "Internet + Model" to transform its customer service model and established a comprehensive service platform integrating online business, remote services, multimedia services, and quality inspection services in Shandong. The Company utilized intelligent devices such as guiding robots, self-service facilities, and advertising screens offline to create intelligent service halls, thereby enhancing customer satisfaction. Moreover, the Company also integrated platforms such as WeChat, Alipay, and official accounts online to interface with local government platforms, facilitating one-stop access for gas-related services, including account opening, payment, recharge, and inquiries.

Environmental, Social and Governance Report 2023

Improve Efficiency and Enhance Governance

Scientific and standardized corporate governance is the foundation for building a world-class enterprise. Kunlun Energy promotes high-quality development by embedding compliance and risk management requirements into the entire operation process. With a perfected governance framework and effective mechanisms in place, the Company focuses on key areas, such as anti-corruption, anti-monopoly, and ESG governance, to address the concerns of stakeholders. Continuous efforts are made to enhance overall competitiveness and risk resilience, which further ensures the steady operation of the Company.

Sustainable issues addressed in this chapter:

- Integrity and compliance
- Risk management
- Privacy protection and information security management
- Deep enterprise reform
- Corporate governance
- Intellectual property protection
- Regional development service
- Communication with stakeholders

Ordered and Compliant Operation

Kunlun Energy anchors its development path on steady progress, with the consolidated foundation of compliance governance and deepened reform of state-owned enterprises. During the reporting period, the Company formulated the "Comprehensive Reform Implementation Plan to Deepen the 'Double-Hundred Actions'," which outlines the reform objectives of strengthening governance effectiveness, mechanism construction, innovation, efficiency and performance, and compliance with laws and regulations, writing the Company' s chapter of steady and further development.

Governance System

The enterprise value hinges on refining the corporate governance structure and operational framework. Kunlun Energy has consistently enhanced the development of its Board of Directors to ensure the effective execution of its functions and authority. Measures include revising protocols such as the "Measures for Selecting Cooperative Shareholders" and the "Measures for Exercising Shares in Subsidiaries" while continuously refining and optimizing the shareholder exercise system. Furthermore, there is an ongoing effort to standardize the performance and exercise of duties by directors. For the purpose of further advancing the modernization of governance efficiency, the Company employs a multidimensional evaluation approach by means of performance assessment and ESG factors to evaluate the performance of full-time directors and supervisors.

Governance Structure

Kunlun Energy is committed to enhancing its corporate governance to modern standards, following regulatory requirements such as Appendix C1 of the Hong Kong Stock Exchange's Corporate Governance Code. The Board of Directors serves as the highest decision-making body responsible for approving and supervising significant matters, such as institutional policies, corporate strategies, internal controls, risk management systems, ESG management systems, and major transactions. The Audit Committee, Remuneration Committee, Nomination Committee, and Sustainability Committee under the Board regularly report to and assist the Board in fulfilling its management and oversight responsibilities, which ensures the effective operation of corporate governance.

The Company has formulated management policies such as the "Board Meeting Rules", "Board Authorisation Management Measures", and "Authorisation Decision List". These policies conscientiously implement relevant requirements and opinions in documents such as "Opinions of the State Council for Further Improving the Quality of Listed Companies" and "Rules for the Work of the Board of Directors of China Central SOEs (Trial)", which clarify the division of responsibilities and coordination mechanisms of various governance bodies and lay a foundation for scientific and efficient operational management. The Board of Directors regularly supervises and reviews the performance of senior management. Meanwhile, committees are responsible for the preliminary review of proposals and provide professional opinions and suggestions to the Board of Directors to ensure the decisions to be taken scientifically and effectively fulfil the Board's functions of "setting strategy, making decisions, and preventing risks".

Kunlun Energy attaches great importance to the independence and diversity of the Board of Directors and has formulated the "Board Diversity Policy." The policy clearly stipulates that when selecting board members, diverse factors such as skills, knowledge, experience, gender, age, race, and educational background are fully considered. The Company adheres to the principle of "appointing the best person for the job", follows objective conditions, and establishes a sound board member structure. Additionally, the Company values the role of independent non-executive directors in providing professional opinions and independent judgment to the Board of Directors. According to the "Listing Rules of the Stock Exchange", the independence of independent non-executive directors is assessed annually. We comply with the requirements of the Stock Exchange and specify the rules for director retirement in the "Bye-Laws of the Company". Each director (including those with specified terms) must retire at least once every three years. Moreover, each director appointed to fill a temporary vacancy during the current year must retire at the next General Meeting of Shareholders.

Composition of Kunlun Energy' s Board of Directors

Name	Title	Career	Audit Committee	Remuneration Committee	Nomination Committee	Sustainability Committee
Mr. Fu Bin	Chairman Executive Director	Mr. Fu is a senior economist with over thirty years of experience in the petroleum and natural gas industry in China. He has a background in engineering and management studies and was appointed as an executive director and the Chairman of the Company in 2020.			Chairman	
Mr. Qian Zhijia	Chief Executive Officer Executive Director	Mr. Qian is a senior engineer with over thirty years of experience in the petroleum and natural gas industry in China. He has a background in engineering and management studies and was appointed as an executive director and the Chief Executive Officer of the Company in 2020.				Chairman
Mr. Zhou Yuanhong	Executive Director	Mr. Zhou is a senior accountant with over thirty years of experience in the petroleum and natural gas industry. He has extensive experience as well as a wealth of knowledge in financial management and capital operations. Currently, he serves as a director and president of Strait Energy Limited/Intercontinental Strait Energy Investment (Beijing) Co., Ltd.				
Mr. Gao Xiangzhong	Chief Financial Officer Executive Director	Mr. Gao has over thirty years of experience in the petroleum and natural gas industry, specializing in auditing and financial management. He was appointed as the Chief Financial Officer of the Company on April 22, 2022, and appointed as an executive director on July 8, 2022.				Member
Dr. Liu Xiao Feng	Independent Non-Executive Director	Dr. Liu has accumulated over twenty years of experience in corporate finance, and worked in several international financial institutions. He is a seasoned professional in monitoring and managing financial and transactional risks. Currently, he serves as an independent non-executive director for multiple listed companies in Hong Kong.	Member	Chairman	Member	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 a fellow of the Hong Kong Institute of Certified Public Accountants. With over thirty years of experience in international finance and investment, he has held key positions at institutions such as J.P. Morgan Chase and Co. and Jardine Fleming Holdings Limited. Mr. Sun has also served as the chairman of the Chamber of Hong Kong Listed Companies, a member of the Takeovers & Mergers Panel and the Takeovers Appeal Committee of the Securities and Futures Commission, deputy convenor of the Listing Committee of the Stock Exchange and a council member of the Stock Exchange. He was also an independent non-executive director and the Chair of Audit and Risk Management Committee of CRRC Corporation Limited (2015-2021). Currently, Mr. Sun serves as an independent non-executive director for several listed companies in Hong Kong.	Chairman	Member	Member	
Mr. Tsang Yok Sing Jasper	Independent Non-Executive Director	Mr. Tsang is a veteran of the political and educational circles in the Hong Kong Special Administrative Region. He has rich experience in handling public administrative crises and risk management. He has served as the Chairman 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 directorof the Hong Kong Securities and Futures Commission.	Member	Member	Member	Member

Compensation Policy

Kunlun Energy's Remuneration Committee is responsible for establishing transparent and fair compensation policies that take into account factors such as operational performance, individual capabilities and contributions to enhance the accountability of directors and employees while stimulating job efficiency. The Company has incorporated ESG indicators into the performance evaluation criteria for Executive Directors and management, covering aspects of production safety, energy conservation and emission reduction, climate change, employee development, diversity and well-being, sustainable supply chain, corporate governance, business ethics, and anti-corruption. Performance evaluation results are linked to compensation, fostering a compensation incentive aligned with the principles of sustainable development.

The Company has implemented a clawback mechanism through the "Kunlun Energy Managerial Member Compensation Management Measures (Trial)" and the "Kunlun Energy Management Performance Evaluation Measures (Trial)". According to the policies, a certain proportion of performance bonuses is prepaid to management personnel each month, and the actual amount of bonuses for the entire year will be determined by the annual evaluation results. Penalties are imposed on management personnel whose performance levels do not meet the benchmark, meaning that any excess portion of the monthly prepaid bonus will be clawed back based on the final evaluation results.

Protection of Shareholder Rights and Interests

Kunlun Energy attaches great importance to shareholder rights protection, especially safeguarding the legitimate interests of minority shareholders. Through regular reports, announcements, and correspondence, the Company promptly discloses operational information to investors and shareholders, enhancing interaction through online and offline channels. The Company convenes annual general meeting annually, where the voting rights of each shareholder, especially the minority shareholders could be ensured by voting to determine proposals in line with the principle of "one share, one vote". Any proposed amendments to the Company's rules and regulations require special resolutions approved at the meeting.

Management of Connected Transactions

Given our Company's primary focus on the midstream and downstream sectors of natural gas and petroleum, petrochemical companies with a comprehensive industry chain in resource exploitation and processing can effectively complement the development of our businesses. We have established continuing transactional relationships with such industrial giants for long-term and win-win cooperation.

While conducting related party transactions, Kunlun Energy adheres to the principles of integrity, fairness, and compliance with commercial terms. We abide by the regulations stipulated in the "Company Law of the People's Republic of China" and the "Listing Rules of the Hong Kong Stock Exchange". To ensure transparency and adherence to regulations, we have issued the "Kunlun Energy Connected Transaction Management Measures", which strictly regulates the entire process, including contract signing, approval, upper limit management, information disclosure, and control connecteded party transactions. During the reporting period, the Company implemented the "Kunlun Energy Connected Transaction Management Measures" and established a special task force to review and scrutinize significant connected party transaction contracts and limits. Independent third-party financial advisors were engaged to assess the reasonableness of connected party transaction amounts. Connected party transactions were also promptly disclosed through announcements and circulars to ensure compliance throughout the entire process. Additionally, independent non-executive directors fulfil their duties by reviewing the fairness and commercial reasonableness of connected party transactions. They provide independent opinions to ensure that related party transactions do not adversely affect the Company's operations and independence, thereby safeguarding the interests of minority shareholders.

Compliance Operations

Kunlun Energy continually advances and implements compliance management by integrating relevant requirements into various fundamental systems and processes. We strengthen the assessment and prevention of various risks, including ESG risks, improving the compliance management system. Regular compliance culture promotion and capacity-building training are conducted, along with risk assessments and issue rectification, to fortify the Company's risk prevention and control framework and enhance its risk mitigation capabilities.

Compliance Management System

Kunlun Energy strictly follows the "Company Law of the People's Republic of China", the "Civil Code of the People's Republic of China", the "Anti-Monopoly Law of the People's Republic of China", the "Price Law of the People's Republic of China", as well as related laws and regulations of the Hong Kong Special Administrative Region. The Company has issued internal regulations such as the "Compliance Management Measures", the "Code of Conduct for Management and Employees", and the "Anti-Monopoly Compliance Manual", continuously strengthening the construction of corporate legal governance and compliance management.

The Company is committed to driving forward the construction of a compliance management system by acting as a model conglomerate for legal governance. In 2023, we placed particular emphasis on advancing work in areas such as contract management, case handling, and anti-monopoly response. To leverage legal safeguards to enhance corporate value, we strengthened efforts to rectify issues related to qualifications, licenses, and unauthorised operations, conducted comprehensive risk assessments and early warning alerts for sales operations, and implemented lawful and compliant corporate governance. During this reporting period, Kunlun Energy's Northwest Branch obtained the ISO 37301 Compliance Management System Certification.

Kunlun Energy's Northwest Branch obtained the ISO 37301 Compliance Management System Certification in July 2023

Internal Control and Risk Management

Kunlun Energy has built a comprehensive risk management mechanism that is led by the Board of Directors, managed comprehensively, and supported by the legal compliance department and other relevant departments. We adhere to the requirements outlined in the "Internal Control Management Manual", which cover aspects such as control environment construction, risk assessment and management, control design and execution, information communication and disclosure, supervision, and assessment. We review and optimise processes annually in response to updates in the Company's regulations, business operations, and organizational structure.

The Company focuses on risk identification and assessment, implementing rigorous risk assessment standards. We incorporate ESG factors and gather external information pertaining to production and operation from various aspects, including politics, economy, society, science and technology, law, and environment. The external information and internal insights are combined and consolidated into a comprehensive risk assessment database. In 2023, we undertook comprehensive examinations of macro policies, regulatory developments, and market conditions to evaluate alterations in risk circumstances and their repercussions. Using our risk assessment criteria, we thoroughly assessed the possibility and impact of risk occurrences, identified essential risks, and developed risk management strategies, solutions, and supervision plans.

We have established a standardized risk event management process, which involves regular collection and categorization of risk events, monthly follow-ups on their handling or rectification status, and immediate reporting of significant risk events.

Furthermore, we undertake special supervision and inspection of internal controls annually, with an emphasis on addressing concerns and meeting goals and objectives. During the reporting period, we conducted special inspections on internal control and risk management for 59 subsidiaries and promptly rectified any identified issues or risks under constant supervision. Performance indicators related to internal control and risk management have been included in the Company's assessment criteria and are evaluated based on the completion and inspection outcomes of subsidiaries. The assessment results are linked with the performance review accordingly.

Key Performance

8,030 employees participated in the assessment of significant risks, quantitatively identifying **16** major risks across **9** categories, including market risks, health, safety, environmental risks, and legal risks. No considerable risk events occurred.

Enhance Compliance Capabilities

The Company continues strengthening compliance training and legal education to foster a culture of "respecting, learning, abiding by, and applying the law." During the reporting period, the Company organised specialised legal compliance training sessions for senior executives at 100% completion. Additionally, all employees participated in compliance quizzes, with a total of 33,105 individuals completing the assessments. Furthermore, 41 employees successfully passed the professional competency tests for corporate compliance officers. Across subsidiaries and branches, diverse and innovative educational activities were conducted to promote compliance awareness and competence among employees. These activities included organising compliance knowledge competitions, debates, and events commemorating Constitution Day on December 4th and publishing legal-themed magazines, all aimed at enhancing employees' understanding and capability in compliance matters.

Business Ethics

Kunlun Energy conducts its business operations with business ethics of integrity, impartiality, and honesty. We encourage the development and oversight of a clean corporate culture, rigorously monitor the conduct of our suppliers and employees, and vehemently denounce any unethical practices that could jeopardize the rights and welfare of our customers, shareholders, and the public. Our Company strives to improve its digital governance capabilities to establish a stable and regulated market environment.

Supervision of Business Ethics

Kunlun Energy strictly adheres to laws and regulations such as the "Company Law of the People's Republic of China", the "Supervision Law of the People's Republic of China", and the "Prevention of Bribery Ordinance" in Hong Kong, maintaining a strict regulatory stance against corruption and bribery while continuously deepening the construction of a culture of integrity. The Company has established an anti-corruption working group led by the Chairman, responsible for overall arrangements of the Company's business ethics and anti-corruption matters, researching and handling major issues related to anti-corruption, and promoting the improvement of the anti-corruption institutional system.

In 2023, the Company issued the "Implementation Measures for Strengthening the Supervision System to Promote the Coordination of Various Supervision," enhancing the effectiveness of supervision mechanisms. We revised the "Norms for Inspection Work" to standardize the procedures of the inspection system. Focusing on key areas and crucial junctures, we rigorously enhanced supervision and rectification, improved the conduct, and continuously strengthened efforts to prevent integrity risks.

Supervise the Handling of Cases with Strict Discipline

- Enhance measures from four aspects of strengthening ideological education, punishing corruption, enhancing integrated supervision, promoting improvement through cases, and actively paying attention to clues.
- Deepen the particular anti-corruption campaign "anti-hunting", incorporating cooperation requirements into contract management and strengthening institutional constraints on users, joint venture partners, and other external stakeholders.

Strengthen the Supervision of Conduct

- Closely monitor critical periods and sensitive timeframes, continuously carry out specific rectification of violations such as unauthorized consumption, identify root causes for improvement from the perspective of institutional mechanisms, adhere to the principles of "educational reminders, supervision and inspection, targeted rectification, and mechanism improvement," and continuously enhance the effectiveness of conduct construction.
- Promptly report typical cases of the "four forms of decadence", urging each subsidiary to reflect and learn from them carefully.

The Company continues to enhance training on business ethics and integrity awareness. On the one hand, we conduct seminars in person, organise themed events, and host knowledge competitions to help management and staff better understand the normative requirements of business ethics. On the other hand, we advance the application of online platforms such as "CNPC E-Learning" and "Pioneer", continuously updating business ethics training courses to keep up with the times. Leveraging apps, mini-programs, and other channels, we improve the coverage and convenience of training. In 2023, we conducted 6 business ethics training sessions, covering 100% directors and permanent and temporary staff.

Key Performance

Conducted **6** sessions of business ethics training, covering **100%** of directors, permanent and temporary staff.

Achieved a **100%** reach rate for business ethics training among suppliers and contractors.

Integrity in the Supply Chain

The Company not only rigorously prevents corruption and bribery risks internally but also emphasises anti-corruption awareness and behaviour among suppliers and partners. We require all suppliers (including contractors and service providers) to sign a "Supplier Admission Commitment" agreement during the entry phase to ensure commitment to the ethical standards outlined in the agreement. We disseminate anti-corruption training materials through face-to-face sessions and online platforms to promote business ethics. In 2023, 100% of admitted suppliers signed the "Supplier Admission Commitment" agreement and underwent training on business ethics and anti-corruption. For suppliers already admitted to the procurement database, our Company conducts annual anti-corruption supervision and assessment, blacklisting any non-compliant or unethical suppliers to ensure transparent procurement practices.

Key Performance

100% of the suppliers admitted to the database signed the "Supplier Admission Commitment" agreement.

Competition and Anti-Monopoly

Kunlun Energy adheres to industry regulatory requirements and market operation rules to maintain a fair and just competitive order. In 2022, we formulated and issued the "Anti-Monopoly Compliance Manual." In 2023, we continued to strengthen our efforts in anti-monopoly management and enhanced the professionalism of our anti-monopoly affairs management. We've organised specialised legal consultations and economic assessments on anti-monopoly issues, engaging professional lawyers in anti-monopoly compliance to provide advice and recommendations on competition and pricing compliance. Additionally, we've also collaborated with the Competition Law Research Centre of China University of Political Science and Law to conduct research on anti-monopoly issues in municipal gas, which further enhanced our understanding of anti-monopoly compliance.

Furthermore, through comprehensive business inspections covering anti-monopoly compliance management, we provided anti-monopoly risk alerts and business compliance guidance to subsidiaries. Through specialized training, the dissemination and construction of anti-monopoly awareness have been deepened through specialised training. In February 2023, Kunlun Energy invited experts from the State Administration for Market Regulation to have special lectures on anti-monopoly legal systems and enforcement practices, with 3,450 management and key personnel attended. In April 2023, we organised a legal compliance training course covering topics of new anti-monopoly laws and regulations, with 171 participants attending the training.

Whistleblower Protection

Kunlun Energy combats and punishes behaviours that violate ethical business norms, welcoming complaints and reports from internal and external stakeholders. The Company has formulated the "Whistleblowing Policy",[11] committing to strict confidentiality of whistleblower information and ensuring protection against unjust treatment such as dismissal, demotion, suspension, harassment, discrimination, or bias due to whistleblowing. The Company establishes a comprehensive investigation and handling process, including steps such as preliminary investigation, follow-up inquiry, credible handling, review, and closure, ensuring timely feedback to whistleblowers on the investigation outcome. If corruption behaviour is detected, it will be promptly reported to relevant regulatory authorities for further action.

Whistleblowing Channels

In writing to the Committee:
Attn: "The Audit Committee of Kunlun Energy Company Limited"
Address: 39/F, 118 Connaught Road West, Hong Kong
In a sealed envelope stated "Strictly Private and Confidential – To be Opened by Addressee Only."

Or **email to** whistleblowing@kunlun.com.hk.

Key Performance

No corruption lawsuits were filed against the Company, directors or employees.

11. https://media-kunlunenergy.todayir.com/20221230130526431979744_tc.pdf

Intellectual Property Protection

Kunlun Energy emphasises intellectual property rights and patent protection, adhering to laws such as the "Patent Law of the People's Republic of China" and the "Copyright Law of the People's Republic of China". The Company strictly manages intellectual property rights in accordance with regulations including the "Intellectual Property Management Regulations" and the "Trademark Management Regulations"of the parent company, as well as the "Science and Technology Management Measures of Kunlun Energy Co., Ltd", to prevent any infringement.

In 2023, the Company organised activities both online and offline under the theme of "Intellectual Property Rights Facilitating Core Technology Breakthroughs" during the Intellectual Property Rights Promotion Week. These activities aimed to enhance awareness of intellectual property protection and compliance among scientific and technological management personnel. Training sessions focusing on science, technology, and intellectual property management were conducted, covering topics such as the Company's technology development plans, regulations, technology projects, intellectual property exploration, and results dissemination. These efforts effectively elevated the Company's technological management level and legal compliance capabilities. Meanwhile, we attached importance to improving science and technology management and technology output capacity. Subsidiaries were engaged in extensive patent application and output endeavours, spanning scientific research initiatives and on-site innovations.

Key Performance

Obtained **30** patent applications accepted by the National Intellectual Property Administration, of which **24** applications were for invention patents and **6** applications for utility model patents; the percentage of applications for invention patents is **80%**.

Data Security and Privacy Protection

As Kunlun Energy's digital capabilities grow, the Company prioritises strengthening its information security management system to protect network and data security in accordance with relevant laws and regulations such as the "Data Security Law of the People's Republic of China" and the "Personal Information Protection Law of the People's Republic of China". The Kunlun Energy Cybersecurity and Digitalisation Working Group is responsible for decision-making about the Company's cybersecurity and digitalisation activities. The Group, led by the Chairman, is responsible for developing cybersecurity and information technology strategies and plans, coordinating major issues, approving assessment results, and managing the Company's overall cybersecurity and information technology matters.

Information Security Management

- Developed the "Cybersecurity Management Measures" and emergency response plans for sudden network security incidents
- Enhanced the cybersecurity system, and completed the construction and evaluation of the protection level of six internal information systems.
- Conducted regular cybersecurity inspections throughout the year to timely identify potential information security risks and loopholes
- Participated in the annual cybersecurity emergency drills organized by the Ministry of State Security to enhance the practical effectiveness of emergency management.
- Conducted cybersecurity training to enhance all staff's information security awareness and capabilities.

Customer Privacy Protection

- Provided user information collection notifications during the online account opening process.
- Included confidentiality clauses in contracts and agreements signed with customers or established separate confidentiality agreements.
- Encrypted customer information and restricted the export of customer information within the system.

In 2023, the Company set up an overall security system for the production management system and big data analytics system, in line with the requirements of "Information Security Technology - Classification Guide for Classified Protection of Cybersecurity" (GB/T 22240-2020) and Level 3 protection standards. This system provides comprehensive protection from aspects such as secure physical environments, secure communication networks, secure area boundaries, secure computing environments, and secure management centres, ensuring the secure and stable operation of the systems.

Key Performance

No information leakage or cybersecurity incidents.

Sustainability Management

Kunlun Energy believes that sustainable development is an essential aspect of high-quality corporate governance, and consistently integrates the principles of sustainable development into its business management. We have established a governance framework for sustainable development, continuously improved our system of relevant policies and procedures, and formulated a set of sustainability indicators to drive the implementation of sustainability initiatives. We strive to benchmark against industry-leading practices, identify areas for improvement, and pursue higher levels of sustainable development capacity and performance.

Sustainability Governance Framework

Kunlun Energy has established a comprehensive sustainability governance framework that spans various levels, providing a solid foundation for the formulation and implementation of sustainable development strategies. The Board of Directors of Kunlun Energy serves as the highest authority for the Company's sustainable development and climate governance. It has established a Sustainability Committee responsible for supporting the Board in assessing risks and opportunities for sustainable development related to ESG, making decisions on material ESG matters, and under the guidance of the Board of Directors, formulating the Company's overall ESG and dual-carbon strategies and goals, as well as implementing various ESG policies and initiatives. With the collaboration of the ESG Reporting Working Group, departments and subsidiary companies have integrated the requirements of sustainable development and ESG management into their daily operation.

The Board of Directors has incorporated sustainability and ESG issues into its regular meeting agendas, reviewing and discussing the Company's progress in sustainable development. Additionally, the Sustainability Committee convenes regular meetings to delve into specific projects. In 2023, the Sustainability Committee organised a meeting covering ESG analysis and goal setting.

Board of Directors	• Incorporate ESG matters into the Company's governance policies and strategies; entrust the Sustainability Committee to assess the Company's sustainability and ESG initiatives, identify ESG risks and opportunities and guide the formulation and implementation of ESG and dual-carbon objectives. • Regularly receive decision-making recommendations from the Sustainability Committee and professional advisors regarding ESG strategies and operations, the impact of ESG risks and opportunities on the Company, as well as relevant mitigation recommendations. • Review the adequacy and effectiveness of the Company's ESG framework and internal oversight system and establish guidelines for the Company's annual ESG initiatives.
Sustainability Committee	• Formulate the Company's sustainable development and ESG management policies and objectives, identify sustainability and ESG-related risks and opportunities, and report to the Board of Directors while providing recommendations. • Review the Company's sustainability and ESG framework, working progress, and supervision, inquire about major internal ESG events, and examine the handling accordingly. • Receive feedback from stakeholders on the Company's sustainable development and ESG initiatives and provide guidance and oversight for analysing materiality issues.
ESG Reporting Working Group	• Implement ESG policies formulated by the Sustainability Committee. • Organise the compilation of ESG reports and conduct training related to sustainable development.
Departments and Subsidiaries	• Daily management of ESG-related matters, implementation of ESG goals, and participation in the compilation of ESG reports. • Implement ESG policies in the Company's operational processes.

Key Performance

1 special meeting of the Sustainability Committee.

Communication with Stakeholders

Kunlun Energy is committed to establishing effective communication channels with stakeholders and welcoming suggestions and feedback from both internal and external parties with an open mindset. Through comprehensive assessments, we identify ESG issues of materiality for our Company and stakeholders alike. This process guides us in defining our ESG strategic direction and enhancing the disclosure of our ESG performance.

Stakeholder Expectations

Kunlun Energy actively listens to all stakeholders' requirements and communicates openly and transparently through various channels. We collect stakeholders' feedback, recommendations, and expectations about our sustainable development activities and respond to them appropriately.

Stakeholders	Communication	Focus issues	Communication and Responses
Household Consumers	• Business premises • Online application • Customer service hotline • Email	• Safe and reliable products • Efficient and convenient service	• Receive customer feedback and complaints • Improve product and service quality • Organize safety inspections and promotion • Conduct customer satisfaction
Business Customers	• Customer meetings • Customer service hotline • Email	• Safe and reliable products • Efficient and convenient service • Stable energy supply • Integrity and compliance management	• Receive customer feedback and complaints • Improve product and service quality • Strengthen energy reserve and regulation capacity • Conduct customer satisfaction surveys
Government and Regulatory Institutions	• Announcement • Meetings	• Green and low-carbon development • Safe and reliable products • Stable energy supply • Operate in compliance with laws and regulations • Promote economic growth	• Develop sustainable development strategies and goals • Implement product quality inspections and ensure safety in production • Strengthen energy reserve and regulation capacity • Adhere to laws and regulations • Conduct business activities according to local development needs
Suppliers	• Supplier training • Supplier audit	• Open and transparent procurement • Win-win cooperation	• Establish and improve supplier management procedures • Implement open and transparent procurement • Carry out business exchanges and communication

Stakeholders	Communication	Focus issues	Communication and Responses
Employees	• Labour union • Suggestion box, e-mail • Employee satisfaction survey • Employee training • Performance evaluations and assessments	• Ensure fundamental rights and benefits • Provide career development opportunities	• Establish labour union organisations • Establish channels for employee feedback and complaints • Conduct employee satisfaction surveys • Organize employee training programs • Implementing compensation, performance, and promotion mechanisms
Shareholders and Investors	• Shareholders' meetings • Announcements and regular reports • Media responses • Press conferences	• Standardize corporate governance • Operate in compliance with laws and regulations • Enterprise risk management • Sustain and stable profitability	• Enhance governance framework • Adhere to legal and regulatory requirements • Conduct risk assessments and responses • Maintain sound business operations

Stakeholders	Communication	Focus issues	Communication and Responses
Media	• Announcements and regular reports • Press conferences	• Timely disclosure of information • Smooth communication channels	• Fulfillment of disclosure obligations • Prompt response to external inquiries
Public Welfare Organizations, Industry Associations, or Academic Institutions	• Project cooperation • Industry conference	• Fulfill social responsibilities • Promote scientific research and innovation • Serve and give back to society	• Participate in public welfare activities • Carry out academic exchanges and cooperation • Participate in the formulation of industry standards • Share enterprise experience

Materiality

Kunlun Energy maintains close communication with internal and external stakeholders to stay informed about material issues of concern. This year, Kunlun Energy continued to conduct qualitative and quantitative analyses of materiality issues, distributed assessment questionnaires and compiled the results into a matrix accordingly.

Materiality Assessment Process

Kunlun Energy has updated its ESG topic library based on the characteristics of its business operations and the demands of internal and external stakeholders. Stakeholder perceptions of the materiality of ESG issues are surveyed through questionnaire assessments, and a matrix is developed based on results from the quantitative analysis. This matrix identifies major ESG issues from both internal and external stakeholder perspectives, which ensures comprehensive coverage of key ESG concerns.

Materiality Issues Collection and Updating

In accordance with requirements from the Hong Kong Stock Exchange, SASAC standards, global rating feedback, and Kunlun Energy's development plans, all ESG issues relevant to the Company are collected and updated in the materiality library.

Drafting and Distribution of Questionnaires

Online questionnaires are drafted and distributed to various internal and external stakeholders to gather feedback. A total of 9,632 questionnaires were collected.

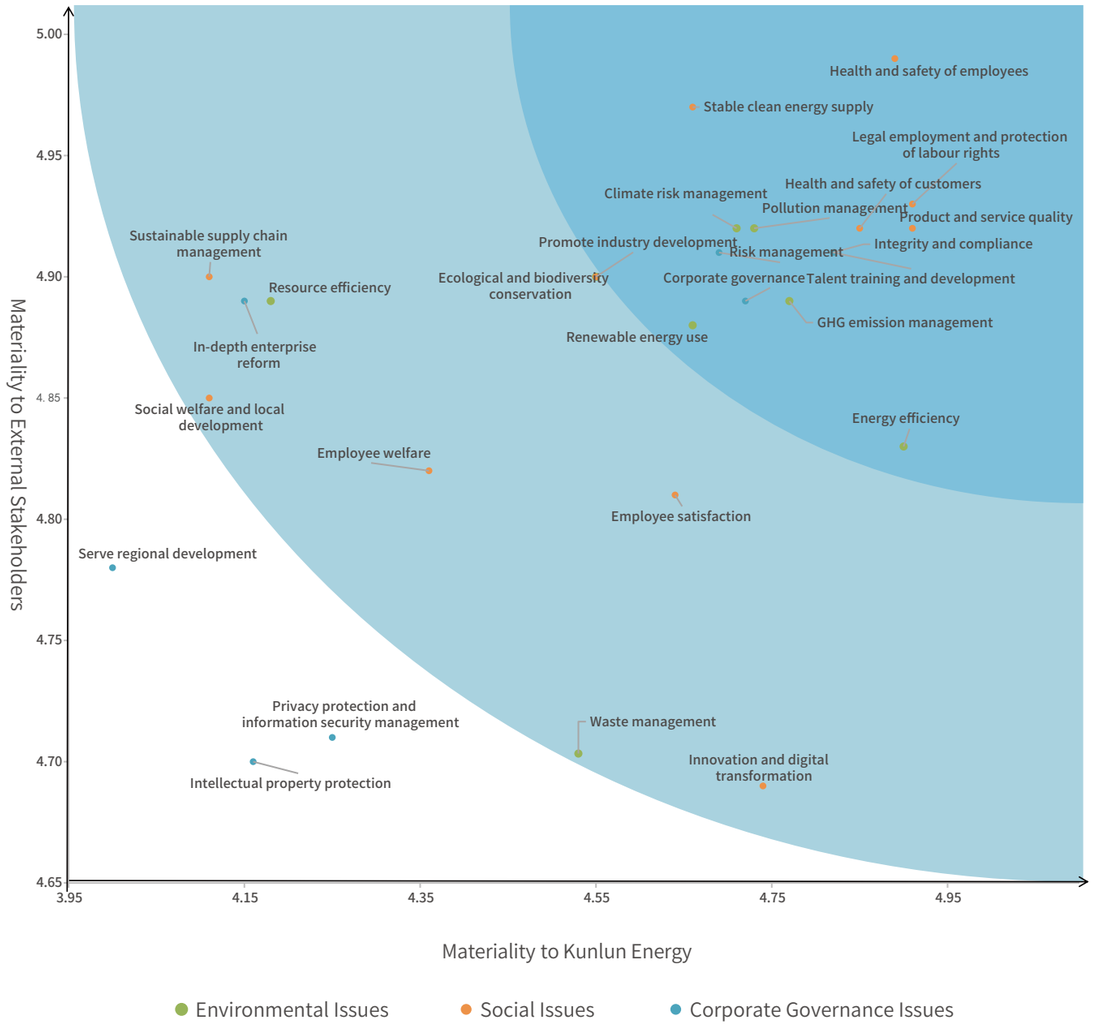
Analysis and Confirmation of Importance Ranking

Quantitative analysis is conducted based on the results of the questionnaire to prioritize ESG issues. A matrix of materiality is then formed and submitted to the Sustainability Committee for discussion and confirmation.

Materiality Matrix

This year, Kunlun Energy identified a total of 27sustainable development issues, which categorized by two dimensions: "Materiality to Kunlun Energy" and "Materiality to stakeholders". A materiality matrix for 2023 was then constructed, and the issues were presented according to the materiality priority.

Materiality Matrix for Kunlun Energy in 2023



Materiality Matrix for Kunlun Energy in 2023

Materiality	Issues
High	Health and safety of employees
	Stable clean energy supply
	Risk management
	Corporate governance
	Pollution management
	Integrity and compliance
	Product and service quality
	Talent training and development
	Legal employment and protection of labour rights
	GHG emission management
	Health and safety of customers
	Climate risk management
Medium	Social welfare and local development
	Renewable energy use

Materiality	Issues
Medium	Resource efficiency
	Sustainable supply chain management
	Employee welfare
	Promote industry development
	Ecological and biodiversity conservation
	Employee satisfaction
	Energy efficiency
	Innovation and digital transformation
	In-depth enterprise reform
	Waste management
Low	Privacy protection and information security management
	Intellectual property protection
	Serve regional development

Environment Issues | Social Issues | Corporate Governance Issues

Green and Low-Carbon Operation

Kunlun Energy attaches great importance to ecological civilization construction, further promoting green construction, deepening the layout of new energy, and implementing comprehensive energy projects to actively respond to the national development strategy. Faced with climate change, we actively promote green technological innovation and the transition to a green, low-carbon economy, practising harmonious coexistence between humans and nature.

Sustainable issues addressed in this chapter:

- Climate Risk Management
- Pollution Management
- Greenhouse Gas Emissions Management
- Energy Efficiency
- Renewable Energy Usage
- Resource Efficiency
- Waste Management

Green Design and Construction

Kunlun Energy adheres strictly to relevant national laws and regulations of the "Water and Soil Conservation Law of the People's Republic of China", the "Environmental Protection Law of the People's Republic of China", and the "Environmental Impact Assessment Law of the People's Republic of China". We uphold the concept of green development by reviewing fixed assets energy-saving situations and efficiently applying technological methods and engineering measures to minimize the environmental impact of construction. Concurrently, we implement measures to protect the ecological environment, maintain or improve ecological structures, and enhance the quality and stability of ecosystems.

Green Site Selection and Design

Kunlun Energy highly values the importance of eco-friendly and green operations during the site selection process to achieve harmony with the natural environment. In 2023, we formulated and issued the "Management Measures for Engineering Construction Projects", "General Deployment and Management Measures for Engineering Construction Projects", and "Management Measures for Commencement Reports of Engineering Construction Projects" to ensure that environmental impact assessment reports and soil and water conservation plans have been approved before commencement. Meanwhile, we implement environmental protection facilities with "Three simultaneous" requirements and strictly follow the results of environmental impact assessments to carry out relevant work. The Company practices green procurement, giving priority to purchasing energy-saving, eco-friendly, and low-carbon materials to ensure energy efficiency right from the source. Additionally, in light of the site conditions, we plan and implement the construction of distributed photovoltaic power generation facilities through the model of "self-use and excess power to the grid".

Green Construction and Building

Kunlun Energy strictly adheres to national laws and regulations, namely the "Environmental Protection Law of the People's Republic of China", the "Regulations on the Administration of Construction Project Environmental Protection", and the "Law of the People's Republic of China on the Prevention and Control of Environmental Pollution Caused by Solid Waste". We have formulated documents such as the "Environmental Protection Management Guidance Manual", the "Civilized Construction Management Guidelines", and the "Special Operation Management Guidelines" to enhance our capabilities in green and civilized construction. We have improved the green and civilized construction management system from multiple dimensions and implemented the "six constructions" in major ways of standardized design, scaled procurement, factory prefabrication, modular construction, information management, and digital delivery.

Green Assembly

We actively promote factory-based prefabrication and modular construction, clearly defining overall requirements for key professional modules such as steel structures, equipment installation, pipelines, building structures, and electrical instruments to maximize the efficiency and sustainability of construction projects. By prefabricating and assembling building components in factories, we aim to reduce potential environmental and noise pollution caused by on-site construction, minimize waste generation and energy consumption at construction sites, and decrease damage to the natural environment, thereby maximizing the efficiency and sustainability of construction projects.

Noise Management

Noise pollution is rigorously controlled in construction projects. During the environmental impact assessment phase, the Company conducts a thorough assessment of the impact of noise pollution and proposes preventive measures. In terms of the construction phase, we' ve installed enclosed machinery sheds for high-noise machinery (electric saws, electric planers, grinding machines, etc.) to reduce the spread of strong noise. Additionally, we' ve strengthened environmental education for workers to prevent generating unnecessary noise. When the project is commissioned, noise prevention and control measures as principles are strictly implemented simultaneously with the main construction. Noise monitoring of noise pollution sources is conducted according to relevant specifications and is included in the scope of ecological environment hazard investigations. Any issues identified are promptly rectified.

Ecological Environment Protection

Kunlun Energy adheres to the principles of ecological civilization throughout project implementation to achieve harmonious coexistence between corporate development and the natural environment. Our Company places great importance on vegetation protection, soil and water conservation, and ecological preservation during engineering construction.

Vegetation Protection

Separate topsoil from subsoil in construction areas and implement layered backfilling to preserve fertility and restore local vegetation upon completion. Collect and preserve topsoil for areas permanently occupied during construction or temporary land use.

Soil and Water Conservation

Adopt site-specific strategies to avoid construction in ecologically sensitive areas of water sources or during harvesting seasons and flood seasons. Specialized construction pathways are constructed, and reasonable planning is undertaken for construction sites, vehicle routes, and material storage areas to minimize the use of additional land resources.

Ecological Preservation

Enhance supervision of construction personnel, increase awareness campaigns for wildlife protection, and prioritize water environment conservation to prevent eutrophication of local water bodies and minimize the impact on aquatic habitats to the largest extent.

Green Acceptance and Restoration

Kunlun Energy upholds the principles of both ecological protection and restoration. After the completion of construction, we undertake systematic restoration of the land and vegetation based on the characteristics of the local ecological environment. This includes timely clearing, loosening soil, covering and collecting cultivated soil, restoring greenery, and replanting suitable local vegetation. Additionally, we continuously monitor local wildlife dynamics and carry out rescue operations when necessary.

Case: Vegetation Protection Measures for the Jieyang Natural Gas Pipeline Project in Guangdong

The Jieyang Natural Gas Pipeline Project in Guangdong implemented corresponding measures to protect vegetation throughout three phases of project design, construction, and completion. Prior to construction, in-depth research was conducted on the types and characteristics of flora and fauna along the pipeline route, followed by eight research reports drafted to analyze the potential impacts on local flora and fauna during construction in advance and identify factors affecting biodiversity protection during each construction phase. A professional technical service team was hired to strictly monitor environmental protection during construction. Thirteen on-site inspections were conducted, and three scheme reviews were carried out in collaboration with municipal government departments. The environmental impact factors during construction were determined, and daily supervision of environmental protection and biodiversity conservation was strengthened, with more than 20 on-site inspections conducted. In total, over 8,600 trees of various species and 28 species of flora and fauna were protected.

Case: Protection of the Ancient Yellow River Waterway in the High-Pressure Gas Pipeline Project in Suqian City

In the Suqian City Tonghu Road Sub-High Pressure Gas Pipeline Project, which crossed the ancient Yellow River segment, a water resources protection plan was established in advance and strictly adhered to during construction. Before construction, comprehensive site surveys were conducted to understand the geological conditions of the crossing area. After thorough communication with the Ancient Yellow River Management Department and Planning Department, a crossing construction plan was formulated by professionals, and water experts were invited to review it to select the best water resources protection plan. During construction, the approved construction plan was strictly implemented to avoid risks of waterway destruction from the source.

Green Production and Operation

Kunlun Energy strictly adheres to national policies of the "Environmental Protection Law of the People's Republic of China" and the "Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution". We continuously improve and optimize our environmental management system to minimize environmental pollution, deepen the layout of clean energy, and move towards a "net-zero" future. Additionally, we implement safety months, low-carbon weeks, and energy-saving days as part of our operational practices.

Management System

The Company has established and obtained certification for the GB/T24001 (ISO14001) Environmental Management System. We have set up the QHSE Committee as the leading decision-making body for environmental management, responsible for overseeing the Company's ecological environmental protection. We have implemented an environmental responsibility system and systematically decomposed environmental indicators. Each year, members of the Board of Directors, senior management, and business department heads sign a "Safety and Environmental Responsibility Pledge", which includes key performance indicators such as the emission compliance rate of atmospheric pollutants and greenhouse gas emissions linked to performance evaluations. Additionally, we utilize regulatory measures to strengthen process control, ensuring the effective operation of the environmental management system.

Certificate of Kunlun Energy' s Environmental Management System

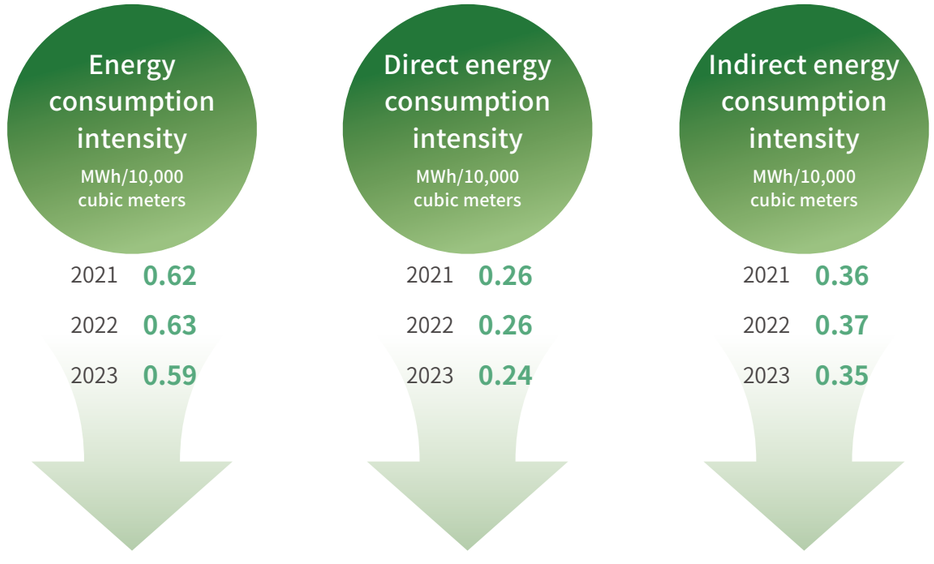
Energy Management

To effectively improve energy efficiency and reduce emissions, Kunlun Energy has formulated and implemented the "14th Five-Year Plan for Energy Conservation", detailing arrangements and deployments for energy and water conservation goals and key tasks. We have established an energy and water conservation leadership group chaired by senior leadership, which analyzes the energy usage of the previous year to set overall energy conservation targets for the current year. Each quarter, key points for energy and water conservation work are distributed to systematically advance energy management, reducing energy consumption from the demand side. Each subsidiary of the Company further decomposes the annual energy and water conservation targets as well as energy baseline indicators, quantifying station-specific measures to implement relevant measures. At the end of the year, assessments are conducted on the energy management indicators of each subsidiary, with corrective actions taken for any issues identified during inspections and assessments.

Kunlun Energy has also established energy baseline frameworks for city gas pipelines, compressed natural gas (CNG), liquefied natural gas (LNG) refueling stations, LNG receiving stations, LNG plants, and liquefied petroleum gas (LPG) storage businesses, achieving refined management and precise assessments of different production operations. We continuously explore various approaches to promote energy conservation in factories: replacing frequency conversion devices, phasing out high-energy-consuming equipment, and adjusting refrigerant ratios. Additionally, we continue to strengthen the foundation of energy conservation statistics, establishing and developing a greenhouse gas accounting statistical platform to enhance the intelligent management of greenhouse gas accounting. Year-on-year and month-on-month analysis, as well as the analysis of the effectiveness of control measures are reinforced to advance the management of data unity, truthfulness, and completeness. The timely reporting rate, accuracy rate, and completeness rate of energy conservation and water conservation statistics for the current year are all 100%.

Kunlun Energy's 2023 Energy Conservation Targets and Progress

Indicators	2023 Targets	2023 Targets Progress	Targets Completion Status
Total energy consumption intensity	Decrease by 17.4% compared to 2020	Decreased by 61.5% compared to 2020	Exceeded target
Energy conservation volume	1.1 thousand tonnes of standard coal	2.4 thousand tonnes of standard coal	Exceeded target



Case: Construction of the Jing-Tang Liquefied Natural Gas (LNG) Plant Energy Control Pilot Project

Kunlun Energy completed the research on the Jing-Tang LNG energy control pilot project to improve the timeliness of energy consumption control. Combining the status of energy metering equipment and information system construction at the receiving station, we initially established the functional framework of the energy consumption control system at the receiving station, achieving pilot monitoring and early warning of major energy consumption indicators in the production system and trend forecasting.

Case: Frequency Converter Replacement in the Shaanxi Ansai Liquefied Natural Gas (LNG) Plant to Improve Production Efficiency

To enhance operational system reliability and improve production efficiency, Shaanxi Ansai LNG plant refurbished and replaced the frequency converter equipment. In terms of energy conservation, the new system raised the voltage output to the motor to reduce the output current. The motor's current was reduced by approximately 25% compared to the original system, and the cable loss on the motor side was reduced by at least 45% or above. Under the same production load conditions, replacing the frequency converter resulted in daily electricity savings of 15,000 to 25,000 kWh. The performance is outstanding, displaying high reliability, and the indicators have achieved the technical standards of international high-power frequency converters. Compared to the original high-power frequency converter speed control system, the new one shows significant improvements in aspects of footprint size, protection level, noise, energy efficiency, and anti-voltage sag.

Energy Consumption of Kunlun Energy in 2023[12]

Indicators		Unit	2021	2022	2023
Total Energy Consumption[13]		MWh	2,609,795.62	2,832,199.58	2,889,323.85
Energy consumption intensity[14]		MWh/10,000 cubic meters	0.62	0.63	0.59
Direct energy consumption	Gasoline	Tonnes	3,916	3,753	4,223
	Diesel	Tonnes	495	498	875
	Natural Gas	10,000 cubic meters	9,458	10,167	11,378
	LPG	Tonnes	148	112	82
Total direct energy consumption		MWh	1,079,495.78	1,153,658.64	1,186,925.58
Direct energy consumption intensity		MWh/10,000 cubic meters	0.26	0.26	0.24
Indirect energy consumption	Purchased electricity	MWh	1,530,299.84	167,666.80	1,689,893.58
	Purchased heat	MWh	/	1,872.95	12,504.68
Total indirect energy consumption		MWh	1,530,299.84	1,678,540.95	1,702,398.26
Indirect energy consumption intensity		MWh/10,000 cubic meters	0.36	0.37	0.35

12. In 2023, Kunlun Energy's energy consumption data statistics encompass Kunlun Energy and its major subsidiaries.

13. The total energy consumption quantity (MWh) is calculated using conversion factors provided by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China and the Standardization Administration of China, as published in the "General Principles for Comprehensive Energy Consumption Calculation (GB/T 2589-2020)"

14. Kunlun Energy further enhanced its ESG indicators and statistical methodologies in 2023. The energy intensity values are calculated using the sales volume of natural gas, and relevant data for 2022 and 2021 have been concurrently updated. Energy consumption intensity (MWh/10,000 cubic meters)= energy consumption volume / natural gas sales volume.

Clean Energy Comprehensive Substitution

Kunlun Energy promotes green transformation, leveraging internal and external resource advantages to harness the characteristics of natural gas as a transitional and alternative energy, which is relatively clean among fossil fuels, to explore its value and achieve the integrated development of natural gas and new energy. In 2023, we pursued multiple projects in the three major sectors of the new energy layout, resource reserves and energy reserves. We improved the manuals for wind power, photovoltaics, and distributed energy development, compiled the "Kunlun Energy Natural Gas Pressure Difference Power Generation Technology Research Analysis and Technical Implementation Guidelines", and conducted the "Kunlun Energy New Energy, Gas-Electricity, and Energy Storage Coordinated Configuration Strategy Optimization Study", laying a solid foundation for the comprehensive layout of clean energy.

Adjust Energy Structure

- Combine abundant renewable resources such as solar and wind energy at production stations and actively explore

Deployment of New Energy Generation Modes

- Advance distributed photovoltaics at stations
- Efficiently utilize pressure difference in power generation

Introduce Affordable Green Energy

- Explore the green electricity and green certificate markets, promoting the convergence of certificates and electricity

Case: Tailoring to Local Conditions, Constructing Photovoltaic Power Generation Projects

The Ningxia Subsidiary completed the construction of two natural gas utilization station photovoltaic power generation projects. The Taiyangshan Station photovoltaic power generation project utilized roofs of auxiliary buildings, firefighting water pool tops, and reserved open spaces within the station. It adopted a "self-use" model to complete the station's 0.4 kV low-voltage power supply system grid connection. The entire electricity generation load of the station was fully absorbed internally, saving about 52.72 tonnes of standard coal and reducing CO_2 emissions by 127.76 tonnes annually. The Shengli Station first changed the original design plan of using diesel generators as backup power sources to a dual-power mode of photovoltaic power generation and grid electricity supply. With a designed power generation capacity of 26.4 kW/h and battery storage of 100 kW/h, it saves about 38,000 kWh of grid electricity annually, achieving the transformation of station electricity usage from mainly relying on photovoltaic power generation with grid electricity as a backup.

Key Performance

- Purchased renewable electricity amounted to **182,873.8** MWh, accounting for **10.82%** of the total electricity consumption, with a total of **22** green electricity certificates obtained.
- Completed **7** centralized new energy projects with installed capacity targets, and **11** comprehensive energy projects were put into operation.
- Completed **29** distributed photovoltaic projects, with **22** projects completed during the year, with a total installed capacity of **3.3** MW. Among them, **14** photovoltaic power generation projects have been put into operation, with a cumulative power generation of **976,000** kWh, and **484,800** kWh for self-use.
- The total power generation of gas-electricity projects reached **11.513** billion kWh, replacing **1.415** million tonnes of standard coal.

Methane Emission Control and Management

We have strengthened efforts to reduce methane emissions and control waste gas emissions through various measures, including waste gas generation optimization, recovery and utilization, detection, and capacity-building in management.

Optimization of Flare Parameters

In factories of Dengkou, Ansai, Karamay, and Bazu, we have successfully reduced natural gas combustion by 6.3 million cubic meters through optimizing flare flow parameters and enhancing precise measurement, resulting in a significant reduction in greenhouse gas emissions equivalent to a reduction of 12,000 tonnes of CO_2 and 85 tonnes of CH_4.

Expansion of BOG Recovery Process Units

The Lunnan factory has expanded its BOG recovery process unit, resulting in an annual reduction of 5.42 million cubic meters of flaring gas, equivalent to reducing 10,000 tonnes of CO_2 emissions and 76 tonnes of CH_4 emissions.

Methane Leak Detection

We have strengthened methane leak detection and repair using various methods, including the cloud-based laser methane detection early warning system, unmanned aerial vehicle leak detection, mobile detection on vehicles, handheld terminal leak detection, and the use of detection dogs. A pilot project was conducted in Inner Mongolia Company where a third party was hired to carry out methane leak detection and repair work, resulting in a reduction of 5 tonnes of CH_4 emissions throughout the year, equivalent to reducing 105 tonnes of CO_2 equivalents.

Capacity-Building and Training for Methane Management

We organized 19 personnel from factories and receiving stations to participate in the China Petroleum Methane Emission Control Alliance exchange meeting to learn about the current international and domestic methane emission reduction technologies and research status. This initiative aims to enhance professional management skills and support Kunlun Energy's methane emission reduction research efforts.

Water Resource Management

Kunlun Energy has established mature procedures for water intake and water conservation, uniformly implementing the "Kunlun Energy Co., Ltd. Energy Saving and Water Conservation Management Measures" as well as "Kunlun Energy Co., Ltd. Energy Saving and Water Conservation Statistical Management Regulations". By adopting an approach of "target control, process management, and node analysis", we promote water conservation optimization and transformation, strengthening water resource management and supervision.

Our Company's water mainly comes from municipal water supplies, supplemented by a small portion collected from self-built wells for groundwater. For groundwater collection, Kunlun Energy has obtained relevant official water intake permits issued by the authorities and strictly conducts water quality testing in accordance with legal requirements. Additionally, we implement water quota management and overall quota assessment management. In early 2023, we issued the "Kunlun Energy Co., Ltd. 2023 Energy Saving and Water Conservation Target Decomposition Table", refining 53 water quota indicators for subordinate companies, effectively improving water resource management efficiency. There were no incidents of water source misuse or damage to local ecological environments during the reporting period.

Kunlun Energy's Water Conservation Targets and Progress in 2023

Indicators	2023 Targets	2023 Targets Progress	Targets Completion Status
Water Conservation	5,000 tonnes	8,000 tonnes	Exceeded target

Key Performance

In 2023, achieved an actual water consumption volume of **129,000** tonnes less than the planned water consumption volume.

Water Consumption of Kunlun Energy in 2023 [15]

Indicators	Unit	2021	2022	2023
Total water usage	10,000 tonnes	480.5	481.5	501.0
Water consumption intensity	Tonnes/ RMB 10,000 of added value	2.35	2.03	2.03

15. In 2023, Kunlun Energy's water consumption data was calculated based on Kunlun Energy and its major subsidiary companies.

Recycling

Kunlun Energy focuses on strengthening compliant management and comprehensive utilization of wastewater. Construction and domestic wastewater are entrusted to third parties for treatment and discharged into designated municipal networks, complying with national sewage discharge standards. Subsidiaries are required to dispose wastewater in accordance with the law, ensuring that water quality meets standards before compliant discharge. Additionally, efforts are made to enhance water recycling technologies, such as optimizing the dosage of circulating water agents, increasing the use of recycled water systems, and installing fresh water-softened water devices. These measures result in a yearly reduction of 230,000 tonnes of wastewater and cost savings of RMB 1.37 million.

Case: Optimization of Seawater Pump Cooling Water Flow Rate

To improve cooling system efficiency and conserve water resources, Kunlun Energy optimized the flow rate of seawater pump cooling water. During operation, the flow rate is maintained at 5 tonnes/hour to prevent component wear, while in standby mode, the flow rate is reduced to 2 tonnes/hour to prevent sand accumulation in the pump shaft sleeve, achieving an annual water savings of 25,000 tonnes.

Case: Innovative Dry-Wet Standby Mode for Submerged Combustion Vaporizers (SCV) to Promote Water Conservation

To optimize energy utilization and reduce costs, Kunlun Energy implemented an innovative standby SCV management mode. During peak production periods, the SCV is set to a wet standby mode to automatically replace softened water. During the off-peak season, it is set to a dry standby mode, and softened water is only added before winter. This measure saves approximately 1 million cubic meters of fuel gas and 130,000 kWh of electricity annually compared to traditional SCV self-replacement or external purchase of softened water, reducing the cost of water replacement and testing by about RMB 3,000 per occurrence.

Kunlun Energy's Wastewater Discharged and Recycled in 2023 [16]

Indicators	Unit	2021	2022	2023
Industrial wastewater discharged	10,000 tonnes	35	35	32
Industrial wastewater recycled	10,000 tonnes	7.0	6.0	6.8
Domestic wastewater discharged	10,000 tonnes	81	84	84
Domestic wastewater recycled	10,000 tonnes	1.6	1.9	1.9

16. In 2023, Kunlun Energy's wastewater discharge and recycle data were compiled for Kunlun Energy and its major subsidiaries.

Waste Management

Kunlun Energy strictly adhered to the "Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste" and "Law of the People's Republic of China on the Prevention and Control of Radioactive Pollution", continuously optimizing the Company's compliance management of waste. Through the QHSE information system, we established a comprehensive supervision and management module from production to disposal, with data and evidence reported together to strengthen assessment and supervision.

Waste Disposal

We attach great importance to the prevention and control of solid waste, especially hazardous waste, strictly complying with the national "Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste". Hazardous solid waste generated in our business operations includes, but is not limited to, molecular sieves, filter cartridges, compressor lubricating oil waste, and hydraulic oil waste. For hazardous waste, we strictly comply with national laws and regulations and entrust qualified institutions to handle them safely. Construction and domestic waste are transported to designated locations and disposed of in accordance with relevant regulations.

Kunlun Energy's 2023 Waste Disposal Targets and Progress

Indicators	2023 Targets	2023 Targets Progress	Targets Completion Status
Waste Disposal Rate	100%	100%	Target Achieved

Kunlun Energy's 2023 Solid Waste Emissions [17]

Indicators	Unit	2021	2022	2023
Non-hazardous solid waste discharge - production	Tonnes	10	25	70
Non-hazardous solid waste intensity - production [18]	Tonnes/100 million cubic meters	0.02	0.06	0.14
Non-hazardous solid waste discharge - construction	Tonnes	11,481	29,126	7,382
Non-hazardous solid waste intensity - construction	Tonnes/100 million cubic meters	27.34	64.74	14.98
Hazardous solid waste discharge	Tonnes	379	454	693
Hazardous solid waste intensity	Tonnes/100 million cubic meters	0.90	1.01	1.41

Note: Due to the expansion of Kunlun Energy's business scale in 2023 (the sales volume of both natural gas and LPG increased compared to previous years) and the disposal cycle of hazardous solid waste, the data of hazardous solid waste emissions increased in some years.

17. In 2023, Kunlun Energy's solid waste emission data was compiled for Kunlun Energy and its major subsidiaries.

18. Non-hazardous solid waste intensity - production (tonnes/100 million cubic meters)=General solid waste of production/natural gas sales volume. The intensity of construction general solid waste emissions and hazardous solid waste emissions is calculated using the same formula.

Pollutant Emissions

Kunlun Energy attaches great importance to controlling pollution and environmental protection during project construction, strictly complying with relevant national laws and regulations, and strengthening management to control and reduce atmospheric pollutant emissions. We conduct comprehensive investigations of pollution sources, continuously improve the list of atmospheric pollution sources, and implement pollution control measures to effectively reduce the generation and emission of atmospheric pollutants.

Air Emission Management	Conducted audits and evaluation of clean production in key areas, completing clean production audits for factories in Huanggang and Taian, with **35** clean production measures proposed and **12** completed.
	Conducted comprehensive inspections of **379** boilers and upgraded **8** high-emission boilers to low-nitrogen models, phasing out **15** vehicles below the IV emission standard.

2023 Kunlun Energy Air Emission Targets and Progress

Indicators	2023 Targets	2023 Targets Progress	Targets Completion Status
Sulfur Dioxide	⩽22 tonnes	20 tonnes	Target Achieved
Nitrogen Oxides	⩽650 tonnes	400 tonnes	Target Achieved

Climate Resilience Management

In response to the worldwide concern about global climate change, Kunlun Energy aligns with key international and national climate frameworks, including the United Nations Framework Convention on Climate Change, the Paris Agreement, China' s Policies and Actions for Addressing Climate Change, and the Action Plan for Carbon Dioxide Peaking Before 2030. Guided by China' s dual carbon objectives, the Company integrates energy saving and carbon reduction into its strategic planning. This approach involves identifying key climate risks, assessing their financial implications, and establishing a solid groundwork for a systematic transition to green, low-carbon operations.

Climate Risk and Opportunity Management

Kunlun Energy has incorporated climate change and response mechanisms into its existing risk management procedures. It has fostered a closed loop containing "risk identification - risk analysis - risk evaluation – risk prevention and control - monitoring and review". Through pinpointing physical and transition risks and uncovering climate opportunities, the Company mitigates climate risk impacts through tailored response strategies and practical actions.

Risk Analysis
Identify potential risks and their consequences considering the sources of risk.

Risk Identification
Identify sources of risk.

Risk Evaluation
Assess the risk level based on the results of risk analysis.

Monitoring and Review
Continuously monitor the efficacy of risk prevention measures.

Risk Prevention and Control
Implement corresponding improvement control measures to address and prevent identified risks.

Physical Climate Risk Identification and Impact Assessment

Risk Type	Risk Description		Potential Financial Impact	Impact Period	Value Chain
Acute Risks	Extreme weather events	• Acute weather such as rainstorm, typhoon, river flooding, coastal flooding may cause damage to transport vessels, stations, and pipelines, increasing operation costs and recovery expenses.	• Fixed assets loss	• Short	• Production
		• Extreme high temperature, extreme precipitation, flash droughts, and cold waves heighten energy allocation stress and supply interruption risks.	• Increased costs during production and transportation Human resources loss		• Operation
		• Landslides and mudslides amplify infrastructure (urban gas pipelines and supply facilities) damage risks and service (gas supply and transportation) disruptions, inflating maintenance costs and reducing revenue.			
		• Extreme weather also jeopardizes supply chains and personnel safety, potentially halting operations and extending maintenance periods, thus destabilizing revenue.	• Human resources loss	• Medium	• Transportation

Risk Type	Risk Description		Potential Financial Impact	Impact Period	Value Chain
Chronic Risks	Sea level rise	• Climate change induced sea level rise results in coastal operations sites being at risk of flooding or shoreline erosion, increasing facility and equipment maintenance costs	• Fixed assets loss • Increased maintenance costs	• Medium • Long	• Production • Operation
	Rising temperatures	• Rising temperatures may lead to heatwaves, droughts, and fires, thereby increasing operational costs • Disrupting natural gas demand patterns leading to a decrease in demand • Adversely affecting staff health.	• Decreased sales • Higher energy costs • Human resources loss	• Medium • Long	• Production • Operation • Sales

Case: Kunlun Energy's Typhoon Recovery Efforts in Zhuozhou

In July 2023, Typhoon Doksuri damaged over 2,000 low-pressure overhead pipelines in Zhuozhou, Hebei province, China, disrupting gas service to approximately 60,000 households. Responding swiftly, Kunlun Energy coordinated and mobilized more than 1,000 professional technicians to help, securing emergency supplies and ensuring a recovery of gas supply, thus minimizing typhoon-induced losses. By late August, Kunlun Energy fully restored gas service to all affected 40,384 households across 119 villages and 13 communities, and won recognition from local governments and residents.

Transition Climate Risk Identification and Impact Assessment

Risk Type	Risk Description		Potential Financial Impact	Impact Period	Value Chain
Policy Risk	Energy Transition	• Increased construction, investment, and management input for clean energy projects in response to national dual carbon policies and to promote the energy transition.	• Increased investment expenses • Increased technological input	• Short • Medium • Long	• Operation • Investment
	Environmental Compliance	• Stricter demands from regulatory bodies and stakeholders for the disclosure of environmental information, leading to higher compliance costs.	• Increased compliance costs	• Short • Medium	• Production • Operation
	Carbon Market	• The Chinese carbon quota trading mechanism increases costs in carbon accounting and verification.	• Increased operational and management costs	• Medium • Long	• Operation
Technological Risk	Renewable Energy	• Exploring renewable energy sources leads to higher overall operational costs due to energy efficiency facility retrofits, new technology, and talent introduction.	• Increased investment expenses • Increased technological input • Increased operational and management costs	• Short • Medium	• Production • Operation • Investment
	Digital Technology	• The exploration and development of digital technologies in the context of digital transformation incur additional capital and incur costs.	• Increased technological input • Increased operational and management costs	• Short • Medium • Long	• Production • Operation

Risk Type	Risk Description	Potential Financial Impact	Impact Period	Value Chain
Market Risk	• As renewable energy replaces fossil fuels, traditional natural gas may gradually lose its market advantage.	• Decreased sales revenue	• Long	• Sales
Reputational Risk	• Delayed response or lack of transparency in Kunlun Energy' s sustainability efforts can harm its reputation as public sustainability awareness grows, leading to reduced investments and consumer demand.	• Decreased revenue • Increased financing costs	• Medium • Long	• Operation • Financing

Kunlun Energy' s Scenario Analysis of Transition Climate Risks

To better identify climate change risks and opportunities, Kunlun Energy has referred to the International Energy Agency' s (IEA) Net Zero by 2050 in the scientific assessment reports of the Intergovernmental Panel on Climate Change (IPCC), the Announced Pledges Scenario, and the Stated Policies Scenario, and combined them with its business characteristics to preliminarily explore the quantitative assessment of transition risks and climate opportunities on the business. It is to refine the climate-related risk management system and response strategies, treating climate change as a significant opportunity for transforming our development approach.

By quantifying the cost of emissions reduction into a Climate Value-at-Risk (CvaR)[19], the Company has assessed the extent to which policy shifts in a carbon-neutral context could impact Kunlun Energy' s value, presenting either climate transition risks or opportunities. Scenario analysis results indicate that as we move further along the timeline, the cost pressure climate change imposes on Kunlun Energy' s production and operations is expected to decrease.

In the context of climate change, Kunlun Energy will continue to firmly seize low-carbon development opportunities, adhere to the concept of "adhere to green and low carbon, achieve high-quality development and build beautiful ecology". We will lay out new energy businesses, construct an integrated energy service system, and steadily advance the application of green energy, technological energy-saving renovations, and intelligent solutions. We are actively promoting a comprehensive green and low-carbon transformation for the Company.

19. CvaR (Climate Value-at-Risk) represents the percentage of the current enterprise value that could be at risk over a specific timeframe due to carbon pricing, with assessment results sourced from Miotech (https://www.miotech.com/zh-CN).

Climate Value at Risk (CvaR)

Climate Opportunities Identification and Impact Assessment

Opportunity Type	Opportunity Description		Potential Financial Impact	Impact Period	Value Chain
Energy efficiency	Application of energy-saving technologies and equipment	• The application and development of energy-saving equipment and technologies could help improve energy efficiency in operations, thereby reducing operating costs.	• Decrease in production & operating costs	• Short • Medium	• Production • Operation

Opportunity Type		Opportunity Description	Potential Financial Impact	Impact Period	Value Chain
Energy efficiency	Energy management	• The Company could improve its management efficiency by strengthening the energy management system and using a digital platform to monitor carbon emissions and energy usage, thereby reducing energy loss and manpower costs.	• Decrease in energy management costs	• Short • Medium	• Production • Operation
	Clean energy	• By developing clean energy and procuring green electricity, the Company could reduce its carbon emissions and lower energy procurement costs to support the company's development in the field of sustainable energy.	• Decrease in energy costs	• Short • Medium • Long	• Production • Operation
Products and services	Natural gas business development	• Natural gas, as a relatively clean energy source, plays an important role in the short to mid-term energy market under the backdrop of China's peak carbon and carbon neutrality goals.	• Increase in operating revenue	• Short • Medium	• Sales
Markets	Integrated energy layout	• Based on its business advantages, the Company could promote the multi-energy integration on the supply sides and create an integrated energy services model, which has the potential to drive new business development and create investment opportunities.	• Increase in operating revenue • Increase in financing	• Medium • Long	• Sales • Investment • Financing

Climate Risks and Opportunities Response

Following transition risk analysis outputs, Kunlun Energy has launched a targeted green transformation program with focuses on sustainable business expansion, exploring the path of ecological priority and low-carbon development while ensuring steady business growth, promoting green transformation in economic development, realizing sustained development in green transformation, and actively practicing the green and low-carbon development strategy. Combining the five fields with "construction - operation – methane - management – energy – and – digitalization", Kunlun Energy has proactively taken varied measures to enhance energy efficiency and reduce carbon emissions.

Green Construction

- Actively promote industrialized prefabrication and modular construction methods to mitigate pollution stemming from production processes.
- Enhance the construction of energy-efficient pipeline networks
- Proactively carry out energy-saving equipment upgrades, process optimizations, and intelligent design implementations in stations.

Green Operation

- Conduct audits and assessments focused on clean production in key areas, and develop and execute clean production plans accordingly.
- Improve greenhouse gas accounting and implement effective emission control measures.

Methane Emission Control

- Upgrade equipment to minimize methane emissions
- Comprehensively enhance methane leak detection systems.
- Promote the orderly utilization of boil-off gas (BOG) resources.
- Advance research on methane emission factors measurement to further mitigate methane emissions within the industry.

Green Energy

- Actively promote the integration and application of renewable energy sources like photovoltaics in business scenarios.
- Explore opportunities in the green electricity market and facilitate the convergence of green certificates.
- Efficiently harness pressure difference power generation methods.
- Investigate the potential for utilizing cold energy resources effectively.

Smart Operation

- Establish and operationalize a platform for comprehensive greenhouse gas accounting statistics, enabling year-on-year and quarter-on-quarter analysis and effectiveness evaluation of control measures, promoting unified, authentic, and comprehensive data management
- Intelligent carbon footprint Managemen.
- Digitize the construction processes of stations.

Case: Innovating a Zero-Carbon Natural Gas Sales Model

Kunlun Energy' s Sichuan branch company has been aligned with national dual carbon objectives and internal carbon management targets, and its subsidiary Yibin Company, secured the first carbon neutrality certificate in April 2022. This innovative approach, combining "carbon quotas + natural gas", represents a significant transition from theoretical models to practical application.

Carbon Neutrality Certificate

Case: Chengdu International Bio-City Distributed Energy Project

Situated in the Chengdu High-Tech Zone' s International Bio-City, the Distributed Energy Project exemplifies a park-style distributed energy initiative. Currently in progress, the project is estimated to generate 150 million kWh of electricity annually and supply 888,000 GJ of heating, catering to the startup area' s electricity and hot/cold water requirements. To fulfill initial energy needs, three boiler heating stations and twelve complementary projects.

Preview of the Chengdu International Bio-City Distributed Energy Project

Empowering From Multiple Sources - Focusing on Sustainable Development

In its business development, Kunlun Energy balances internal and external dynamics, focusing on value chain synergy. Internally, we maximise each employee's potential through equitable treatments and empowering initiatives; externally, we collaborate with our supply chain partners to ensure accountability, embrace environmentally-friendly and high-standard procurement practices, and actively engage in standardisation efforts for the continuous and stable advancement of the natural gas sector.

Sustainable issues addressed in this chapter:

- Legal employment and labour rights protection
- Talent training and growth
- Health and safety of employees
- Employee welfare
- Job satisfaction
- Industry advancement
- Sustainable supply chain practices

Empowering Employee Potential

Kunlun Energy regards its work force as an engine for innovation and growth, thus investing in talent development and capital accumulation. We respect and uphold employee rights, offering just compensation and aligning talent growth with industry progress through effective management strategies that unlock potential, boost welfare, and foster a sense of achievement and belonging.

Rights Protection

Kunlun Energy strictly complies with China' s labour laws and regulations, including "the Labour Law of the People' s Republic of China" "the Labour Contract Law of the People' s Republic of China", and "the Prohibition of Child Labour Regulations", and implements its policies such as "Labour Contract Management Methods and Employee Career Management Methods" to safeguard employees' rights and interests and build harmonious labour relations for a healthy enterprise atmosphere.

Fair Employment

We adhere to a people-oriented approach, follow the principle of fair employment, strive to create an equal, diverse career development space, and prohibit all forms of discrimination, including nationality, gender, ethnicity, race, religious belief, education, physical and psychological defects, as well as employing child labour, forced labour, and harassment.

Key Performance

0 incidents of discrimination, child labour, forced labour, or harassment at Kunlun Energy;

The total number of employees is **27,138**, with female employees accounting for **32%**. Women accounted for **36.4%**in management roles, and **13.5%** in senior management positions and above.

Number and proportion of employees

By Gender

68.0% Male

32.0% Female

By Employment Type

100.0% Full-time

0.0% Part-time

By Region

99.2% China

0.8% Overseas

By Education Level

55.3% University or higher

25.1% College education

19.6% Other

By Age Group

10.9% <30 years old

71.5% 30-50 years old

17.6% >50 years old

Compensation and Benefits

Kunlun Energy commits to the fair treatment of employees, ensuring equitable compensation and a comprehensive benefits package with relevant methods such as the "Salary Management Methods" and "Corporate Annuity Implementation Methods". This includes adherence to the "equal pay for equal work" principle and providing statutory benefits such as five types of insurance and one housing fund, labour protection supplies, and paid leave. Beyond these, we offer extra support through housing provident funds, corporate annuities, additional pension insurance, and critical illness coverage.

We strictly enforce work-hour regulations and leave policies, establish the "Employee Leave Management Methods", and resist all forms of forced and compulsory labour. For employees who work overtime due to work needs, we provide compensatory leave or overtime pay as required.

Employee Communication

Kunlun Energy actively engages with its employees and improves communication systems to foster a culture of open dialogue, collaboration, and learning. The Company has set up effective feedback channels, such as disciplinary inspection and complaint portals, alongside initiatives for gathering constructive suggestions, ensuring employees' voices are promptly and accurately heard across departments. To assist new staff, Kunlun Energy runs orientation sessions and offers dedicated channels to tackle their specific concerns, facilitating a smoother transition into their new roles.

Through diverse approaches, including workers' congress, surveys, and grassroots interactions, the Company stays attuned to staff needs, advocating for their participation and feedback on new initiatives, upholding their rights to engagement, information, expression, and oversight. The establishment of a three-tier labour union extends its reach to all teams, enhancing the union' s roles in support, development, participation, and education, with membership reaching 26,135 by the end of the reporting period.

Talent Management

Insisting on a robust talent strategy, Kunlun Energy refines its "Select-Develop-Retain" cycle to mitigate turnover and bolster a team proficient in both skills and comprehensive qualities. The Company constantly advances its career development assessments, employing various motivational tools and integrating ESG metrics into performance reviews to aid sustainable corporate progress. The Company also addresses the varying needs of employees at different stages and roles, proactively harnessing internal and external educational and training resources to facilitate their growth and advancement.

Attracting Top Talent

Kunlun Energy prioritises talent attraction and retention, crafting recruitment plans based on industry and company growth needs, enhancing university-industry collaboration, and advancing high-level expert hiring to broaden talent introduction channels.

We continually improve the structure and quality of graduate recruitment, focusing on key positions in major business departments and emerging sectors. During the 2023 autumn college recruitment, guided by the Company's "eight major talent projects", we targeted talents in essential fields like safety, construction, research and development, marketing, legal, and finance, with a particular focus on storage, gas, and marketing professionals. We developed plans prioritising core majors, appropriately reserving for new fields, systematically supplementing scarce specialities, and focusing on challenging regions. For the first time, we integrated PhD student recruitment into our plan, establishing targeted policies and utilising the university job fair, high-level talent introduction, and specialised compensation schemes to enhance job attractiveness and retention.

To build the high-level expert pool and implement the "Talent-Enhancing Enterprise Scheme", we recruited technical experts in 2023. This initiative aims to benchmark modern corporate management standards and identify and cultivate a group of high-calibre individuals proficient in theory, policy, and industry expertise. We signed a "Pairing and Collaboration Agreement on the Reform of Technical Series Positions" with companies, establishing a collaborative framework to support a diverse range of expert roles. By focusing on "technical orientation, innovation leadership, strategic advisory roles, and talent development", we aim to enhance the contributions of experts and drive forward reforms in technical positions to foster a competitive team of technical talents. By the end of 2023, we recruited three experts and four senior technicians and established two company-level expert studios.

Case: Kunlun Energy Creates a University-Enterprise Talent Development Channel through the "Outstanding Engineer" Joint Training Program

Kunlun Energy has been dedicated to driving the "Outstanding Engineer" joint training program as a pioneering effort, actively embodying the spirit emphasised by General Secretary Xi Jinping regarding the cultivation of exceptional engineers. The Company has recommended eight topics in digital transformation and hydrogen energy development to the Outstanding Engineer Institute. Leveraging projects like the "Digital Transformation and Pilot Intelligent Development of LNG Receiving Station", Kunlun Energy has collaborated with domestic top universities to establish joint training programs. This collaborative model aims to create a fully integrated and mutually beneficial university-enterprise training approach, serving as a crucial talent pool for the Company's innovation initiatives and modern industrial chain expansion.

Facilitating Promotion Channels

Kunlun Energy places great importance on employees career development and facilitates self-improvement through a robust promotion system and performance evaluation mechanism. The Company has established a management matrix for technical series positions that covers eight major disciplines and spans three levels of management across headquarters, regional subsidiaries, and project companies. This structure ensures a well-balanced talent distribution and ongoing strategic planning for the cultivation of young leaders and talent pools, thus enhancing the team's vitality.

The Company has tailored assessment schemes for employees at different levels, implementing key performance indicators (KPIs), 360-degree performance evaluations, and goal-setting (GS) assessments. The assessment results are linked to promotions and compensation packages, enhancing the precision and effectiveness of performance assessments. In 2023, Kunlun Energy introduced the "Special Incentive Management Measures (Trial)" to regulate special incentive programs, focusing on key motivational aspects, precise incentives, and supplementary rewards. The Company also revised the "2023 Performance Indicator Assessment Detailed Rules" to refine assessment criteria and enhance its accuracy. Furthermore, the Company intensified assessments of employees' ESG responsibilities, incorporating energy conservation, carbon emissions, emergency response, legal compliance, and safety evaluations into managerial performance contracts, linking assessment outcomes with rewards, penalties, and promotions.

Improve Training Quality

Kunlun Energy improves its training system by offering diverse and tailored training programs in alignment with regulations such as the "High-Skilled Talent Management Measures" and the "Technical Expert Management Measures". Building upon talent-targeted schemes like the "Kunpeng Plan" (for young talents), the "Kunyu Plan" (for technical talents), and the "Caihong Plan" (for skilled operators), the Company develops training resources based on employee needs to drive their long-term and all-around development.

For new employee training, Kunlun Energy has formulated the "New Employee Training Management Measures", tailoring training plans that match graduates' strengths through hierarchical training, cross-functional rotations, ongoing evaluations, and dynamic management. By employing methods such as dual mentorship, establishing centralised training facilities, and rotational job experiences, the Company accelerates the growth and development of recent graduates. Presently, some graduates have excelled in key positions in areas such as marketing, operations, and financial management.

Regarding training for young leaders, the Company focuses on enhancing both management capabilities and professional competencies. Through initiatives like organising training sessions for middle and young leaders, elite young leader training programs, Kunlun Energy reinforces the development of young leaders through enhanced awareness building, practical exercises, and specialised training. In 2023, the courses for middle and young leaders and elite young leader training programs concentrated on challenging issues in corporate management, covering aspects such as international and domestic situations, strategic planning, SOE reforms, production safety, equity marketing, and organisational development. Through formats like discussions, group activities, and topic workshops, the training sessions combine theory with practical scenarios to effectively enhance leaders' decision-making skills and application abilities.

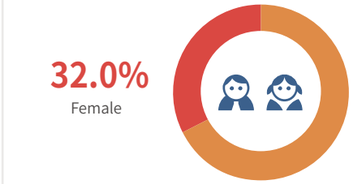
Additionally, in 2023, the Company conducted various specialised training programs covering areas such as HR management, internationalisation capabilities, corporate governance, and compliance and integrity, meeting the Company's pursuit of high-quality development and employees' functional requirements. Kunlun Energy continues to enrich and expand its training resources by utilising platforms like the "CNPC eLearning" online platform, external training groups, university lecturers, and other training channels to engage all employees in learning activities, facilitating their professional growth. In 2023, the average training duration per employee at Kunlun Energy was 81 hours, with a total of 27,138 individuals undergoing training, achieving a 100% training coverage rate among production operators.

Law Awareness Training Sessions at Kunlun Energy

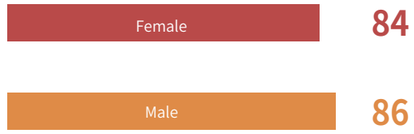
Employee Training Statistics

Total number of trained employees: 27,138

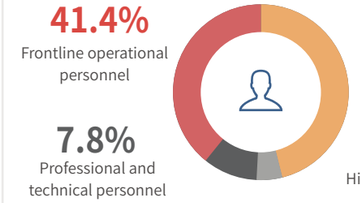
Percentage of Trained Employees by Gender



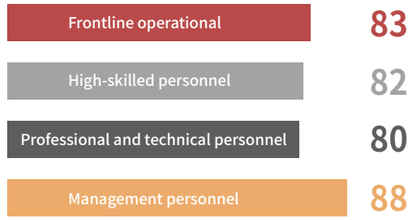
Average Training Hours by Gender (hours)



Percentage of Trained Employees by Employee Type



Training Hours by Employee Type



Case: Kunlun Energy's Operators Achieve "Technical Expert" Title in National Vocational Skills Competition

Kunlun Energy strongly emphasises "learning through competition and integrating training with competitions". Through the organisation of vocational skills competitions and various other activities, the Company enhances the vocational skills and expertise of its employees, fosters the development of production operators, and assesses the outcomes of grassroots training efforts. In 2023, the Company hosted the 4th National Oil and Petrochemical Professional Vocational Skills Competition for Gas Pipeline Operators, attracting participation from 9 major domestic gas enterprises. All 8 Kunlun Energy participants received awards, with 5 achieving gold medals and 3 receiving silver medals. Kunlun Energy was awarded first place in the team category and received recognition for being an outstanding organisation. Additionally, 3 employees were recommended as "National Technical Experts".

Kunlun Energy' s employees participated in the National Oil and Petrochemical Professional Vocational Skills Competition for Gas Pipeline Operators.

Enhancing Employee Satisfaction

The Company values the opinions and suggestions of its employees and is dedicated to enhancing employee satisfaction and fostering a sense of belonging within the workplace. Regular employee satisfaction surveys, prompt feedback and responses help us to build a harmonious corporate culture and a sound work environment while supporting employees in self-identification and ultimately decreasing employee turnover rates.

Employee Turnover

Overall employee turnover rate: 2.9%

Percentage of Employee Turnover by Gender

Female	2.7
Male	3.0

Percentage of Employee Turnover by Region

Overseas	0
China	2.9

Occupational Health

Following the principle of "prevention first and treatment combined", we place utmost importance on safeguarding the lives and well-being of our employees. Our aim is to mitigate health risks for our staff and create a work environment that is both healthy and safe for all.

Elevating Health Management Standards

Kunlun Energy strictly abides by the "Law of the People’ s Republic of China on the Prevention and Treatment of Occupational Diseases", the "Regulation on Work-Related Injury Assurance", the "Convention Concerning Occupational Safety and Health and the Working Environment" and other laws and regulations related to occupational health. The Company continuously improves its occupational health management system and has developed a series of policies, including the "Administrative Measures for the Detection of Occupational Hazards in the Workplace", the "Administrative Measures for Occupational Health Monitoring", and the " "Three Simultaneities" Management Rules for Occupational Disease Protection Facilities for Construction Projects". The Company prioritises the well-being of employees, ensuring a safe and healthy work environment.

Implementation of "Position Negative Health List" and "Special Work Negative List"

Including **20** types of detrimental diseases for **21** categories of personnel to bolster health risk awareness

Appointment of "Occupational Health Experts"

Designating **3** "Occupational Health Experts" to foster a culture of holistic health consciousness among employees

Establishment of Comprehensive Employee Health Information Records

Collecting fundamental health data for six categories of employees, such as hypertension, to set the groundwork for digital health management

Kunlun Energy has certified for the GB/T45001-2020 (ISO45001:2018) Occupational Health and Safety Management System.

Certification of Health Management System

Kunlun Energy has attained certification for the GB/T45001-2020 (ISO45001:2018) Occupational Health and Safety Management System, achieving a total coverage rate of **100%**

Occupational Disease Risk Mitigation

Kunlun Energy implements national standards for occupational health management and protects occupational health for employees. The Company conducts regular inspections and research to minimise potential occupational health hazards in the workplace and furnish employees with personal protective equipment. The Company also offers regular occupational health checks for employees and tracks the results to diminish the likelihood of occupational diseases.

In 2023, the Company organised the Occupational Disease Prevention and Control Law Awareness Week activities, where we offered guidance on occupational disease hazards and knowledge on its prevention, organized 896 case-sharing and online learning activities, and conducted 297 emergency drills for public health crises. This has enhanced employees' awareness and skills in self-rescue and mutual aid for occupational disease prevention.

Key Performance

In 2023, Kunlun Energy achieved a **100%** employee occupational health check rate, a **100%** pass rate for occupational health checks, a **100%** detection rate of occupational health hazard factors, and a **100%** pass rate for occupational health hazard site detection.

Prioritising Employee Physical and Mental Healthcare

Aligned with the "Healthy China 2030" initiative, Kunlun Energy has implemented the Healthy China Action, fostered a corporate health culture, and enhanced our health management standards. The Company offers employees, contractors, and others a wider array of health support and services to enhance their physical and mental well-being.

1 Healthy Enterprise Development

We will further refine and optimise the implementation guidelines for healthy enterprise development, conduct specialised training in health management, and deepen our efforts to enhance standards after achieving health certification.

2 Health Management for All Employees

We aim to enhance the identification of non-occupational disease risks, research and develop targeted health intervention measures for high-risk populations, and implement graded health management and guidance for these groups. By reducing the risks of chronic diseases such as hypertension, diabetes, and hyperlipidemia, we are actively driving the transition of our enterprise from focusing solely on occupational health to comprehensive health management for all employees.

3 Stringent Control of Non-Production Fatalities

We are rigorously enforcing our health examination system and coordinating the implementation of employee health examination plans.

We prioritise the health and safety of contractors and subcontractors during the execution of contracts.

We strengthen the management of non-production fatalities among long-term absent employees.

We conduct regular health education programs to promote awareness and knowledge among our workforce.

We are committed to maintaining and expanding our healthy cafeteria initiatives.

Case: Accessible Medical Care

To address the challenge of employees and their immediate family members seeking treatment for severe illnesses in Beijing, Kunlun Energy has engaged health service organisations to aid employees and their families in accessing treatment in Beijing, supporting accompanying consultations and online medical advice. By the end of 2023, this service had facilitated outpatient registrations and hospital services for nearly 900 employees and their families, with a satisfaction rate of 100%. Furthermore, the Company ensures that temporary agency workers receive medical benefits equivalent to those of their contracted employees, thereby boosting the recognition of agency employees.

Remote video consultation service

Key performance

Between 2021 and 2023, Kunlun Energy invested a total of **48.51** million yuan, established **607** new facilities, including gyms, added over **1,900** sets of fitness equipment, and adjusted **53** positions for employees with occupational contraindications.

In 2023, subsidiary companies gained **16** local "Healthy Enterprise" awards.

Employee Care

Kunlun Energy has always regarded employees as the Company’ s most valuable asset, dedicated to creating a warm and harmonious work environment. The Company focuses on employees’ career development and work-life balance, establishing a sound employee care system and providing flexible work arrangements and healthy welfare programs to help employees achieve a sense of accomplishment and happiness at work. The Company also provides rest and financial benefits for long-serving employees, as well as special funds for employees facing difficulties, especially those experiencing sudden losses or major illnesses, offering financial assistance to help them through tough times.

Women’ s Care

Kunlun Energy respects female employees and carries out caring activities for female employees through diverse initiatives, creating a female-friendly and inclusive work environment.

Case: "Mom’ s Room" for Female Employees

Kunlun Energy pays full attention to the needs of female employees and has created "Mom’ s Room" to provide temporary rest areas for pregnant and lactating female employees. This year, the rooms have been established in 6 subsidiary provincial and city companies. We will continuously innovate new models and platforms to care for female workers, promote the construction of family-friendly workplaces, and provide more care and support for female employees.

"Mom’ s Room" nursing room

Diverse Cultural and Sports Activities

The Company focuses on balancing work and life, provides convenient cultural facilities, organises employee activities such as painting and photography contests and badminton competitions, and invites retired employees to these activities to enhance their sense of honour and belonging.

Case: Staff Reading Rooms

Kunlun Energy assists employees in creating a good reading environment, enriching their spiritual lives. In 2023, the project to build staff reading rooms continued. Currently, 355 staff reading rooms have been built, covering 80% of provincial and municipal subsidiaries, providing employees with richer and higher-quality learning spaces and promoting the cultural advancement of the entire enterprise.

Staff reading rooms create a good learning environment for employees.

Case: "Big Hand Holding Small Hand" Station Open Day Event for Employees' Children

In May 2023, Kunlun Energy held a special "Station Open Day" event where 29 employees visited the natural gas stations with their children. During this open day event, the guides explained the source and uses of natural gas, production processes, gas leak detection, and IoT smart gas meters to the young visitors, enhancing the safety awareness of employees’ children. The event, with the goal of "educating one child, impacting one family, and driving the entire society", created a safety atmosphere in which "everyone prioritises safety and knows emergency response".

On the Station Open Day, the event guide explained natural gas knowledge to young participants.

Collaborating with Suppliers to Fulfil Responsibilities

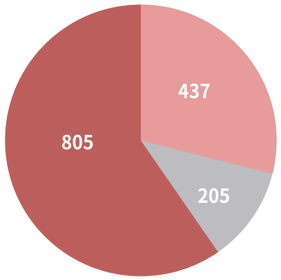
Supply Chain Lifecycle Management

Kunlun Energy strictly adheres to the "Bidding Law of the People' s Republic of China", enhances supplier management standards and constructs a sustainable, resilient supply chain in alignment with legal requirements. The Company actively engages in green procurement, fortifies supplier oversight, evaluation processes, and exit schemes, consistently mitigating diverse environmental and social risks within the supply chain. In 2023, the Company bolstered supply chain ESG management by integrating key management documents such as the "Management Protocol for Market Access", the "Administrative Measures for Bidding", and the "Management Protocol for Material Procurement" "Supplier Management Rules" "Supplier Evaluation Form" and "Supplier Commitment Letter".

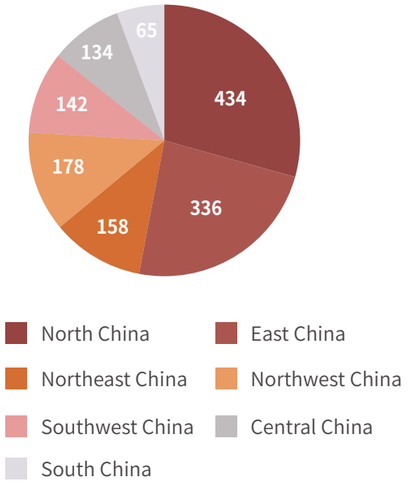
Key Performance

In 2023, Kunlun Energy had **1,447** suppliers, comprising **437** service contractors, **805** material suppliers, and **205** engineering contractors.

Number of Suppliers by Category



Number of Suppliers by Region



Supplier Admission

During the supplier admission phase, the Company strictly enforces the "Management Protocol for Market Access", mandating that suppliers meet fundamental criteria, including possessing certifications for quality, safety, environmental protection, occupational health, and relevant production and business licenses, as well as demonstrating a solid track record of business integrity and compliance. Building upon a foundation of unified and stringent admission requirements, Kunlun Energy tailors specific entry criteria to accommodate the unique service attributes of different supplier categories.

Supplier Admission Criteria

Material Suppliers

Primary material suppliers adhere to the requirements of the parent company. For secondary and tertiary material suppliers participating in public tenders, we follow the "Material Supplier Management Rules", with all entities undergoing on-site inspections[20] to ensure not only their operational proficiency but also their commendable ESG performance.

Engineering Contractors

Standardised admission conditions are established, and contractors are obliged to sign commitment agreements upon contract execution to prevent subcontracting, illicit subcontracts, and related malpractices.

Service Contractors

Specific qualification criteria are tailored for providers of pipeline maintenance, asset evaluation and consultancy, and environmental impact assessment.

Supervision and Evaluation of Suppliers

Kunlun Energy monitors and assesses supplier performance by applying the "Material Supplier Management Rules" and the issued inspection notifications like the "Notice on the Release of Two Work Plans, including the '2023 Material Quality Warehouse Management Flight Inspection Work Plan' ". These directives guide the evaluation of suppliers' sustainability performance in crucial areas such as health, safety, environmental protection, and regulatory compliance. Daily performance acts as a pivotal factor in supplier assessment and appraisal.

20. On-site inspections for primary material suppliers are conducted by the China National Petroleum Corporation.

1 Material Suppliers

We implement a graded management system for material suppliers, with different assessment methods based on their level. Additionally, our electronic bidding platform is extensively utilised for graded management, business review, dynamic tracking, and process compliance.

Our comprehensive assessment of suppliers combines daily evaluations with annual assessments to form a holistic evaluation result. The annual assessment evaluates factors such as overall supplier strength, product quality, price competitiveness, supply share, and performance service based on business permissions.

2 Service Contractors

For service contractors in inspection and maintenance, we continue to adhere to the “Kunlun Energy Annual Evaluation Rules of Inspection and Maintenance Contractors” to standardize the selection, utilisation, and evaluation processes of these contractors.

3 Engineering Contractors

For engineering contractors, the Company requires them to sign a commitment letter along with the contract.

The Company implements on-site inspections of suppliers. If subcontracting, illegal subcontracting, or affiliation occurs, the supplier withdrawal mechanism will be enforced. Based on the evaluation results of contractors from the previous year, actions such as termination of contracts or issuing warning letters will be taken accordingly. In 2023, the Company issued warning letters to 32 engineering contractors with compliance risks, temporarily controlled 11, took action against 177 personnel, and terminated contracts with over 30 contractors.

Enhancing Supplier Performance

The Company collaborates with suppliers to elevate ESG performance. Through daily interactions, we impart green production principles to suppliers and aid in enhance their ESG performance. Any operational, quality, compliance, integrity, or service issues identified during the cause of supplier performance are promptly communicated to ensure timely resolution. Suppliers failing to address issues adequately or promptly receive warnings. In cases involving severe violations of laws and regulations, suppliers listed on government agency websites for serious misconduct, or those deemed unsatisfactory in annual evaluations, the Company initiates exit procedures.

Green Procurement

Kunlun Energy’ s procurement strategies are rooted in principles that balance economic advantages with environmental benefits, implementing green practices throughout the entire supply chain. The Company fosters collaborative engagement across all business sectors and focuses on continuous improvement. By establishing the "Green Procurement Management Measures", Kunlun Energy promotes green and low-carbon concepts throughout the procurement process for production, engineering projects, and operational management, which include prioritising the purchase and utilisation of energy-efficient, material-efficient, water-efficient, and environmentally friendly raw materials, products, and services. The Company integrates environmental protection and resource conservation principles across the entire chain, from design to raw material procurement, transportation, storage, use, and disposal. This approach aims to encourage collaborative innovation, coordination, green transparency, and shared practices among upstream and downstream enterprises in the supply chain, fulfilling environmental protection responsibilities and enhancing resource utilisation efficiency.

Key Requirements of the "Green Procurement Management Measures"

Procurement Criteria

Products not listed in national high-pollution or high-environmental risk catalogues.

Products or services emphasising efficiency, energy conservation, environmental protection, and low carbon characteristics.

Suppliers of products for major energy-consuming units should hold energy management system certifications.

Suppliers and products must meet standards for pollutant emissions, energy consumption, and other environmental performance indicators.

Suppliers' entire process of material production, transportation, and storage should align with the "Green Procurement Management Measures".

Procurement Practices

Enhancing digitisation during the bidding process to reduce resource consumption.

Specifying green procurement responsibilities in contracts or agreements.

Rationalising procurement practices to minimise waste.

Moreover, the "Green Procurement Management Measures" detail regulations for warehousing logistics, material disposal, information management, and other aspects to promote environmental responsibility within the Company’ s supplier network and internal material management processes.

Empowering Industrial Growth

Kunlun Energy has consistently led the charge in fostering high-quality enterprise development through technological innovation, catalysing sustainable progress across the entire industry. The Company actively collaborates with universities, enterprises, and research institutions, cultivating a dynamic ecosystem of industry-academia-research partnerships. The focus on technological innovation and research and development accelerates pivotal technological breakthroughs, scientific advancements, and their practical applications, continually bolstering the Company's technological core competitiveness. Kunlun Energy also plays a vital role in industry standardisation efforts, offering crucial technological and standardisation support for the industry's high-quality evolution.

Pioneering Technological Advancements

In 2023, Kunlun Energy reinforced top-level design, embraced an innovation-centric approach and focused on the high-quality development needs of urban gas and other businesses. The Company initiated 8 research projects in key technical areas such as urban gas project quality evaluation, hydrogen blending at natural gas terminals, and development strategies for comprehensive heating energy projects. It continued to advance 9 ongoing research projects and achieved milestones in urban gas integrity management, gas risk prevention and control, and domestication of detection technologies.

Key Technological Innovations by Kunlun Energy

Integrity management technology

The Company established a comprehensive set of integrity management system documents, crafted two knowledge graphs on integrity management, developed technology to pinpoint vulnerable units in urban gas pipelines, and laid the groundwork for an efficacy evaluation system for urban gas pipeline integrity management.

Urban gas pipeline risk management

The Company first introduced a risk factor identification list and control strategies for rural coal-to-gas conversions. Additionally, we formulated five standard drafts such as urban gas steel pipeline defect repair technology specifications, urban gas network hazard assessment guidelines, and microwave detection standards for polyethene pipe heat fusion joints.

LNG receiving station

Research efforts in low-temperature sealing detection technology and localisation led to the invention of LNG receiving station low-temperature sealing detection technology and the localisation of related products, and cutting down of maintenance costs.

Carbon emission management

Models for energy consumption, carbon emissions, and provincial benefit calculations were developed to support the Company's carbon emission management endeavours.

Case: Kunlun Energy's LNG Company Makes Innovative Technological Advancements

Throughout the current year, various subsidiaries under Kunlun Energy have been actively involved in pioneering on-site intelligent operations and automation technology research. Notably, Jingtang LNG Company has achieved fully automated loading of LNG tankers, revolutionising the process into an intelligent one-click operation. This groundbreaking advancement encompasses a range of automated tasks, from initiating the low-pressure pump and adjusting loading manifold pressure to halting the pump, effectively minimising disruptions caused by tanker loading on production and outbound transportation. By reducing the dependency on Distributed Control System (DCS) operators, this innovation has significantly bolstered the operational stability of the LNG terminal. Moreover, Jingtang Company is concurrently delving into the realm of online monitoring technology, facilitating intelligent management of critical equipment at the LNG terminal across its entire lifecycle. The approach ensures the seamless oversight of fundamental information, operational status, maintenance procedures, inspections, and repairs, guaranteeing the steadfast and efficient operation of equipment.

In a parallel endeavour, Jiangsu LNG Company has harnessed the power of intelligent operational technology to develop predictive tank inventory and warning models alongside terminal outbound volume calculation models. These innovations enable the automatic issuance of directives for ship unloading at the terminal and outbound transportation, dynamically aligning inventory levels with outbound shipments and thereby increasing production efficiency.

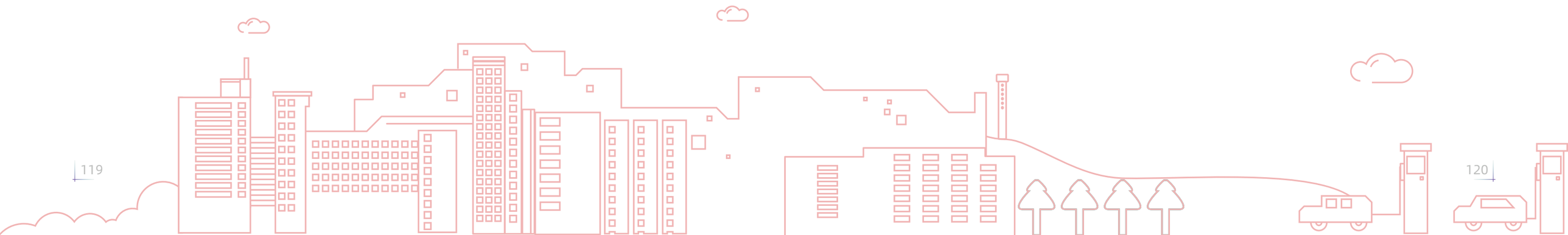
Driving Standard Revisions

In 2023, Kunlun Energy actively revised and drafted national, industry, and association standards, bridging existing gaps in liquefied natural gas equipment, safety protocols, project design, and implementation standards. By refining standard rules, the Company bolstered its influence and contributed to a more robust industry framework. Kunlun Energy also led internal standard revision projects, establishing detailed guidelines for gas engineering design, gas transmission and distribution, quality control, safety regulations, and environmental protection oversight, providing a solid base for the Company's lean management practices.

Key Performance

In 2023, Kunlun Energy participated in revising and drafting **12** national standards, **3** industry standards, and **22** association standards.

Standard Level	Number	Standard Name
National Standard	1	Design of liquefied natural gas facilities and equipment - Part 1: General requirements
	2	Sampling facilities and sampling performance tests for liquefied natural gas
	3	Safety monitoring system for the transportation of hazardous chemicals by vehicles - Part 3: Installation of onboard devices
	4	Guidelines for investment project risk assessment
	5	Construction and acceptance criteria for urban gas transmission and distribution engineering
	6	Safety management system requirements
	7	Quality requirements for liquefied natural gas for vehicles and ships (in preparation)
	8	Design and testing of liquefied natural gas unloading arms for conventional onshore LNG receiving terminals (in preparation)
National Standard	9	Technical regulations for the operation, maintenance, and emergency repair of urban gas facilities (in preparation)
	10	Electromagnetic gas emergency shut-off valve (in preparation)
	11	Design code for liquefied petroleum gas supply engineering (in preparation)
	12	Guidelines for urban gas services (in preparation)
Industry Standard	13	Self-sealing of gas pipelines (in preparation)
	14	Design, construction, and operation specifications for natural gas liquefaction plants - Part 1: Design and construction (in preparation)
	15	Design, construction, and operation specifications for natural gas liquefaction plants - Part 2: Operation (in preparation)



Case: Kunlun Energy' s Engagement in Developing International Standards for Urban Gas IoT Systems

In 2023, Kunlun Energy drafted the international standard "Application of Urban Gas Pipeline IoT (Internet of Things) Systems". In November, the Company representatives attended the 14th Plenary of ISO/IEC JTC1 SC41 in South Korea, where the Working Group 5 of ISO/IEC JTC1 SC41 reviewed and approved the draft. Urban gas IoT enables real-time monitoring of urban gas system operations through data collection and visualisation of pipeline and equipment status. Leveraging its expertise in urban gas digitisation, Kunlun Energy actively contributes to international standardisation efforts, enhancing the operability and consistency of urban gas IoT to advance the industry's overall digitalisation.

The draft from the WG5 working group underwent review, marking the project' s progression into the committee drafting phase.

Case: Contribution to the Development of a New Standard for Electromagnetic Gas Emergency Shut-off Valves

In response to the State Council' s heightened focus on gas safety, Kunlun Energy assumed a proactive role in the safety leadership of gas enterprises. They participated in the formulation of the updated national standard for "Electromagnetic Gas Emergency Shut-off Valve", which is currently under review. This standard provides detailed specifications for the appearance, performance, and durability of electromagnetic gas emergency shut-off valves, aiming to mitigate safety risks in gas systems and ensure user safety.

Industry Engagement and Collaboration

Kunlun Energy closely monitors industry trends and actively engages in industry seminars and standardisation activities to drive sustainable development awareness among industry partners, elevating the industry to new heights.

Case: Innovative Technological Advancements in Urban Gas Distribution System IoT Research by Kunlun Energy

In 2023, Kunlun Energy conducted in-depth research on the application architecture of urban gas distribution system IoT. They analysed the current landscape, both domestically and internationally, technological advancements, domestic standard support, and IoT reference system architecture. Presenting "Analysis of the Application Architecture of Urban Gas Distribution System IoT" at the China Urban Gas Association, Kunlun Energy shared research findings with industry peers, facilitating the transformation and modernisation of the natural gas industry.

Case: Kunlun Energy's Support for the CGA Group' s Initiatives

As a key member of the China Gas Association (CGA) Standards Committee, Kunlun Energy actively contributes to the development of group standards within CGA. In 2023, the Standards Committee spearheaded the creation of 26 standards, enhancing industry standardisation levels. At this year' s CGA Standards Committee Annual Meeting, Kunlun Energy facilitated a seminar on gas safety operations and intelligent construction, fostering a platform for industry collaboration and knowledge exchange.

CGA Group Standard Release Conference in 2023

Value Creation and Enhancing Community' s Well-being

Kunlun Energy holds a philosophy of mutual benefit, steadfastly embracing a customer-centric approach, collaborative development and shares accountability to forge a win-win ecosystem that enriches lives. The Company has built a market-responsive quality management system, and a customer service framework characterized by layered responsiveness, standardized protocols, and centralized operations, aiming to fulfil and surpass customer expectations through premium products and services. Concurrently, the Company is dedicated to enhancing community welfare, diligently upholding its corporate citizenship duties, fostering national progress, and contributing to green energy initiatives.

Sustainable issues addressed in this chapter:

- Product and service quality
- Customer health and safety
- Reliable clean energy supply
- Social welfare and local development
- Support for regional development

Rigorous Quality Management

Kunlun Energy is dedicated to supplying customers with superior, safe, and dependable products and services. We are committed to the ongoing enhancement of our Quality, Health, Safety, and Environmental (QHSE) management systems, guided by principles centred on "customer focus, leadership, integrated business and quality management, comprehensive engagement, systematic planning, digital quality control and continuous improvement". Through proactive risk mitigation, we aim to elevate our quality management standards, thereby delivering quality-assured products and services to our community, customers, and businesses.

Enhancing the Quality Management System

Kunlun Energy rigorously complies with the "Product Quality Law of the People's Republic of China" and other relevant quality management legislations, formulating policies such as "Quality Management Measures" and "Quality Incident Management Measures" to fortify our quality control framework. In 2023, building upon our existing policy and structural foundation, we developed the "Quality Enhancement Plan" and released directives for "Further Strengthening Quality Control Efforts", reinforcing our commitment to systematic and regulated quality management processes.

Internally, we strictly adhere to the Quality Management System (GB/T 19001-2016) standards, with a focus on risk management to develop, execute, maintain, and refine our QHSE management system. The QHSE committee, our highest governing body, oversees the coordination of quality, health, safety, and environmental initiatives.

QHSE Strategic Goals	Pursue zero harm, zero pollution, zero accidents, and zero quality defects, while reducing energy consumption, with the goal of attaining top-tier domestic and internationally recognized standards in quality, health, safety, and environmental management within the industry
QHSE Philosophy	People Focus, Quality Foremost,Safety First,Environmental Protection Priority
QHSE Guidelines	Honesty and Integrity, Striving for Excellence, Full Compliance with Responsibilities, Continuous Improvement

Kunlun Energy' s QHSE Strategic Objectives, Philosophy, and Guidelines

Kunlun Energy prioritizes the standardization of quality management. In 2023, we drafted the "Quality Management Manual", which lays out standardized procedures for managing quality across products, projects, materials, and services, tailored to urban gas, pipeline branches, LNG, LPG, and ancillary services. This document organises 18 key items to facilitate ongoing improvements and standardize our internal quality management practices.

Furthermore, the Company actively engages in the establishment and accreditation of third-party quality management systems. We have attained ISO 9001 Quality Management System certification, encompassing the management activities of our subsidiary companies across a spectrum of operations, including urban gas transmission and distribution, natural gas branch pipeline distribution, LNG/CNG production and terminal sales, LNG processing, storage and transportation, LPG storage and sales, natural gas power generation, and distributed energy equipment operations.

Kunlun Energy Quality Management System Certification

Key Performance

In 2023, Kunlun Energy reported **0** quality-related incidents.

Strengthening Quality Management

Kunlun Energy adheres to a quality policy of "honesty, integrity, and striving for excellence", leveraging a scientific management framework and advanced technologies to follow established procedures, enhance process oversight, standardize operational practices, with an aim for zero quality defects, and to deliver top-tier products and services to our customers.

Quality Risk Management

Kunlun Energy places a high priority on identifying, evaluating, and mitigating quality risks. In 2023, we undertook a comprehensive assessment of quality risks across our operations and identified 7 key areas for targeted control and over 1,900 quality risk items before we established a preliminary quality risk database. We also implemented corrective and preventative measures for identified risks, aiming to address potential quality issues at their source.

Quality Monitoring and Inspection

Aligned with our annual quality management objectives, Kunlun Energy conducts regular audits and self-assessments to verify compliance with national standards, such as "Natural Gas" (GB 17820-2018) and "Urban Gas Design Code" (GB 50028-2006). We instituted a robust self-inspection protocol and developed a specialized quality supervision checklist that integrates 40 classes and 133 specific items for general application, product, project, material, and service quality into our QHSE audit standards. We also introduced a bi-weekly quality reporting mechanism uponself-inspection to elevate our quality management performance.

Key Performance

In 2023, Kunlun Energy performed **3,248** internal and external gas quality checks, achieving a **100%** compliance rate.

Quality Management Capability Building

Kunlun Energy encourages on-site teams to develop quality infrastructure for measurement, standardization, certification, and inspection functions. In 2023, the Company added 22 online analysis facilities and set up 5 laboratories certified by China National Accreditation Service for Conformity Assessment (CNAS). Through the real-time calorific value testing by the online analysis facilities, we meet the downstream companies' demand for stable gas calorific value, thus supporting their scheduled production.

Case: Jingtang LNG Company Laboratory Accredited by CNAS

On September 27, 2023, the laboratory of Jingtang LNG Company was officially certified by the China National Accreditation Service for Conformity Assessment (CNAS). This certification not only designates the laboratory as a nationally recognized third-party testing institution with international standards for management, testing capabilities, and facilities but also enhances the Company's metering capabilities for international trade. Moving forward, Kunlun Energy intends to utilize the advanced testing capabilities of the Jingtang LNG Company laboratory to deliver superior testing services for the international natural gas trade, thereby providing robust support for the Company's commitment to high-quality growth.


China National Accreditation Service for Conformity Assessm
LABORATORY ACCREDITATION CERTIFICATE
(Registration No. CNAS L19136)
PetroChina Jingtang LNG Co., Ltd. Laboratory

Jingtang LNG Company's laboratory received CNAS Laboratory Accreditation Certificate

Enriching Quality Culture

Kunlun Energy is committed to nurturing a deep sense of quality awareness among its employees, fostering an environment that emphasizes the importance of quality. In 2023, the Company rolled out a series of activities to enrich its quality culture, including targeted training sessions and a month-long quality awareness campaign, engaging over 8,100 participants. To further motivate employees to participate in quality-centric activities, the Company introduced a pilot program for registering quality management teams and documenting projects. With the external support and Q&A sessions from experts, 28 subsidiaries and branches registered 201 quality management teams and 97 quality-reliable groups.

Quality Awareness Campaign

Key Performance

In 2023, more than **8,100** employees took part in quality awareness activities.

High-Quality Customer Service

Kunlun Energy insists on "starting with customer needs, aiming for customer satisfaction, and exceeding customer expectations" by delivering convenient and safe gas services. Through multiple communication channels, we actively collect customer feedback and make improvements to meet diverse customer needs.

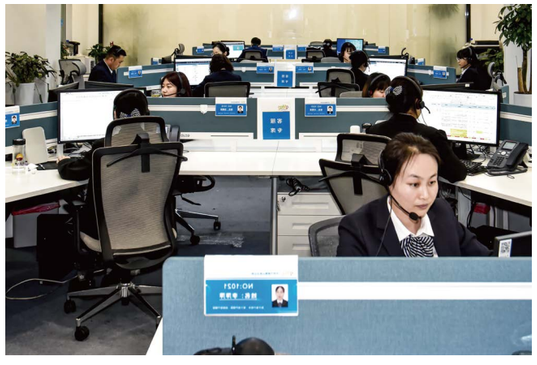
Customer Feedback and Response

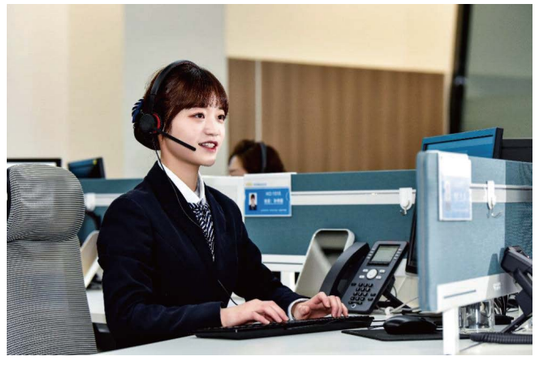
Kunlun Energy is dedicated to providing high-level services to customers. Under the framework of customer service quality management system, we developed the "Natural Gas Customer Standardized Service Procedure Guide V2.0" that specifies processes of 51 customer services and 16 key performance indicators in detail. Based on the manual, we conducted training for relevant personnel, laying a solid foundation for standardized and unified customer service quality management. In 2024, we will establish a monthly customer service evaluation mechanism, using indicators such as on-time completion rate, response rate, and customer satisfaction rate to improve our management and service quality.

Kunlun Energy offers round-the-clock customer service and enhanced its mechanism for managing customer complaints. Upon receipt of a complaint, our customer service team evaluates its details and swiftly forwards valid concerns to the appropriate departments for resolution. Following the resolution, we follow up with customers to confirm that their issues have been satisfactorily addressed, thereby achieving a closed-loop management of customer complaints. In 2023, we handled 856 complaints, successfully resolving them within an average closure time of one working day, excluding instances of unanswered follow-up calls.

Customer Seivice Progress of Kunlun Energy

Indicators	Unit	2021	2022	2023
Total Number of Customers	10,000 households	1,384.6	1,471.7	1,560.4
Customer Satisfaction	%	99	99	99.5
Number of Complaints Received About Products and Services	/	2,286	2,157	856
Resolution Rate of Received Complaints	%	100	100	100





the Customer Service Team of Shandong Subsidiaries were Answering Customers' Calls

Protection of Customer Rights

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

Responsible Marketing

Kunlun Energy rigorously complies with laws and regulations such as 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". We disclose information of products and services within our business domain, including their characteristics, prices, and quality, steadfastly preventing misleading, ambiguous product details, and exaggerated promises.

Customer Safety Protection

At Kunlun Energy, user safety is paramount, and we implement all necessary measures to ensure the safety and dependability of gas supply. Adhering strictly to the "Gas Service Guidelines" (GB/T 28885) for user safety inspection management, we formulated the "Kunlun Energy User Safety Inspection Management Measures", outlining protocols for daily safety inspections, company duties, maintenance, follow-up visits, and public awareness. In 2023, we revised the safety inspection chapter of the "Pipeline Gas Service Specifications", elaborating on safety inspection standards and criteria.

Key Performance

- Our safety inspection services spanned all **29** provinces, autonomous regions, and municipalities nationwide.
- The Company conducted safety inspections for **10,837,000** households, achieving a home inspection rate of **94%** and a **100%** safety inspection rate for industrial and commercial service users.

Moreover, we actively promote the concept and knowledge of safe gas usage, standardizing customer gas behavior. Alongside distributing safety brochures during home visits, we utilize the "Kunlun Huixiang+" WeChat Account to deliver weekly gas safety reminders, educating customers on daily gas usage practices.

The "Kunlun Huixiang+" WeChat Account offers a gas safety guide for users.

Case: Youth Volunteers from Daqing Branch Held Safety Knowledge Training at Local Education Centre

On April 20, 2023, youth volunteers from Daqing Branch visited the local Early Childhood Education Centre, providing gas safety training for 91 safety officers and canteen staff across the centre and its 15 associated public kindergartens. With an aim to enhance gas safety awareness, this training significantly improved the staff' s emergency response capabilities in handling gas-related incidents, ensuring robust safety measures for early childhood education facilities.

Staff from the Early Childhood Education Centre and local kindergartens were studying gas safety knowledge during the training.

Enhancing Customer Experience

Kunlun Energy places utmost importance on its customers, valuing their experience highly. Through optimization of service processes and the provision of convenient products and services, we strive to elevate customer satisfaction.

Streamlining Service Processes

At Kunlun Energy, we are dedicated to delivering more convenient and professional services to our customers. We enhance end-to-end customer services to cater to the diverse needs across different categories, regions, and time frames. For new customers, we offer personalized "one-on-one service, full-process assistance", ensuring timely and proactive on-site support to streamline the gas installation process, and save customer efforts. We have expedited the development of a customer service information platform while refining the online natural gas retail system "A10 System". The A10 system contains 9 major functional modules, spanning from sales management, intelligent metering, card management, on-site work to customer service, internet services, statistics, system management and interface, thereby enhancing operational efficiency. In 2023, the Company initiated a pilot project in Shandong Province to integrate the A10 system with the 956100 hotline system, facilitating seamless work order transfer and enabling service personnel to manage tasks from both systems via a single app, thus significantly enhancing work efficiency. This initiative will be fully rolled out in 2024. Furthermore, we actively expand internet payment channels, introducing online gas recharge services on WeChat official accounts and Alipay mini-programs to further enrich the customer experience.

Case: Hunan Changde Branch Launched AI Follow-up of Mobile Cloud Service

In 2023, Customer Service Centre of Kunlun Energy' s Changde Branch collaborated with Changde Mobile Company to introduce "Mobile Cloud Business". This initiative incorporates features such as "AI outbound calls, WeChat Moments cloud display, 5G precise outreach, and cloud MAS", marking a significant stride in seamlessly integrating traditional business with digital transformation. Consequently, service quality has been notably enhanced, leading to increased user satisfaction.

Key Performance

By 2023, the A10 system, our online natural gas retail platform, extended its coverage to **14.375** million customers.

Customer Satisfaction Survey and Improvement

In 2023, we conducted a comprehensive customer satisfaction survey encompassing 23,000 users, including residential, commercial, and opinion users, as well as those from project company business halls, government 12345 platforms, and other gas competition enterprises. Employing various methodologies such as telephone interviews, online surveys, on-site interviews, and mystery shopper visits, we sought to collect user opinions from multiple perspectives. The results revealed an increase in customer satisfaction, reaching 99.5%, up by 0.5% from the previous year. Based on the survey findings, we undertook in-depth analysis and initiated measures to further enhance the quality of customer service, fulfilling our commitment to service excellence.

Key Performance

In 2023, the Company achieved a customer satisfaction rate of **99.5%**, reflecting a **0.5%** increase compared to the previous year.

Empowering Regional Dynamics

In addition to delivering quality services and ensuring stable energy supply, Kunlun Energy remains steadfast in its commitment to community development. Over the years, we have seamlessly integrated our corporate development into the sustainable growth of local communities, actively fulfilling our social responsibilities across operations and contributing positively to society.

Public Welfare and Charity

Adhering strictly to the "Law of the People' s Republic of China on Donations for Public Welfare Undertakings" and internal guidelines such as the "External Donation Management Measures", Kunlun Energy holds public welfare activities in alignment with our corporate ethos of "dedicating energy, creating harmony". Actively engaging in volunteer service activities, we encourage employee participation to foster a culture of philanthropy within the Company. Moreover, we fulfill our corporate responsibilities by providing support during times of disasters and emergencies. For instance, in December 2023, following an earthquake in Jishishan County, Linxia Prefecture, Gansu Province, Kunlun Energy immediately mobilized resources to support relief efforts and resource distribution, ensuring the safety and uninterrupted gas supply for affected residents.

Key Performance

- The Company offered **817** sessions of social welfare services, with **17,254** participants, totaling **2,789** service hours.
- The Company donated a total of **1.49** million yuan for social welfare, benefiting **7,095** individuals.

Case: Shaanxi Subsidiary's Charity Activity for Dongzhou's Children Village

In response to a national initiative, on March 18, 2023, Shaanxi Subsidiary held a charity event for Dongzhou's Children Village to assist children in challenging circumstances. To address the winter heating needs of these children, the Shaanxi Subsidiary has already completed the construction of a dedicated natural gas pipeline for Dongzhou Children's Village by 2022. Additionally, the Subsidiary provided essential living amenities such as gas stoves, cupboards, and vegetable washing facilities. The donated materials and cash, totaling more than 60,000 yuan, will be utilized to promote the healthy growth and holistic development of local children.

Shaanxi Subsidiary Held a Charity Event for Dongzhou's Children Village

Environmental Public Welfare Initiatives

Kunlun Energy actively engages in a range of public welfare initiatives, including voluntary tree planting and marine ecological compensation, to drive sustainable impact. The Company aims to foster harmonious coexistence between humanity and nature, alongside synchronized progress in the realms of economy and environment.

In 2023, Kunlun Energy organized the "Planting Trees for Carbon Neutrality" campaign, with an employee participation rate of over 80%. The campaign included a donation of 550,000 CNY, on-site planting of 13,370 trees, and an additional 86,176 trees planted through alternative funding channels. The Company has intensified efforts to enhance green spaces within its factory premises, crafting specialized blueprints aimed at achieving complete afforestation of all available land by 2026. These initiatives significantly contribute to the realisation of an aesthetically pleasing and ecologically sound urban landscape.

Progress of greening of Kunlun Energy in 2023

Indicators	Unit	2022	2023
Afforestation rate in factory area	%	14.7	22
Number of trees planted in factory area	/	97,919	119,559

Case: Kunlun Energy Jiangsu LNG Receiving Station's Marine Ecological Compensation and Release Activities

Kunlun Energy's Jiangsu LNG receiving station routinely organizes marine ecological compensation and release events at the Yangguang Island heavy cargo terminal. A diverse array of fry, including yellow croaker, black porgy, jellyfish, and spot prawns, are released into the sea to augment fishery resources in the South Yellow Sea and revitalize the marine ecosystem. Since 2010, the Jiangsu LNG Company has been steadfast in its participation, investing over 5 million yuan in fry procurement. For 13 years, more than 100 million units of various fry have been released, effectively safeguarding the ecological balance of the surrounding marine habitats.

Employees of Kunlun Energy's Jiangsu LNG Receiving Station were Releasing Fry into the Sea

Rural Revitalization and Poverty Alleviation Efforts

Aligned with the national strategy for rural revitalization, Kunlun Energy leverages its operational strengths to deliver accessible gas services to rural regions through the "Gas for Villages" initiative. This initiative not only enhances the local energy structure but also elevates the living standards of rural populations. Throughout 2023, the Company supported regions such as Xinjiang, Tibet, Qinghai, Sichuan, and Jiangxi through collaborative programs, including industrial assistance, recruitment, charities, and infrastructural development, all aimed at bolstering economic growth and social progress.

The Company leverages the "Kunlun Huixiang+" platform while empowering poverty alleviation through consumption initiatives. Subsidiaries and branches, especially those in Hunan, Hainan, Ningxia, Zhejiang, and Hebei provinces, proactively engage with impoverished counties and cities within their jurisdiction, providing assistance in the qualification review for local products. Consumers nationwide could shop online through the "Kunlun Hui Xiang+" WeChat official account and the mini-program, and buy local specialities from 21 subsidiaries and branch stores.

Key Performance

- Total consumption assistance: **13.7314** million yuan
- Contribution towards rural revitalization and construction: **1.37** million yuan

Case: Kunlun Energy Changde Branch's Efforts for Rural Revitalization

Situated in the western Wuling district of Changde, Hunan, Danzhou Township has long grappled with economic challenges due to its remote location, and residents have to face a modest standard of living. In 2023, to address the inconveniences and safety risks posed by the prolonged use of liquefied gas cylinders, Changde Branch swiftly responded to local needs, expedited the development of local gas infrastructure, and conducted thorough terrain surveys before laying a 6-kilometre natural gas pipeline. To date, the Branch has provided gas services to 345 households in the Jiajie community and 270 households in the Nanmu Village community of Danzhou Township, ensuring natural gas supply and significantly improving the quality of life for locals.

One Employee of Kunlun Energy Changde Branch was Answering Gas Service Purchase Questions For Residents

Future Outlook

In 2024, the supply and demand imbalance in the global energy market is anticipated to be alleviated to some extent. However, the profound reshaping of the energy landscape will still need to navigate a delicate balance among intertwined complexities such as emission reduction and safety, mitigation and adaptation, as well as efficiency and equity, amidst factors like geopolitical tensions, climate change, and currency fluctuations. In response to the intricate scenario, Kunlun Energy has revised its ESG objectives across five key sectors: green low-carbon development, health and safety, talent growth, product responsibility, and integrity and compliance governance. Furthermore, the Company refines its corporate governance mechanisms, including compliance, risk management, sustainable development, and stakeholder engagement, so as to fortify its resilience and competitiveness in an uncertain macro environment, driving sustainable, high-quality growth.

Kunlun Energy prioritises preparedness and bolsters risk prevention and control, while upholding a steadfast commitment to safety.

The Company steadfastly upholds the ethos of safe development, and makes risk management as its focal point in the pursuit of "Four Zero and One Decress" under the framework of the enhanced QHSE management system. The Company advocates a management philosophy centred on "people orientation, quality excellence, safety as paramount, and environmental priority", and sets up the "Quality, Health, Safety and Environment (QHSE) Committee" to refine risk control mechanisms and address major risks at their roots. Meanwhile, the Company leads a campaign to improve urban gas safety, steadily advancing towards modernising its safety production and governance capabilities.

Kunlun Energy prioritises green development and energy transformation, and sets emission reduction targets.

As a pioneer in green transformation, the Company aligns with the national "dual carbon" goals by formulating the "Kunlun Energy Carbon Peak and Carbon Neutrality Action Plan (2024 Edition)". We have established specific phased emission reduction targets and the ultimate goal of achieving carbon neutrality by 2050. To put these goals into practice, we strictly adhere to the principle of "prioritising emission reduction and green energy, with offsets as a supplementary measure", strategically mapping out green low-carbon transformation initiatives. We concentrate on enhancing energy efficiency and technological upgrades, transitioning to a low-carbon energy mix, and magnifying its green corporate influence on the journey of being a resource-efficient and eco-friendly model enterprise, thereby achieving sustainable business growth in an environmentally conscious manner.

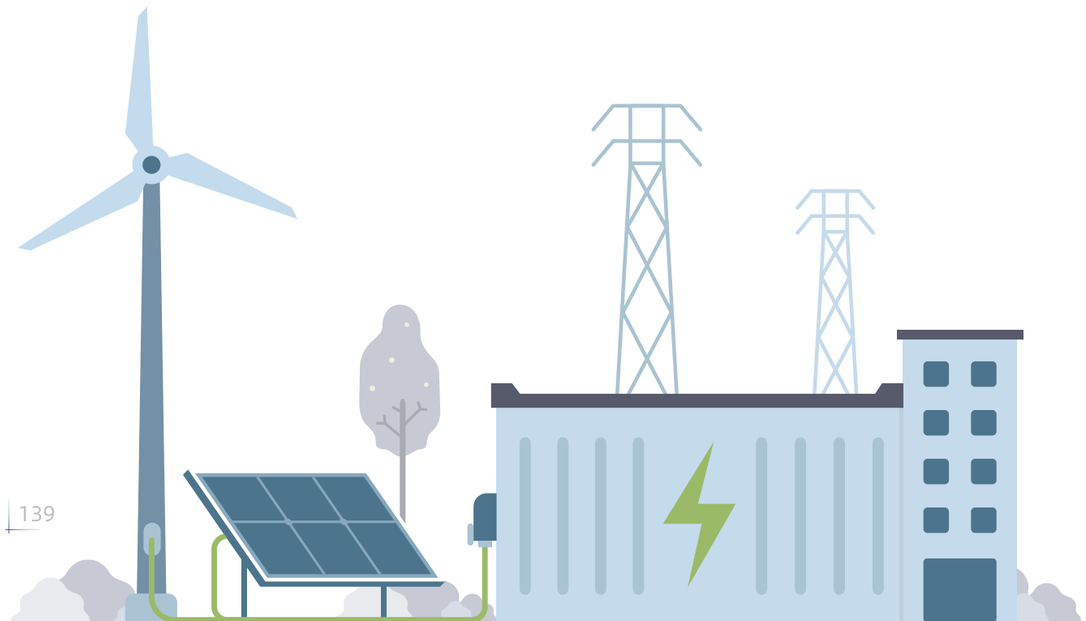
Kunlun Energy insists on transparent governance and integrity via top design and regulated operation.

We remain resolute in modernising our governance system and capabilities to form a better corporate governance framework with optimised compensation package, compliance management, internal control, and risk management, safeguarding the vision of building a world-class energy enterprise. We uphold business ethics and improve our integrity management by means of prevention, control, and oversight in critical areas such as anti-corruption, anti-monopoly, and transparent procurement. Regular integrity training and awareness campaigns help us to foster a culture of integrity where corruption is neither tolerated, possible, nor desired. Bearing the principles of integrity, fairness, collaboration, and mutual benefit in mind, we actively participate in market activities, supplying clean, dependable, and sustainable energy to communities.

Kunlun Energy proudly embraces its origins and remains steadfast in upholding the principlesof mutual benefit and long-term value creation.

We prioritise collaboration with all stakeholders and willingly share our corporate achievements. By continuously enhancing our quality management system, we are dedicated to delivering products and services that are of the highest quality, safety, and reliability to our customers, businesses, and communities. We embody a service philosophy centred around "starting with customer needs, aiming for customer satisfaction, and exceeding customer expectations" in response to the evolving and diverse demands of our customers. In addition to pursuing corporate growth, we actively encourage our employees to volunteer work within communities. Leveraging our business strengths, we support rural revitalisation efforts and initiatives aimed at enhancing community environmental welfare. Through tangible actions, we empower local communities and contribute to their sustainable development.

In this era of accelerated energy transformation, Kunlun Energy remains resolute in its commitment to expedite the transition to clean energy and contribute to the achievement of the "dual carbon" goals. By integrating ESG principles and emphasising high-quality development in our business strategy and daily operations, we have bolstered our ability to create value for the economy, society, and environment. Through collaboration with all stakeholders, we strive to explore the most effective emission reduction practices, actively participate in building a sustainable China, and enhance the quality of life for all.



Expert Comments

Green energy stands as the cornerstone and defining feature of Kunlun Energy' s business. The Company' s sustainable solutions intertwine with societal advancement and individual well-being, capturing the keen attention of stakeholders. This report reflects Kunlun Energy' s commitment to Environmental, Social, and Governance (ESG) principles across diverse fields of its operations, spanning "green innovation, energy provision, catalysing customer expansion, and enhancing societal well-being". It delves into the Company' s endeavours, including reliable gas supply, eco-friendly production, energy efficiency, emissions mitigation, digital enhancements, organisational capacity building, risk identification and management, employee welfare, community well-being, and industry synergies, and highlights the Company' s responsible manner and distinctive "Responsibilities for Three Supplier Types" framework throughout the full life-cycle and along the value chains of its operation and collaboration. The Report, underpinned by a transparent governance structure and pragmatic mechanisms, has a coherent structure of chapters and detailed content. Major issues are identified through stakeholder responsiveness, industry analysis, and operational implications. A systematic process of issue evaluation, prioritisation, and action planning has yielded tangible objectives and a roadmap for ongoing enhancement throughout 2023 and 2024. Moreover, the Company has developed a suite of quantifiable, visualizable, and trackable ESG metrics, facilitating dynamic management of ESG concerns and the monitoring of key performance indicators. These measures ensure the diligent pursuit and realisation of ESG objectives, underpinning Kunlun Energy' s commitment to sustainable progress and responsible business practices.

It is recommended that Kunlun Energy enhance the awareness and development of risk management among all employees in risk identification and control. It should strengthen systematic identification and control of non-traditional risks and non-financial impacts based on the risks related to the Company' s strategy, production and operation objectives, and key tasks, as well as macro policies, regulatory trends, and market environment. In terms of information accessibility, the Company should fully utilise information disclosure as a tool to maintain closer and more regular communication with stakeholders, establishing deeper social trust and an excellent corporate brand in the process.

Kunlun Energy' s ESG practices are gradually entering a substantial stage of sustainable business, actively integrating the Company' s core values, main areas of focus, key skills, and comprehensive resources into the process of designing and implementing solutions for significant social, environmental, and economic issues. By focusing on social pain points, market demand, industry ecology, and application scenarios, the Company designs and implements business models and operations that integrate corporate and social value, becoming the internal driving force for the Company' s growth, and building resilience and sustainability while bringing benefits to society and the environment. This is a new type of sustainable business model that paves the way for Kunlun Energy to become a world-class comprehensive green energy supplier.

Dr. Lü Jianzhong

Deputy Director of the Sustainable Development Committee of the China Society of Management Science

Kunlun Energy Limited (00135.HK) 2023 ESG Report identifies 27 sustainability issues around the themes of green low-carbon development, health and safety, talent growth, product responsibility, and integrity and compliant governance. The Company made a matrix of significant issues based on the dimensions of "importance to Kunlun Energy" and "importance to stakeholders", with 12 of them identified as highly important. The 2023 ESG report of Kunlun Energy meets the principles of importance, quantification, balance, and consistency of the Hong Kong Stock Exchange. Based on MSCI' s ESG rating model and quantitative analysis, Kunlun Energy' s 2023 ESG performance ranks 5th out of 64 in the gas industry. Among the significant issues, ESG governance, employee engagement and diversity, business ethics, and labour management are ahead of the industry average. Kunlun Energy has been publishing ESG reports for many years and has established a sound ESG governance structure, accumulating management experience and related data. It is recommended to further benchmark international standards and industry benchmarks, improve certain indicators that are below or at the industry average (in the 2023 significant issues, Kunlun Energy scored 40.93/100 in corporate governance information, which is at the industry average), and improve its ESG competitiveness and leadership in the industry in all respects.

Zhu Dajian

Specially engaged Professor at Tongji University and Director of the Institute of Sustainable Development and Management

After carefully reading the full report, I have been pondering a question: as a corporate citizen, what does Kunlun Energy bring to society?

In the functioning of society, energy is the most direct and irreplaceable force.

Normal production and daily life, the tranquillity found in our meals and seasons—all of these rely on energy supply. It is precisely because of the significant issues arising from energy utilisation in industrial society development that global energy efficiency and carbon reduction goals have emerged. In this stage of challenge and opportunity, a traditional energy company must uphold its role in societal production and life while aligning with the dual carbon goals of the current development period - achieving CO_2 emissions peak before 2030 and carbon neutrality before 2060. I have always advocated that in the journey towards sustainable development, reports and ESG regulations are merely tools. It is when these tools promote sustainable development ideologies among people and integrate these ideologies into daily actions that the United Nations' 17 Sustainable Development Goals have hope of realisation. These goals represent principles that need to be practiced in the long term for individuals to live with dignity on this beautiful planet.

Within this report, we witness various sustainable development practices undertaken by an energy company in its transitional phase. It is hoped that Kunlun Energy can become a typical case and exemplary enterprise of sustainable development, offering society more experiences in sustainable development practices.

The existence of a company allows our world to become better. I believe this is what should be advocated for - a benevolent corporate citizen.

Yu Jian

Executive Director of the First Financial Research Institute

We are pleased to witness Kunlun Energy' s release of its 2023 Environmental, Social, and Governance (ESG) report, which reflects the Company' s commitment to initiatives and actions promoting sustainable development. The past year has been a significant one for China' s sustainable development. During his visit to Heilongjiang in September, President Xi Jinping highlighted the importance of integrating technological innovation resources to lead the development of strategic emerging industries and future industries, accelerating the formation of new quality productive forces.

As a leading central enterprise in the domestic energy sector, Kunlun Energy actively leverages its strengths to promote the country' s low-carbon transformation and the process of economic sustainable development. The Company' s 2023 ESG report adheres to both domestic and international mainstream ESG disclosure guidelines, providing comprehensive and robust content and data that fully meet investors' transparency needs regarding climate change, corporate governance, and employee management issues.

The report indicates that Kunlun Energy exceeded its annual greenhouse gas emissions target for 2023, steadily progressing towards the Company' s medium- to long-term goals of peaking carbon dioxide emissions by 2030 and achieving carbon neutrality by 2050. The Company has closely integrated clean energy planning and energy efficiency improvement practices into its core business processes of natural gas exploration, processing, storage, transportation and sales, emphasizing the concept of "green growth" in its operations.

Furthermore, Kunlun Energy is dedicated to strengthening its internal management system, with well-established policies and processes for board governance, compensation incentives, internal control, and risk management. In response to the central government' s call to deepen the reform of state-owned enterprises and improve the quality of listed companies, the Company considers ESG factors in the performance evaluation of directors and supervisors, and implements policies that take diversity into account in board member appointments, showcasing Kunlun Energy' s responsibility and commitment as a leading enterprise.

Jason Tu

CEO & Co-Founder of MioTech

Expert for Caixin Insight's China ESG 30 Forum

Member of the ESG Committee of China Association for Public Companies

Sustainability Performance

Economic Performance

Indicator Category	Indicators	Unit	2021	2022	2023
Economic Performance	Sales revenue	RMB100 million	1,385.5	1,719.4	1,773.5
	Total assets	RMB100 million	1,325.8	1,388.9	1,435.2
	Sales volume of natural gas	100 million cubic metres	420.0	449.9	492.8
	Annual sales volume of LPG	10,000 tonnes	598.6	561.6	576.8
	Number of users	10,000 households	1,384.6	1,471.3	1,560.4

Environmental Performances

Indicator Category	Indicators	Unit	2021	2022	2023
Emissions	Emissions of SO_2	Tonne	40.8	18.2	20.0
	Emissions of NOx	Tonne	980	452	400
	Amount of recycled associated gas in oil field	100 million cubic metres	2.10	3.47	4.59
	Discharged amount of industrial wastewater	10,000 tonnes	35	35	22
	Recycled amount of industrial wastewater	10,000 tonnes	7.0	6.0	6.8
	Discharged amount of domestic wastewater	10,000 tonnes	81	84	84
	Recycled amount of domestic wastewater	10,000 tonnes	1.6	1.9	1.9
	Non-hazardous solid waste discharge - production	Tonne	10	25	70
	Non-hazardous solid waste intensity - production	Tonne/100 million cubic metres	0.02	0.06	0.14
	Non-hazardous solid waste discharge - construction	Tonne	11,481	29,126	7,382
	Non-hazardous solid waste intensity - construction	Tonne/100 million cubic metres	27.34	64.74	14.98
	Hazardous solid waste discharge	Tonne	379	454	693
	Hazardous solid waste discharge intensity	Tonne/100 million cubic metres	0.90	1.01	1.41
Climate Change	Direct GHG emissions (Scope 1)	Tonne CO_2 -e	480,112	460,708	373,839
	Indirect GHG emissions (Scope 2)	Tonne CO_2 -e	987,566	1,096,106	1,094,381
	Methane emissions	Tonne	8,578	7,091	7,150
	Reduced BOG emissions by optimising process measures and process control	Tonne	5.5	6.0	6.3
	Total GHG emissions	Tonne CO_2 -e	1,467,679	1,556,814	1,618,370
	GHG emissions intensity	Tonne CO_2 -e/10,000 cubic metres	0.349	0.346	0.328
	Greenery coverage percentage in plants	%	14.4	14.7	22
	Number of trees planted in plants	/	92,013	97,919	119,559
Resource Use	Total amount of water consumption	10,000 tonnes	480.5	481.5	501.0
	Water consumption intensity	Tonne/RMB10,000 of added value	2.35	2.03	2.03
	Total amount of energy conservation	10,000 tonnes of standard coal	0.25	0.23	0.24
	Total value of energy conservation	RMB10,000	859.85	955.10	960.80
	Total amount of water conservation	10,000 tonnes	0.90	0.80	0.80
	Total value of water conservation	RMB10,000	1.94	2.20	2.20
	Total energy consumption	MWh	2,609,795.62	2,832,199.58	2,889,323.85
	Energy consumption intensity	MWh/RMB10,000 of added value	0.62	0.63	0.59

Indicator Category	Indicators	Unit	2021	2022	2023
Energy Use	Gasoline consumption	Tonne	3,916	3,753	4,223
	Diesel consumption	Tonne	495	498	875
	Natural gas consumption	10,000 cubic metres	9,458	10,167	11,378
	Liquefied petroleum gas consumption	Tonne	148	112	82
	Total direct energy consumption	MWh	1,079,495.78	1,153,658.64	1,186,925.58
	Direct energy consumption intensity	MWh//10,000 cubic metres	0.26	0.26	0.24
	Purchased electricity	MWh	1,530,299.84	167,666.80	1,689,893.58
	Purchased thermal energy	MWh	/	1,872.95	12,504.68
	Total indirect energy consumption	MWh	1,530,299.84	1,678,540.95	1,702,398.26
	Total energy consumption	MWh//10,000 cubic metres	0.36	0.37	0.35

Social Performances

Indicator Category	Indicators	Unit	2021	2022	2023
Anti -corruption	Number of concluded legal cases regarding corrupt practices brought against the Company during the reporting period	Case	0	0	0
	Number of concluded legal cases regarding corrupt practices brought against the Company' s employees during the reporting period	Case	0	0	0
	Coverage of anti-corruption training	%	100	100	100
	Number of sessions for employees participating in anti-corruption training	/	/	609	6

Indicator Category	Indicators	Unit	2021	2022	2023
Production Safety	Lost Time Injury Rate (LTIR)	/	/	/	0.0396
	Total Recordable Injury Rate (TRIR)	/	/	/	0.0659

Indicator Category	Indicators	Unit	2021	2022	2023
Production Safety	Number of work-related fatalities	/	0	0	0
	Number of lost days due to work injuries during this reporting period	Day	287	48	42
	Total Lost Worktime Rate (TLWR) due to work injuries during the Reporting Period	/	29.9	5.1	4.4
	Number of general Class A accidents (or above)	/	0	0	0
	Safety promotion information desks set up	/	746	882	907
	Accident case education	/	1,637	1,754	2,036
	Participates in watching warning videos	Man-time	26,486	30,377	45,035
	Press releases	Piece	301	1,314	2,310
	Safety skills competition	Session	192	59	196
	Safety knowledge lectures	Session	1,821	455	1,623
	Number of employees participated in safety training	Man-time	138,110	157,857	162,107
	Total hours of safety-related training	Hour	92,259	88,518	92,315
	Emergency drills held by the Company	/	1,018	20,288	14,000
	Participates in the emergency drills	Man-time	11,765	146,680	84,000
Product Quality	Participates in the emergency drills	%	>99	>99	>99
	Length of pipeline with internal inspection conducted	Kilometer	806	886	652
	City gas pipeline availability coverage rate	%	100	100	100
	Branch pipeline availability coverage rate	%	100	100	100
	Branch pipeline high impact zone identification rate	%	100	100	100
	Branch pipeline flood prevention and geological hazard protection coverage rate	%	100	100	100

Indicator Category	Indicators	Unit	2021	2022	2023
Product Quality	Number of residential users inspected	10,000 households	826	1,078	1,083.7
	Coverage of safety inspection for residential users	%	90	86	94
	Number of non-residential users inspected	10,000 households	12.2	14.46	13.58
	Coverage of safety inspection for non-residential users	%	100	100	100
	Monitoring coverage of important production operations	%	100	100	100
	Percentage of reported emergency issues	%	100	100	100
Supplier Management	Total number of suppliers	/	1,814	1,850	1,447
	Number of material suppliers	/	1,132	1,073	805
	Number of services contractors	/	481	582	437
	Number of engineering contractors	/	201	195	205
	Percentage of contractors that commit transparent procurement	%	/	/	100
	Percentage of contractors that commit social responsibilities	%	/	/	100
Customer Service	Number of customer complaints on products and services	/	2,286	2,157	856
	Resolution rate of customer complaints	%	100	100	100
	Customer satisfaction rate	%	99	99	99.5
	Total number of customers	10,000 households	1,384.5	1,471.7	1,560.4
Employment	Total number of employees	Person	33,284	30,916	27,138
	By gender-female managers	%	/	14.3	36.4
	By gender-male managers	%	/	85.7	63.6
	By gender - male	%	67.7	67.9	68.0

Indicator Category	Indicators	Unit	2021	2022	2023
Employment	By gender - female	%	32.3	32.1	32.0
	By region - PRC	%	99.3	99.3	99.2
	By region - oversea	%	0.7	0.7	0.8
	By employment type - full-time	%	99.7	99.8	100
	By employment type - part-time	%	0.3	0.2	0
	By education - undergraduates or above	%	48.7	50.3	55.3
	By education - tertiary education	%	27.5	26.7	25.1
	By education - others	%	23.8	23.1	19.6
	By age - under 30	%	17.5	10.0	10.9
	Proportion by age - age 30-50	%	68.0	73.4	71.5
	Proportion by age - above 50	%	14.5	16.6	17.6
	Number of newly hired employees	Person	/	110	274
	Number of employees with disabilities	Person	/	114	117
	Employee turnover rate	%	1.9	2.8	2.9
	By gender - male	%	1.9	2.8	3.0
	By gender - female	%	2.0	2.9	2.7
	By region - China	%	1.8	2.9	2.9
	By region - oversea	%	9.1	0	0
	By age - under 30	%	2.2	5.6	3.5
	By age - age 30-50	%	2.0	2.6	3.0

Indicator Category	Indicators	Unit	2021	2022	2023
	By age - above 50	%	0.9	2.4	2.0
Occupational health	Coverage of occupational health check	%	100	100	100
	Qualified rate of occupational health check	%	100	100	100
	Coverage of occupational health hazard inspection	%	100	100	100
	Qualified rate of occupational site hazard inspection	%	100	100	100
Employees Training	Front-line staff training ratio	%	100	100	100
	Training projects at Company level	/	43	25	55
	Employee training at Company level	Man-time	6,931	2,730	6,767
	Training courses at PetroChina level	Session	88	64	115
	Employees trained at PetroChina level	Man-time	716	26,547	34,571
	Total number of employees trained	Person	27,208	25,455	27,138
	Total number of employees trained by gender - male	Person	18,145	17,279	18,454
	Total number of employees trained by gender - female	Person	9,063	8,176	8,684
	Percentage of employees trained by gender - male	%	66.7	67.9	68.0
	Percentage of employees trained by gender - female	%	33.3	32.1	32.0
	Average training hours by gender - male	Hour	98	78	86
	Average training hours by gender - female	Hour	95	76	84
	Total number of employees trained by employee type - management personnel	Person	11,405	11,611	11,235
	Total number of employees trained by employee type - professional technicians	Person	1,133	825	896
	Total number of employees trained by employee type - highly skilled personnel	Person	1,670	1,685	2,117
	Total number of employees trained by employee type - front-line operators	Person	13,000	11,334	12,890
	Percentage of employees trained by employee type - management personnel	%	41.9	45.6	41.4
	Percentage of employees trained by employee type - professional technicians	%	4.2	3.2	3.3
	Percentage of employees trained by employee type - highly skilled personnel	%	6.1	6.6	7.8
	Percentage of employees trained by employee type - front-line operators	%	47.8	44.5	47.5
	Average training hours by employee type - management personnel	Hour	101	82	88
	Average training hours by employee type - professional technicians	Hour	91	72	80
	Average training hours by employee type - highly skilled personnel	Hour	96	73	82
	Average training hours by employee type - front-line operators	Hour	94	73	83
Community Investments	Time length of social welfare activities	Hour	/	/	2,789
	Number of social welfare activities	/	/	775	817
	Number of participants in social welfare activities	/	2,134	1,382	17,254
	Total number of beneficiaries	/	156	18,152	7,095
	Total amount of donation	RMB10,000	156	178	149
	Total amount of consumption assistance	RMB10,000	/	1,350.00	1,373.14

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Environment

Aspects	Index Number	General Disclosure & KPI	Page
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 and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non- hazardous waste.	P39, 85-88
	A1.1	The types of emissions and respective emissions data.	P88
	A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P40, 144
	A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility)	P87, 144
	A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	P87, 143-144
	A1.5	Description of emission target (s) set and steps taken to achieve them.	P38
	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 them.	P87
A2: Use of Resources	General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	P79-86
	A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in 1000s) and intensity (e.g. per unit of production volume, per facility).	P80, 145
	A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	P85, 144
	A2.3	Description of energy use efficiency target (s) set and steps taken to achieve them.	P80-81, 144-145
	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.	P84-85
	A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	The Company's business attributes do not involve product packaging, so this KPI is not applicable
A3: The Environmental and Natural Resources	General Disclosure	Policies on minimising the issuer' s significant impact on the environment and natural resources.	P77-78
	A3.1	Policies on minimising the issuer' s significant impacts on the environment and natural resources.	P75-78
A4: Climate Change	General Disclosure	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	P89
	A4.1	Policies on description and action of significant climate-related issues which may impact the issuer.	P89

Social

Aspects	Index Number	General Disclosure & KPI	Page
Employment and Labor Regulations			
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, antidiscrimination, and other benefits and welfare relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	P101
	B1.1	Total workforce by gender, employment type (for example, full-or part-time), age group and geographical region.	P101,147-148

Social

Aspects	Index Number	General Disclosure & KPI	Page
	B1.2	Employee turnover rate by gender, age group and geographical region.	P101, 148
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	P26-34, 107-110
	B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	P26, 146
	B2.2	Lost days due to work injury.	P26, 146
	B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored	P107-110
B3: Development and Training	General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	P105
	B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	P106
	B3.2	The average training hours completed per employee by gender and employee category.	P106, 149-150
B4: Labor 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.	P106
	B4.1	Description of measures to review employment practices to avoid child and forced labour.	P101
	B4.2	Description of steps taken to eliminate such practices when discovered.	P101

Social Performances

B5: Supply Chain Management	General Disclosure	Policies on managing environmental and social risks of the supply chain.	P113-114
	B5.1	Number of suppliers by geographical region.	P113
	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.	P113-116
	B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	P113-116
	B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	P116

Social

Aspects	Index Number	General Disclosure & KPI	Page
B6: Product Responsibility	General Disclosure	Information on: (a)the policies; and 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.	P125
	B6.1	Percentage of products sold or shipped that need to be recalled due to safety and health reasons.	The Company's business attributes do not involve product packaging, so this KPI is not applicable
	B6.2	Number of complaints received about products and services, along with the methods used to address them.	P125
	B6.3	Description of practices related to the protection and maintenance of intellectual property rights.	P129
	B6.4	Description of the quality assurance process and product recall procedures.	P125-127
	B6.5	Description of consumer data protection and privacy policies, as well as relevant enforcement and oversight methods.	P57
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.	P60
	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.	P60, 145
	B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	P60
	B7.3	Description of anti-corruption training provided to directors and staff.	P59

Community

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.	P134
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Governance	Disclose the governing body (which may include the board of directors, committees, or equivalent bodies responsible for governance) or individuals responsible for overseeing climate-related risks and opportunities.	P63-64
	Disclose the role of management in the oversight, management, and supervision of the governance processes, controls, and procedures related to monitoring climate-related risks and opportunities.	P63-64
Strategy	Disclose how climate-related risks and opportunities may reasonably impact the prospects of the entity.	P89-98
	Disclose the current and expected impacts of climate-related risks and opportunities on the entity's business model and value chain.	P89-98
	Disclose the impact of climate-related risks and opportunities on the entity's strategies and decisions, including information on transition plans related to climate.	P89-98
	Disclose the impact of climate-related risks and opportunities on the entity's financial position, financial performance, and cash flows during the reporting period, as well as the expected impact on the entity's short-term, medium-term, and long-term financial position, financial performance, and cash flows, considering how climate-related risks and opportunities are incorporated into the entity's financial planning.	P89-98
	Consider the entity's ability to adapt to climate-related changes, developments, and uncertainties, and disclose the entity's strategies and its business model's adaptability to climate-related changes.	P89-98
Risk Management	Disclose the processes and related policies used by the entity to identify, assess, prioritize, address, and monitor climate-related risks.	P89-98
	Disclose the procedures used by the entity to identify, assess, prioritize, and monitor climate-related opportunities, including whether and how the entity uses climate scenario analysis to identify climate-related opportunities.	P89-98
	Disclose to what extent the processes for identifying, assessing, prioritizing, and monitoring climate-related risks and opportunities are integrated into the entity's overall risk management process and how they are incorporated and reported.	P89-98
Directions and Targets	Disclose information related to cross-industry metric categories.	/
	Disclose industry-specific metrics related to specific business models, activities, or other common characteristics of participating industries.	/
	Disclose the targets set by the entity to mitigate or adapt to climate-related risks or to leverage climate-related opportunities, as well as any targets required by laws or regulations for the entity to achieve, including indicators used by the governing body or management to measure progress towards these targets.	P37-38

GRI Index

Sector Material Topic	GRI Standard	Disclosure	Sector Standard Ref. NO.	Pages
Topic 11.1 GHG emissions	GRI 3: Material Topics 2021	Disclosure 3-3 Management of material topics *Additional sector recommendations* • Describe actions taken to manage flaring and venting and the effectiveness of actions taken.	11.1.1	P12, 39-40, 81-84
	GRI 302: Energy 2016	Disclosure 302-1 Energy consumption within the organization	11.1.2	P80, 82, 144
		Disclosure 302-3 Energy intensity	11.1.4	P80, 82, 144
	GRI 305: Emissions 2016	Disclosure 305-1 Direct (Scope 1) GHG emissions *Additional sector recommendations* • Report the percentage of gross direct (Scope 1) GHG emissions from CH_4. • Report the breakdown of gross direct (Scope 1) GHG emissions by type of source (stationary combustion, process, fugitive).	11.1.5	P40
		Disclosure 305-2 Energy indirect (Scope 2) GHG emissions	11.1.6	P40
		Disclosure 305-3 Other indirect (Scope 3) GHG emissions	11.1.7	P40
		Disclosure 305-4 GHG emissions intensity	11.1.8	P40
Topic 11.2 Climate adaptation, resilience, and transition	GRI 3: Material Topics 2021	Disclosure 3-3 Management of material topics *Additional sector recommendations* • Describe policies, commitments, and actions of the organization to prevent or mitigate the impacts of the transition to a low-carbon economy on workers and local communities.	11.2.1	P12, 37-44, 75-88
	GRI 201: Economic Performance 2016	Disclosure 201-2 Financial implications and other risks and opportunities due to climate change	11.2.2	P75-88
	GRI 305: Emissions 2016	Disclosure 305-5 Reduction of GHG emissions *Additional sector recommendations* • Report how the goals and targets for GHG emissions are set, specify whether they are informed by scientific consensus, and list any authoritative intergovernmental instruments or mandatory legislation the goals and targets are aligned with. • Report the Scopes (1, 2) of GHG emissions, activities, and business relationships to which the goals and targets apply. • Report the baseline for the goals and targets and the timeline for achieving them.	11.2.3	P38-44

Sector Material Topic	GRI Standard	Disclosure	Sector Standard Ref. NO.	Pages
Topic 11.3 Air emissions	GRI 3: Material Topics 2021	Disclosure 3-3 Management of material topics *Additional sector recommendations* • Describe actions taken to manage flaring and venting and the effectiveness of actions taken.	11.3.1	P12, 88, 143
	GRI 305: Emissions 2016	Disclosure 305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	11.3.2	P88, 143
	GRI 416: Customer Health and Safety 2016	Disclosure 416-1 Assessment of the health and safety impacts of product and service categories	11.3.3	P130
Topic 11.4 Biodiversity	GRI 3: Material Topics 2021	Disclosure 3-3 Management of material topics *Additional sector recommendations* Report whether application of the mitigation hierarchy has informed actions to manage biodiversity-related impacts.	11.4.1	P77-78
	GRI 304: Biodiversity 2016	Disclosure 304-3 Habitats protected or restored *Additional sector recommendations* • Describe how the application of the mitigation hierarchy, if applicable, has resulted in: - areas protected through avoidance measures or offset measures; - areas restored through on-site restoration measures or offset measures.	11.4.3 11.4.4	P77-78 P63
Topic 11.5 Waste	GRI 3: Material Topics 2021	Disclosure 3-3 Management of material topics	11.5.1	P77-78
	GRI 305: Emissions 2016	Disclosure 306-1 Waste generation and significant waste-related impacts	11.5.2	P87-88
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		Disclosure 306-3 Waste generated	11.5.4	P87-88
		Disclosure 306-4 Waste diverted from disposal	11.5.5	P87-88
		Disclosure 306-5 Waste directed to disposal	11.5.6	P87-88

Sector Material Topic	GRI Standard	Disclosure	Sector Standard Ref. NO.	Pages
Topic 11.6 Water and effluents	GRI 3: Material Topics 2021	Disclosure 3-3 Management of material topics	11.6.1	P85-86
	GRI 303: Water and effluents 2018	Disclosure 303-1 Interactions with water as a shared resource	11.6.2	P85-86
		Disclosure 303-2 Management of water discharge-related impacts	11.6.3	P85-86
		Disclosure 303-3 Water withdrawal	11.6.4	P85-86
		Disclosure 303-4 Water discharge	11.6.5	P85-86
		Disclosure 303-5 Water consumption	11.6.6	P85-86
Topic 11.9 Occupational health and safety	GRI 3: Material Topics 2021	Disclosure 3-3 Management of material topics	11.9.1	P25-35, 107-110
	GRI 403: Occupational Health and Safety 2018	Disclosure 403-1 Occupational health and safety management system	11.9.2	P107-110
		Disclosure 403-2 Hazard identification, risk assessment, and incident investigation	11.9.3	P107-110
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		Disclosure 403-5 Worker training on occupational health and safety	11.9.6	P107-110
		Disclosure 403-6 Promotion of worker health	11.9.7	P107-110
		Disclosure 403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	11.9.8	P107-110
		Disclosure 403-8 Workers covered by an occupational health and safety management system	11.9.9	P107-110
		Disclosure 403-9 Work-related injuries	11.9.10	P28, 145
		Disclosure 403-10 Work-related ill health	11.9.11	P107-110

Sector Material Topic	GRI Standard	Disclosure	Sector Standard Ref. NO.	Pages
Topic 11.10 Employment practices	GRI 3: Material Topics 2021	Disclosure 3-3 Management of material topics	11.10.1	P101-112
	GRI 401: Employment 2016	Disclosure 401-1 New employee hires and employee turnover	11.10.2	P107, 148
		Disclosure 401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	11.10.3	P107, 112
	GRI 404: Training and Education 2016	Disclosure 404-1 Average hours of training per year per employee	11.10.6	P106, 149-150
		Disclosure 404-2 Programs for upgrading employee skills and transition assistance programs	11.10.7	P104-106
	GRI 414: Supplier Social Assessment 2016	Disclosure 414-1 New suppliers that were screened using social criteria	11.10.8	P114
		Disclosure 414-2 Negative social impacts in the supply chain and actions taken	11.10.9	P115
Topic 11.11 Non-discrimination and equal opportunity	GRI 3: Material Topics 2021	Disclosure 3-3 Management of material topics	11.11.1	P53-54, 60, 101
	GRI 404:Training and Education 2016	Disclosure 404-1 Average hours of training per year per employee	11.11.4	P101
	GRI 405: Diversity and Equal Opportunity 2016	Disclosure 405-1 Diversity of governance bodies and employees	11.11.5	P53-54, 101
	GRI 406: Non-discrimination 2016	Disclosure 406-1 Incidents of discrimination and corrective actions taken	11.11.7	P60, 101
Topic 11.12 Forced labor and modern slavery	GRI 3: Material Topics 2021	Disclosure 3-3 Management of material topics	11.12.1	P101, XXXX

Sector Material Topic	GRI Standard	Disclosure	Sector Standard Ref. NO.	Pages
Topic 11.14 Economic impacts	GRI 3: Material Topics 2021	Disclosure 3-3 Management of material topics	11.14.1	P3, 69-72, 143
	GRI 201: Economic Performance 2016	Disclosure 201-1 Direct economic value generated and distributed	11.14.2	P3
	GRI 203: Indirect Economic Impacts 2016	Disclosure 203-1 Infrastructure investments and services supported	11.14.4	P134-136
		Disclosure 203-2 Significant indirect economic impacts	11.14.5	P134-136
Topic 11.15 Local communities	GRI 3: Material Topics 2021	Disclosure 3-3 Management of material topics *Additional sector recommendations* • Describe the approach to identifying stakeholders within local communities and to engaging with them.	11.15.1	P69-72
Topic 11.19 Anti-competitive behavior	GRI 3: Material Topics 2021	Disclosure 3-3 Management of material topics	11.19.1	P56-59
Topic 11.20 Anti-corruption	GRI 3: Material Topics 2021	Disclosure 3-3 Management of material topics *Additional sector recommendations* • Describe how potential impacts of corruption or risks of corruption are managed in the organization' s supply chain. • Describe the whistleblowing and other mechanisms in place for individuals to raise concerns about corruption.	11.20.1	P58-60
	GRI 403: Occupational Health and Safety 2018	Disclosure 205-2 Communication and training about anti-corruption policies and procedures	11.20.3	P58-60
		Disclosure 205-3 Confirmed incidents of corruption and actions taken	11.20.4	P60

TABLE OF ABBREVIATIONS AND FULL FORMS

Abbr.	Full Form
AR	Augmented Reality
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
GS	Goal Setting
IFRS S2	International Financial Reporting Standards S2 Climate-related Disclosures
ISO	International Organization for Standardization
IPCC	Intergovernmental Panel on Climate Change
KPI	Key Performance Indicator
LNG	Liquefied Natural Gas
LPG	Liquefied Petroleum Gas
LTIR	Lost Time Incident Rate
MSCI	Morgan Stanley Capital International Index
QHSE	Quality Health Safety and Environment
SDGs	Sustainable Development Goals
TRIR	Total Recordable Incident Rate
VR	Virtual Reality

VERIFICATION REPORT

HKQAA
HONG KONG QUALITY ASSURANCE AGENCY
香港品質保證局

VERIFICATION STATEMENT

Scope and Objective
Hong Kong Quality Assurance Agency ("HKQAA") was commissioned by KunLun Energy Company Limited, (hereinafter referred to as "KunLun Energy") to undertake an independent verification for its Environmental, Social and Governance Report 2023 (hereinafter referred to as "the Report"). The scope of HKQAA's verification covered the sustainability performance and information of KunLun Energy for the period from 1st January 2023 to 31st December 2023 in providing a limited level of assurance.

The Report has been prepared in accordance with the Appendix C2 Environmental, Social and Governance Reporting Guide ("ESG Guide") of The Stock Exchange of Hong Kong Limited ("SEHK"), and with reference to Global Reporting Initiative ("GRI") Standard.

Level of Assurance and Methodology
The process applied in this verification was based on the International Standard on Assurance Engagements 3000 (Revised), Assurance Engagements Other Than Audits or Reviews of Historical Financial Information issued by the International Auditing and Assurance Standards Board. Our evidence gathering process was designed to obtain a limited level of assurance for devising the verification conclusion.

Our verification procedures covered:

- review of the report compilation, stakeholder engagement and materiality assessment processes;
- examination of the raw data and supporting evidence of the selected samples; and
- evaluation of the mechanism for collecting, collating and reporting performance data.

Independence
KunLun Energy is responsible for preparing the report. HKQAA is not involved in calculating, compiling, or in the development of the Report. Our verification activities are independent from KunLun Energy.

Conclusion
Based on the verification results and in accordance with the verification procedures undertaken, HKQAA has obtained a limited level of assurance and is in the opinion that, nothing has come to the verification team's attention that:

- The Report has not complied with all the mandatory disclosure requirements and "comply or explain" provisions outlined in the ESG Guide; and
- The Report has not been prepared with reference to the GRI Standard for disclosure;

Signed on behalf of Hong Kong Quality Assurance Agency

Kado Zhang
Assistant Director, Business Development
April 2024

Reader Feedback

Thank you for reading the "Kunlun Energy 2023 Environmental, Social, and Governance (ESG) Report". In order to provide more valuable information to you and other stakeholders, and to promote Kunlun Energy' s ability to enhance ESG management, the Company sincerely welcomes your feedback and suggestions on the report. You can provide feedback to the Company through the following channels:

ADDRESS: 39 FLOOR, 118 CONNAUGHT ROAD WEST, HONG KONG

Website: http://www.kunlun.com.hk/

Email: info@kunlun.com.hk

1. How do you rate the overall quality of this report?

☐ Excellent ☐ Good ☐ Fair ☐ Poor

2. How do you assess the clarity, accuracy, and completeness of the information, data, and indicators disclosed in this report?

☐ Excellent ☐ Good ☐ Fair ☐ Poor

3. Do you believe this report fully reflects Kunlun Energy's performance in environmental, social, and governance aspects?

☐ Excellent ☐ Good ☐ Fair ☐ Poor

4. Are the textual expressions in this report clear, organised, and easy to understand?

☐ Excellent ☐ Good ☐ Fair ☐ Poor

5. Does the layout design of this report help you understand the relevant information?

☐ Excellent ☐ Good ☐ Fair ☐ Poor

6. What aspect of this report do you think needs the most improvement?

☐ Governance ☐ Safety ☐ Service ☐ Supply Chain
☐ Employees ☐ Environment ☐ Social

7. Do you have any additional comments or suggestions regarding Kunlun Energy' s ESG management and ESG reporting?

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