

2023

Sustainable Development (ESG) Report



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About This Report

This is the 2023 Sustainable Development (ESG) Report (hereinafter referred to as "this report") released by SANY Heavy Industry Co., Ltd. This report is a genuine description of SANY Heavy Industry's efforts to fulfill its economic, social and environmental responsibilities and achieve sustainable development, and contains the Company's response to critical issues of concern to stakeholders. This report has been reviewed by the Board of Directors of the Company is responsible for the authenticity and effectiveness of the information herein. In case of data inconsistency, please refer to the annual report.

Reporting Period

This report covers the period from January 1, 2023, to December 31, 2023. To ensure the consistency of the report, some of the contents may cover information before or after the reporting period.

Reporting Scope

This Report covers SANY Heavy Industry Co., Ltd. and its subsidiaries.

Data Sources

All the information and data are from the Company's official documents, statistical reports and financial reports, as well as the information and data collected, summarized and reviewed by the Company. This report is published in both Chinese and English. In case of any inconsistency, the Chinese version shall prevail. Unless otherwise specified, the currency unit is RMB.

Basis of Preparation

This report is prepared according to the Rules Governing the Listing of Stocks on Shanghai Stock Exchange (January 2023 Revision), the Guidelines No.1 for Self-discipline Regulation of Listed Companies on Shanghai Stock Exchange-Standard Operations and refers to the Global Reporting Initiative's Global Standards for Sustainability Reporting (GRI Standards) released by Global Sustainability Standards Board(GSSB) and A Guide to Formulating Corporate Social Responsibility Reports for Enterprises in China by the Chinese Academy of Social Sciences.

Note on Appellation

To ensure clarity and readability, SANY Heavy Industry Co., Ltd. hereinafter referred to as "SANY Heavy Industry," "the Company," and "We" throughout this report.

Access to This Report

This report is available for browsing and download on the Shanghai Stock Exchange website: www.sse.com.cn and the Company's website: www.sany.com.cn.

For further information, please contact the Company's Securities Affairs Department of the company:

Telephone: 0731-84031555

Fax: 0731-84031555

Email: xiaoh62@sany.com.cn

Address: New R&D Building 4th Storey, SANY Heavy Industry Industrial City, Liangtang Road, Changsha County, Changsha

City, Hunan Province

Postal Code: 410100

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Message from the Chairman



The challenging yet opportunistic year of 2023 has swiftly passed. We have steadfastly adhered to long-termism, recognizing the power of certainty amid uncertainties, epitomized by the convergence of two rare opportunities—the Chinese Dream of the great rejuvenation of the Chinese nation and the "super technology window" resulting from the intersection of the Fourth Industrial Revolution and the Third Energy Revolution. In an era where transformation and opportunities coexist, we, grounded in a new

historical juncture, have refined the corporate strategy of "Globalization, Digitalization, and Decarbonization," continually consolidating and advancing the transformational pace in relevant domains. We actively respond to changes in the external environment, consistently implementing the United Nations Sustainable Development Goals and China's commitments to "peak carbon emissions and achieve carbon neutrality," striving for green and sustainable development, thus showcasing the resilience and innovation of the Company.

Throughout this year, we've navigated the tumultuous currents of global markets and the intricate paths of economic recovery. Yet. SANY Heavy Industry remains steadfast in its commitment to innovation-driven strategies, actively adapting to market shifts. As we continue our globalization strategy, we're intensifying our foothold in international markets. By fostering localized production and robust research and development endeavors, we've achieved pivotal advancements in product and technology and made significant strides in international markets. Our localized production initiatives in India and Indonesia have yielded notable outcomes, streamlining our supply chain, curbing costs, and amplifying our brand presence locally. Furthermore, to establish sustainable global operational capabilities, we have undertaken organizational reforms for overseas entities, adopting an organizational framework of "platform empowerment + elite teams." We have established overseas regions and national regions as comprehensive strategic planning and empowerment platforms at the regional level, significantly enhancing overseas operational efficiency. Our strides in globalization are resolute and robust, and through close collaboration with SANY teams across various countries globally, we continually elevate the localization standards of products and services, better catering to the diverse needs of different markets.

SANY Heavy Industry is actively driving the comprehensive digitalization upgrade across our production, management systems, and business models in digital transformation. This effort has led to significant enhancements in production efficiency and notable reductions in operational costs. Our advancements in "Lighthouse Factories" and smart factory initiatives mark substantial progress, setting industry standards by integrating cutting-edge digital technologies and guiding the future manufacturing trajectory. By adopting

advanced artificial intelligence and big data analytics, we continuously refine product design, improve production quality, and elevate customer service standards, thereby generating greater value for our customers. The ongoing enhancement of our digital systems and the establishment of the new industrial Internet will further boost our information processing capabilities and production operational efficiency, offering robust support in achieving our "Dual Carbon" goals.

The implementation of low-carbon strategies exemplifies our steadfast commitment to environmental conservation and sustainable development. SANY Heavy Industry embraces the global challenge of climate change and pledges to support China's "Dual Carbon" goals. We actively drive the transition towards green practices and sustainable growth, channelings increased R&D investments into areas such as electric and hydrogen energy technologies. We have unveiled a suite of innovative electric and hydrogenpowered products, including fully electric-controlled rotary drilling equipment and pure electric telescopic crawler cranes. These offerings spearhead the industry's shift towards a more eco-friendly and energy-efficient trajectory, making significant strides in curbing greenhouse gas emissions and fostering the advancement of clean energy solutions. The excellent performance of these innovative products not only meets the market's demand for increased efficiency and reduced emissions but also demonstrates SANY Heavy Industry's significant technical expertise in renewable energy, which further highlights the Company's leading position in the sector.

We deeply understand that robust corporate governance is the foundation of business development and consistently adhere to high standards and strict requirements. "Customer-first" is not only the cornerstone of operation but the core driving force behind our ongoing innovation and quality improvement. We place great emphasis on the quality of corporate management, following the principles of legality, clear procedures, efficient management, and scientific rationality. We continue to deepen the construction of the Board of Directors, strengthen internal management and risk control, ensure the compliance and transparency of operations, establish a modern corporate governance system, and ensure the healthy and stable development of the enterprise.

Guided by the vision of "Build First-class Enterprises, Foster First-class Talents, and Make First-class Contributions," we proactively assume various social responsibilities and ensure the rights and welfare of employees. Upholding talent concepts such as "Putting employees first" and "Embracing the spirit of endeavor," we focus on employee well-being, striving to provide a safer, healthier, and more harmonious working environment, thereby enhancing employee happiness and sense of belonging while offering extensive career development opportunities and abundant training resources. Our employee stock ownership plan further ignites creativity and enthusiasm among our workforce, bolstering the cohesion and unity of our enterprise.

In terms of social responsibility, we maintain open communication and collaboration with stakeholders, working together to fulfill our social responsibilities and contribute to societal harmony and progress. SANY Heavy Industry adheres unwaveringly to the belief that "The responsibility to society outweighs the interests of the Company." We actively participate in philanthropic activities, support rural revitalization, promote educational innovation, and contribute to the establishment of disaster relief networks. Together with our employees and their families, we engage in various charitable activities focused on green and low-carbon initiatives, community engagement, and educational innovation. Through these endeavors, we aim to spread love and warmth, making meaningful contributions to the harmonious development of society.

Looking ahead to 2024, SANY Heavy Industry will continue to uphold its corporate mission of "Quality changes the world" and its corporate vision of "Build First-class Enterprises, Foster First-class Talents, and Make First-class Contributions," steadfastly advancing its strategy of "Globalization, Digitalization, and Decarbonization". In this new era, we will remain committed to people-oriented principles and innovation-driven approaches, collaborating with global partners to explore the path of sustainable development. We aim to contribute to achieving global sustainable development goals and create greater value for our employees, shareholders, and society.



About SANY Heavy Industry

Company Profile

SANY Heavy Industry (SH: 600031) was listed on July 3, 2003. It is the first enterprise in China to succeed in the split-share structure reform and achieve full circulation of shares. In July 2011, SANY Heavy Industry was shortlisted in the Financial Times (FT) Global 500 list for the first time, and it was the only Chinese construction machinery enterprise on the list. In 2012, SANY Heavy Industry acquired German manufacturer Putzmeister, renowned as the "Global No. 1 Brand of Concrete Machinery". In May 2021, SANY Heavy Industry was shortlisted in the Forbes Global 2000 list, ranking 468th and breaking into the prestigious Global Fortune 500 for the first time, which positioned the Company as the top in China and the second globally in engineering machinery on the list.

SANY Heavy Industry, primarily engaged in equipment manufacturing, offers a diverse product portfolio including concrete machinery, excavators, cranes, road construction machinery, and piling machinery. The Company's concrete machinery holds a dominant global position. In 2020, our excavator sales topped the global rankings for the first time. Additionally, our sales of large tonnage cranes, crawler cranes, and piling machinery were ranked first in China.



Concrete Machinery

Our main products include truck-mounted concrete pumps, trailer pumps, batching plants, truck mixers, and line pumps.

Concrete machinery is mainly used in in building, bridge, tunnel, foundation construction and other industries.

Excavator

Our excavators include large, medium, small, and mini excavators.

They are mainly used in the farmland, water conservancy, railway, highway, construction, and real estate industries



Crane

The main products are truck cranes and crawler cranes.

Cranes are widely used in the electric power, steel, bridge, shipbuilding, and petrochemical industries. Small truck cranes are mostly used in bulk cargo business such as municipal works, while large truck cranes and crawler cranes are used in the power, steel, shipbuilding, and petrochemical industries.

Piling Machinery

The main products are rotary drilling rigs.

Our piling machinery is mainly used in municipal works, highway and bridge construction, industrial and civil buildings, underground diaphragm walls, water conservancy, anti-seepage slope protection and other infrastructure construction projects.



Road Construction Machinery

The main products include roller, paver, grader, and asphalt batching equipment.

Road construction machinery is mainly used for the construction of highways, urban roads and airport runways.

Financial Services

We offer vehicle financing services to provide buyers of engineering machinery with mortgage and other financial services.



SANY Heavy Industry has business divisions and industrial centers all over the world. It has built industrial parks in Beijing, Changsha, Shanghai, Kunshan, Chongqing and other places in China, and global R&D and manufacturing centers in India, the United States, Germany and Indonesia.

Adhering to the mission of "Quality changes the world," SANY Heavy Industry spends more than 5% of its sales revenue on R&D every year and is dedicated to manufacturing world-class products. Building on the strength of technological innovation, SANY Heavy Industry received the National Scientific and Technological Progress Award three times and the National Technological Invention Award twice. These two awards represent the highest honor in the engineering machinery industry in the PRC

With the premier product quality, SANY Heavy Industry has undertaken a great number of significant projects worldwide, including Burj Khalifa, Beijing Olympic venues, London Olympic venues, Brazil World Cup Stadium, Shanghai Tower, Hong Kong International Finance Center, Hong Kong-ZhuhaiMacau Bridge, Beijing Daxing International Airport, and Xiong'an New Area.

Awards and Recognition in 2023





Performance Highlights in 2023

"Globalization, Digitalization, and Decarbonization" Corporate Strategy



- International sales revenue reached RMB **43.449** billion, an increase of **18.81**% compared to last year, with overseas income accounting for **60.75**% of total revenue.
- A total of 33 lighthouse factories have been completed, with a reduction of 46.33% in unit labor costs.
- Obtained **275** patents on clean technology.
- Revenue from electric products reached RMB 3,146 million, with revenue from hydrogen energy reaching RMB 130 million.

Honest Operations and Governance



- 1 General Meeting of Shareholders and 4 Extraordinary General Meetings of Shareholders were convened; 7 meetings of the Board of Directors and 7 meetings of the Board of Supervisors were held with 100% attendance.
- Over 30 risk repositories covering 6,196 risks in finance, business, marketing, overseas, etc., were established.
- Audits were conducted on 382 key clues and issues, identifying and addressing over 4,000 problems and risks.
- Anti-corruption audits were conducted on the headquarters and all subsidiaries, achieving a coverage rate of 100%.
- The signing rate of the Integrity Cooperation Agreements/Commitment Letters with suppliers reached 100%.

R&D and Product Quality



- R&D investment reached RMB **6.101** billion, accounting for **8.33**% of main operating income.
- Established training sessions for institute directors, covering 500 individuals, and R&D lectures covering 1,000 individuals, totalling 7 sessions conducted.
- Filed 1.533 patent applications, with 854 valid patents granted for inventions.
- Participated in the formulation and release of 19 national standards, 4 industry standards.
- Conducted 1 information security awareness training and examination for all employees, with over 22,389 participants and a coverage rate of 100%.

Green and Safe Operations



- Out of 26 main engine and component manufacturing subsidiaries, 10 have obtained ISO 14001 certification for environmental management systems, while 11 have achieved ISO 45001 certification for occupational health and safety management systems.
- Clean energy usage reached **44,815.9** thousand kWh, accounting for **6.55**% of total energy consumption.
- Non-production area energy consumption decreased by **13**% year-on-year, while energy consumption per RMB 10,000 of output in production areas decreased by **10.7**%.
- Energy-saving projects conducted during operations resulted in cumulative energy cost savings of approximately RMB 112 million.
- A total of **207,118** individuals participated in health and safety training, accumulating a total of **271,313** training hours.
- The injury rate per thousand persons was 1.3%, with a completion rate of 100% for third-level safety education training, occupational disease injuries was 0, with a 100% rate of occupational health examinations.

Workplace and Employees



- Occupational training coverage reached 92.52% of employees, with an average training duration of 121.40 hours per person.
- The scale of stock incentive amounted to RMB 591 million, benefiting 7.131 employees.
- Employee participation rate in satisfaction surveys reached **94.81**%, with employee satisfaction exceeding **90** points.
- Assistance subsidies for employees facing difficulties totalled RMB 1.011 million, benefiting 39 individuals.

Giving Back to Society



- A total investment of RMB **27.8720** million has been allocated to disaster relief, epidemic prevention, rural revitalization, public welfare education, donation of goods and other projects.
- Conducted 76 public welfare and volunteer service activities, with a cumulative participation of 11,200 individuals, and a total duration of 2,266.20 hours of employee volunteer activities.



Stakeholder Engagement

SANY Heavy Industry establishes a regular stakeholder communication mechanism to get to know and respond to the expectations and demands of stakeholders. Aimed to generate shared values, SANY Heavy Industry conducts materiality assessments regularly to take major issues that stakeholders focus on into daily operations and decision-making.

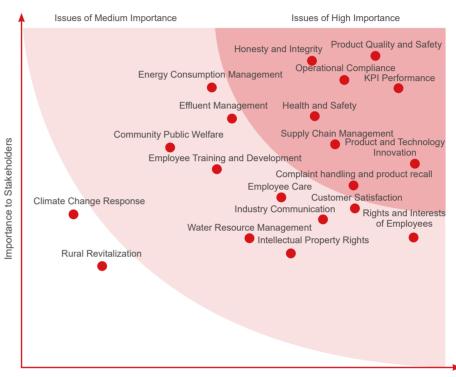
Stakeholder Communication Strategy

The Company values the expectations and demands of stakeholders by maintaining active communication with them through multiple channels and responding to the expectations and issues of common concern in the value chain.

	Stakeholders	Issues in Focus	Communication and Feedback
盒	Government Departments/ Regulators	Operational Compliance Effluent Treatment Honesty and Integrity Climate Change Response	On-site Spot Checks Dialogue and Meeting On-site Investigation
Ω Ω	Shareholders	KPI Performance ESG Management Operational Compliance	General Meeting of Shareholders On-site Investigation Roadshow
8	Investors	Corporate Governance Product Quality and Safety Industry Communication Technology and Innovation	Company Announcement Investment Conference Roadshow Telephone Conference
208	Employees	Rights and Interests of Employees Health and Safety Remuneration and Benefits	Employee Training Labor Union Activities Customer Satisfaction Survey
8	Suppliers	Supply Chain Management Product Quality and Safety Honesty and Integrity	On-site Assessment Quality Communication Supplier Training and Assistance Supplier Conference
P ₌	Customers	Product Quality and Safety Climate Change Response Industry Communication Technology and Innovation	Market Research Satisfaction Survey Media Conference Customer Online and Offline Promotion
公	Community, the Public and NGO	Community Culture Public Welfare Poverty Alleviation Community Environment	Community Symposium Community Publicity Online Promotion
(%)	Partners	Industry Communication Stable Partnership Honesty and Integrity	Strategic Cooperation High-level Exchanges
റീറീ	Industry Peers	Fair Competition Industry Communication	Industry Forum and Meeting Cooperation Agreement Inspection and Exchange of Opinions

Materiality Analysis

To better respond to the expectations of stakeholders in this report, the Company regularly identifies and evaluates the material issues. The material issues that have a significant impact on the Company and stakeholders are defined, specially revealed and responded to in the report. We have drawn up a matrix of the importance distribution of issues in terms of both "Importance to Stakeholders" and "Importance to SANY Heavy Industry" to clarify the focus of responsibilities.



Importance to SANY Heavy Industry

Matrix of materiality issues for 2023



SANY

Case

Feature:

"Globalization, Digitalization, and Decarbonization" Corporate Strategy

SANY Heavy Industry is actively pursuing its strategies of "Globalization, Digitalization, and Decarbonization" to hasten the Company's growth. By establishing production bases and research centers globally, SANY Heavy Industry not only enhances the competitiveness of its products and services worldwide but also ensures swift responses to market demands and localizes its services effectively. Furthermore, the Company is leveraging advanced digital technologies to drive the digital transformation of its production processes, management systems, and business models, thereby enhancing operational efficiency and the quality of decision-making. In terms of low-carbon initiatives, the Company is dedicated to sustainable development through practices such as green manufacturing, energy conservation, emission reduction, and the promotion of circular economy principles, all aimed at contributing to the creation of a cleaner and brighter future.

Globalization - Expanding Worldwide Presence

SANY Heavy Industry actively seizes upon the opportunities presented by globalization, integrating premium resources to establish a global presence spanning production bases, research centers, and marketing networks. This strategic endeavor has enabled the Company to achieve comprehensive coverage across diverse business sectors and geographical markets. With an unwavering commitment to its globalization agenda, the Company has implemented and refined a robust organizational framework, strategically positioning itself to narrate the compelling story of SANY on the global stage. Building upon the foundation of domestic recognition, SANY relentlessly pursues excellence in product quality and service delivery, thereby garnering widespread acclaim from customers worldwide.

In 2023, we embarked on a series of pivotal initiatives, including the "Implementation of Overseas Organizational Reform," the "Strict Enforcement of Product Quality Control," and the "Establishment of a Comprehensive Global Manufacturing Platform." These endeavors have not only propelled the execution of our globalization strategy but also facilitated rapid responsiveness to dynamic global market demands while elevating our service capabilities. By doing so, we are actively fostering the long-term sustainability and growth of the Company.

In 2023,



SANY Heavy Industry's international sales revenue reached RMB

43.449 billion



Marking an increase of

18.81%

compared to the previous vea

(¥

Overseas revenue accounted for

60.75%

of total operating income

The majority of the Company's revenue and profits are derived from overseas markets, achieving a historic breakthrough.

Manufacturing Globalization

SANY Heavy Industry has strategically expanded into global markets by establishing localized production bases in key regions to better adapt to local market demands and shorten supply chain cycles. Through localized production, the Company can rapidly respond to market changes, provide products and services that meet local standards and preferences, reduce transportation costs, and enhance price competitiveness. Additionally, the localized production strategy helps SANY Heavy Industry optimize resource allocation globally, promote local employment and technology exchange, deepen integration with local societies, and provide solid support for the Company's globalization strategy.

Successful Implementation of Localized Production in India

In December 2023, SANY Heavy Industry achieved a significant milestone with the successful implementation of a localized production project in India. By customizing our product offerings, such as road rollers and motor graders, to meet the specific requirements of the Indian market, we not only improved product performance but also increased customer satisfaction.

Furthermore, our efforts to shorten the supply chain led to improved market responsiveness and cost reduction. To ensure the quality of our production, teams from our Indian research and assembly facilities received comprehensive training at our headquarters in Lianyuan City, Loudi City, Hunan Province. The successful launch of the localized production project in India reinforces SANY Heavy Industry's global strategic positioning and significantly enhances the competitiveness of the SANY brand in international markets.



Successful implementation of localized production in India

Case

Joint Venture for Factory Construction, Deepening Presence in Central Asian Markets

In November 2023, SANY Heavy Industry signed a memorandum of understanding with Enter Engineering, an energy construction contractor in Uzbekistan, to jointly invest in and construct a new factory in the G'allaoro Special Industrial Zone. Spanning an area of 48,000 square meters, the factory aims to locally produce various construction machinery equipment, including semi-trailer trucks, concrete mixers, and dump trucks.

This collaboration not only strengthens SANY Heavy Industry's production and service capabilities in the Central Asian market but also provides robust support for local infrastructure development and economic growth in Uzbekistan.



Spanning an area of

48,000

A SANY

Case

Global Business Expansion

SANY Heavy Industry, through its global business strategy, actively responds to demands from various regions worldwide by dispatching specialized teams to project sites. Whether in bustling metropolises in the Far East or remote areas in Africa, SANY Heavy Industry can swiftly deploy personnel and resources, providing end-to-end services from consultation and planning to implementation. Through flexible and efficient global operations, the company continuously expands its international influence, driving its globalization process forward.

Case

Supporting NEOM City Construction

In 2023, SANY Heavy Industry continued to contribute to global infrastructure development, particularly playing a significant role in supporting the construction of NEOM City in the northwestern part of Saudi Arabia. NEOM City is a crucial component of Saudi Vision 2030, aiming to create a future city entirely reliant on sustainable energy through innovative design and technology. Faced with complex technical requirements and a massive construction scale, we assembled an on-site service team of over 50 engineers and deployed more than 2,000 pieces of equipment to ensure the smooth progress of the project.



Supporting NEOM city construction

Global Product Expansion

SANY Heavy Industry achieves global product distribution by innovating and improving equipment based on a deep understanding of the diverse needs of customers in different regions. This approach successfully positions the Company's high-performance construction machinery products in global markets, achieving a comprehensive global product layout. With outstanding performance and reliable quality, SANY Heavy Industry's products have received widespread acclaim in international markets, effectively driving the deep implementation of the Company's globalization strategy.

SANY Cranes Arrive in Chile

In October 2023, SANY Heavy Industry's SCL10000 all-terrain lattice boom crane successfully arrived in Chile. With a maximum lifting capacity of 1,000 tons and a maximum lifting moment of 11,000 ton-meters, this crane not only set a new record for Chinese exports to the South American market but also became the largest crane currently operating in Chile.



With a maximum lifting capacity of

1,000



A maximum lifting moment of

11,000



SANY cranes arrive in Chile

Case

Launching Excavator Products for the European and North American Markets

In November 2023, SANY Heavy Industry introduced five new models of compact excavators specifically tailored for the European and North American markets. These products underwent comprehensive upgrades in functionality and performance to meet the long-term demands of these markets. The development of these five compact excavators emphasized four major advantages: enhanced functionality, improved performance, increased manoeuvrability, and strengthened operational safety. The goal is to provide users with a more efficient, safer, and more convenient operational experience. This product upgrade not only showcases SANY Heavy Industry's innovation capabilities in the field of construction machinery but also consolidates the Company's competitiveness in the European and North American markets.



Excavator products for European and North

American markets



Case

Digitalization - Aids in the Achievement of the "Dual Carbon" Goals

SANY Heavy Industry seizes the opportunities of the new era by enhancing its information processing capabilities according to market and business needs. It is gradually transitioning towards digitalization by using smart technologies, with a foundation in the digitalization of production operations and business processes. We integrate digitalization into manufacturing, operations, services, and products, with the construction of lighthouse factories as the core. This involves data collection and application, industrial software application, and standardized, online, automatic, and intelligent processes, promoting the transformation and upgrading of "digitalization" to improve production efficiency and support the advancement of "Dual Carbon" initiatives.

Construction of Lighthouse Factories

With the rise of "Industry 4.0," advanced technologies such as Industrial Internet, robotics, and artificial intelligence are increasingly applied in various industrial scenarios. SANY Heavy Industry's lighthouse factories integrate various digitalization technologies, using 5G technology and the Industrial Internet as the foundation. They utilize flexible automation, artificial intelligence, and large-scale Industrial Internet of Things (IIoT) to create a digitalized heavy equipment manufacturing system. Through seamless integration, they achieve smart manufacturing and the "Internet of Everything," contributing to the construction of a "Global network of lighthouse factories." This initiative promotes outstanding development in terms of production efficiency and ecological sustainability. By the end of 2023, SANY Heavy Industry had built and put into operation 33 lighthouse factories, reducing labor costs by 46.33%.





SANY Heavy Industry had built Reducing labor costs by

33

lighthouse factories

46.33%



Sany Heavy Industry is the only heavy industry enterprise in the world to receive certification as a "lighthouse factory" from the World Economic Forum. As of December 31, 2023, **2** factories, the "Beijing Piling Machine Factory" and the "Changsha No. 18 Factory," have obtained "lighthouse factory" certification, providing a replicable model for digitalization development in the global manufacturing industry.

Construction of Sany Heavy Industry's "Lighthouse Factory" in Indonesia

In 2023, SANY Heavy Industry, following the standards of Industry 4.0, fully integrated the concepts of smartness, flexibility, and green production, successfully designing and constructing its first overseas "lighthouse factory" in Indonesia. This achievement realized full network connectivity and unmanned production.

The factory draws extensively from the successful experiences of over 30 domestic lighthouse factories, aiming to establish a comprehensive smart system. This system includes manufacturing operation systems, warehouse management systems, automated material distribution systems, digital twin systems, process simulation systems, and automatic reporting systems. By incorporating functions such as automatic ordering, unmanned vehicle distribution, visual positioning and tracking, trajectory heat maps, and anomaly alerts, the factory promotes the intelligence and efficiency of operational processes. Simultaneously, it enhances operational safety, and production efficiency, and reduces energy consumption.





Smart production workshop at the "Lighthouse Factory" in Indonesia

Digital System Upgrade

Digital technology is a crucial focus for smart transformation and a key driver for enhancing operational efficiency and productivity in enterprises. SANY Heavy Industry, leveraging the Manufacturing Operations Management (MOM) platform as its foundation and complemented by multiple digital systems such as the Warehouse Management System (WMS), Advanced Planning and Scheduling (APS) system, and digital twin, has formed the "smart brain" for factory production and manufacturing. Through online, real-time, and digital research and production management, SANY Heavy Industry makes informed decisions scientifically, facilitates optimal resource allocation, achieves cost reduction and efficiency improvement, and reduces unnecessary energy consumption. In 2023, we implemented bi-weekly iterative upgrades to our digital systems and adjusted the release frequency based on user needs and habits to ensure an excellent user experience.





Overview of SANY Heavy Industry's Digital System Construction in 2023

Manufacturing Operations Management (MOM) Platform



- Coordinates and manages manufacturing operations, covering various aspects such as production factory
 modelling, execution, logistics scheduling, and quality control; optimizes production processes to improve efficiency,
 reducing the MOM single factory implementation cycle from 3 months to 1 month;
- All workstations in the structure component workshop of the Indonesian factory have been brought online, with gradual coverage of all factories.

Warehouse Management System (WMS)



- Achieves warehouse management and logistics automation, precisely controls inventory to avoid material waste, and reduces manual operations and waiting time, improving operational efficiency; WMS single warehouse implementation cycle reduced from 1 month to two weeks, with a 28.7-fold increase in delivery efficiency;
- Supports 10 languages, with both domestic and overseas warehouses using the WMS system for control.

Advanced Planning and Scheduling (APS)



- Achieves unmanned production planning through efficient algorithms, with a calculation efficiency increase of over 20 times compared to traditional algorithms;
- Adaptable to multiple scenarios such as assembly lines, structural components, and mechanical processing;
- APS covers a total of 25 factories.

Digital Twin



- During the early stages such as product scheme design and factory construction, virtual simulation technology to simulate whether the scheme meets expected requirements, reducing productivity and material consumption due to repeated attempts;
- In the mid-to-late stages such as product deployment, use model algorithms to predict faults in advance, facilitating timely fault handling and reducing potential losses from operational interruptions;
- For energy-consuming products such as batteries, helps reduce unnecessary energy consumption.

Case

SANY Heavy Industry Reduces Energy Consumption with Digital Twin Technology

In 2023, SANY Heavy Industry developed an energy-efficient optimization digital twin system for electric concrete mixers. By integrating collected data into the digital twin model, real-time analysis of information such as vehicle speed and energy consumption is achieved, along with monitoring of abnormal conditions related to battery health and temperature.

Furthermore, we comprehensively applied energy management, charging planning, and route selection algorithms. Through visualization, multiple dimensions of energy monitoring and alarm, as well as predictions of range and charging planning are presented. This enables the prediction of energy consumption changes and the scientific formulation of energy-saving strategies to improve energy utilization efficiency. The system has been applied to major models of SANY's electric concrete mixers, contributing to a reduction in comprehensive vehicle energy consumption by approximately 5%.



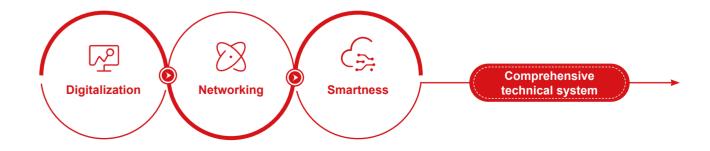
Visualization of energy consumption achieved by the digital twin system for electric concrete mixers

New Industrial Internet Construction

The Industrial Internet is the result of deep integration between digital technology and manufacturing, incorporating a comprehensive technical system that integrates digitalization, networking, and smartness to achieve information sharing and collaborative operations. SANY Heavy Industry involves a large number of engineering machinery and complex operating procedures in manufacturing and operations scenarios.

To improve production and operation efficiency, we are advancing the management model of the Industrial Internet, efficiently utilizing smart management technologies such as the Industrial Internet of Things (IIoT) and "water, electricity, oil, and gas" four-meter management. This connects machines, equipment, systems, and personnel to achieve autonomous promotion and application in planning, production execution, warehouse logistics, engineering changes, and equipment interconnection, supporting the Company's high-quality development in the manufacturing field.

In 2023, SANY Heavy Industry continued to carry out internal and external construction of the Industrial Internet, timely identifying issues and taking optimization measures to improve production efficiency, promoting sustainable development and cooperation.







"External Connectivity"

Expanding the layout of the "new C (Customer)" Industrial Internet by promoting the unified protocol and toolchain of various business clients, while reducing client storage and computing costs. Over 320,000 host devices have been accessed, with a cumulative cost reduction of RMB 6.62 million in 2023.

Gradually expanding the "new C" platform overseas while complying with local information security laws and regulations. Overseas Industrial Internet C-end sites have been established in Singapore, Frankfurt, and Africa. It is expected that the "new C" Industrial Internet will achieve full connection domestically and internationally in the future.

"Internal Access"

Conducting self-developed IIoT platform replacement, realizing real-time online access of 18,000 devices, 29,000 four-meters, and over 50,000 cameras, supporting smart security, work hours quota, auxiliary material quota, energy consumption control, and equipment efficiency improvement systems. As of December 2023, cumulative cost savings have exceeded RMB 1 billion.



Case

Achieving Energy Savings in Heat Treatment through Equipment Interconnection

In 2023, SANY Heavy Industry continued to promote the application of equipment interconnection technology. By integrating equipment interconnection, energy, and production data, we modelled the heating furnace for heat treatment, optimizing the heating process and smart control insulation time. In 2023, energy efficiency increased significantly by 25%, with an annual savings of approximately RMB 16 million in electricity costs and a reduction in electricity consumption of approximately 28.07 million kWh.



Interface of the equipment interconnection platform

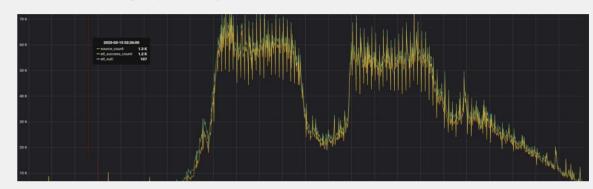
"Four-dimensional Process" and Industrial Software Applications

SANY Heavy Industry conducts closed-loop management in R&D, supply chain, procurement, production, sales, and other processes, making good use of big data and smart technology to promote standardization, onlineization, automation, and digitalization (referred to as "four-dimensional process") construction of processes, thereby improving operational efficiency. In 2023, the Company carried out a series of optimization projects such as application management platform upgrades, tag platform construction, data middle platform docking, and unified mobile development platforms, effectively saving manpower and resource costs in various processes.

Case

Optimization of User Behavior Analysis Platform

In 2023, SANY Heavy Industry upgraded and iterated the user behavior analysis platform. By systematically receiving user behavior data reported from multiple ends, the platform not only supports data management and user grouping management but also realizes various real-time analysis models, data dashboard management, and permission management. This significantly improves the accuracy and efficiency of data analysis, with an expected annual saving of approximately RMB 530,000 in various cost expenses.



Visualization of data volume received after system launch

Digitalization of Product and Technology

In the context of rapid development of frontier technologies such as big data and artificial intelligence, SANY Heavy Industry seizes the opportunities of the times, continuously carries out technological innovation, and promotes innovation and transformation through smart technologies such as visual recognition, smart algorithms, unmanned driving, and 5G networks. This provides more stable, secure, and efficient hardware and software support, exploring the development of smart products that balance efficiency and environmental protection. In 2023, we integrated technological innovation resources, carried out product technology innovation according to market demand, and made phased progress in unmanned transportation, automatic parking, and other areas, driving the improvement of the value chain and expanding the efficiency of digital transformation, extending the digitalization strategy to a broader scope.

Case

Development of Unmanned Electric Loader by SANY Heavy Industry

In 2023, SANY Heavy Industry successfully developed an unmanned electric loader, advancing the smartness and unmanned transformation in construction operations. The unmanned electric loader focuses on the material loading operation at batching plants. Integrated with a digitalized cloud control system, it autonomously plans and selects travel roots, utilizes overhead cameras to monitor material levels in real-time, and schedules tasks based on material shortage at the loading ports. It features autonomous driving, obstacle avoidance, parking, loading, and unloading capabilities. Additionally, emergency stop buttons are installed in the human-machine interface to ensure operational safety.



Unmanned electric loader



Low Carbonization - Targeting Clean Opportunities

With the increasing awareness of environmental protection and the demand for green development, clean technology is gradually becoming an important engine for commercial development. SANY Heavy Industry regards low carbonization as a key development strategy, carrying out business layouts in sectors including pure electric, hybrid, and hydrogen fuel. We continue to explore clean energy production and utilization, promote and apply clean technology, and accelerate energy conservation and emission reduction. In 2023, SANY Heavy Industry obtained 275 patents in clean technology, achieved sales of RMB 3,276 million, with revenue from electric products reached RMB 3,146 million, and revenue from hydrogen energy reaching RMB 130 million.

Electric and Hybrid Technology

SANY Heavy Industry attaches importance to the development and mastery of electrification technology in main products, core components, and auxiliary power devices, covering products such as excavators, loaders, pump trucks, mixer trucks, and cranes. We actively carry out the conversion of oil to electricity and strengthen the research and development of pure electric technology based on hybrid power. We expand the development of independent vehicle control units (VCUs) and continue to launch new pure electric vehicle models to reduce reliance on fossil fuels. In 2023, the Company launched more than 40 new products, including the world's first fully electric rotary drilling rig, pure electric telescopic crawler crane, breaking through more than 30 key technologies, with sales exceeding 4,300.

Highlighted Electric Vehicle Models

Highlighted Vehicle Models

Features

SYM5311GJB1BEV 412 Charging Edition Mixer Truck Industry-first frameless structure combined with integrated drive design, decreasing energy consumption by reducing vehicle weight, lowering over 30% operating costs compared to fuel vehicles.



SCE800TB-EV 80t Electric Telescopic Crawler Crane

- Introduces the world's first pure electric telescopic crawler crane, with a lifting capacity nearly 10% higher than industry benchmarks, featuring smart functions such as remote air conditioning and wireless remote control.
- Achieves zero emissions during equipment use, equipped with a 282 kWh high-capacity battery from CATL, saving customers over RMB 1,400 in fuel costs per day.



SW956E Electric Wheel Loader

- Utilizes in-house developed VCU control technology for precise tuning, providing stability and reliability of traditional loaders with the quick response of electric loaders, with long endurance of 4-8 hours and high operating efficiency of 700t/h, which offers a comfortable driving environment and reliable performance for operators.
- Saves nearly 14,000 liters of fuel for every 1,000 hours of operation.



Hydrogen Energy Technology

Hydrogen energy, as a widely available renewable energy source, is an ideal medium to support the development and application of clean energy, with significance for energy conservation, emission reduction, and deep decarbonization. SANY Heavy Industry deeply understands the vast prospects of hydrogen energy and actively engages in the hydrogen energy industry, considering it a key area of focus for low-carbon strategies. Leveraging its strong talent pool, the Company focuses on R&D in hydrogen energy vehicles and adjusts its product energy structure and service models. It continues to roll out technology achievements with independent intellectual property rights to support the development of the entire hydrogen energy industry chain.

Case

SANY Heavy Industry Develops Multiple Hydrogen Fuel Mixer Trucks

In 2023, leveraging mature and reliable guarantees of Type III cylinders, parts, systems, and vehicle "three-level" tests, SANY Heavy Industry's Engineering Vehicle Division has developed vehicles equipped with industry-leading durability hydrogen fuel cell systems. Multiple hydrogen fuel mixer trucks have been launched, including the 411 hydrogen fuel cell and 416 hydrogen fuel cell models. These trucks are equipped with a 1,680-liter large-capacity hydrogen cylinder group, providing a cruising range of over 500 kilometers under constant speed conditions. They operate efficiently, and their energy systems are stable and reliable. Additionally, safety designs such as high-temperature protection, over-current protection, low-pressure alarm, leakage detection, and control have been incorporated into the onboard hydrogen supply system to ensure the stability and safety of gas usage.



Providing a cruising range under constant speed conditions of over





Hydrogen fuel mixer truck

01

Honest Operations and **Governance**

SANY Heavy Industry is committed to achieving sustainable and high-quality development. We adhere to honest and compliant operations, prioritize risk management and internal controls, uphold business ethics, and firmly oppose all forms of corruption. By continuously strengthening the Company's institutional system, we steadily enhance the scientific, robust, and effective governance, providing a fundamental guarantee for the Company's sustainable development.

- Strengthen Corporate Governance
- Comprehensive Risk Management
- Anti-Corruption and Business Ethics











Strengthen Corporate Governance

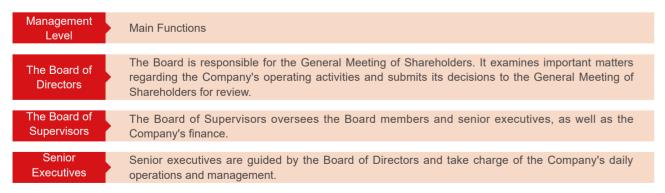
A sound corporate governance mechanism is the core for companies to achieve a stable operation and sustainable development. SANY Heavy Industry adheres to the relevant requirements of the *Company Law of the People's Republic of China*, the *Securities Law of the People's Republic of China*, the *Code of Corporate Governance for Listed Companies*, and the *Rules Governing the Listing of Stocks on Shanghai Stock Exchange*, continuously optimizing the corporate governance structure to ensure the full performance of the functions and responsibilities of the General Meeting of Shareholders, the Board of Directors, and the Board of Supervisors. At the same time, we disclose information according to the law and regulations, establishing a scientific modern corporate governance system with effective balances and efficient operations.

The Board of Directors has established several key committees including the Strategic Committee, Audit Committee, Nominating Committee, and Remuneration and Appraisal Committee. When selecting board members, we prioritize a comprehensive evaluation that encompasses industry experience, educational background, skills, and gender diversity to ensure the board's composition meets the standards of independence and inclusivity. Our directors bring a wealth of professional expertise and experience in legal matters, finance, auditing, and corporate management. This diverse skill set significantly enhances the board's performance and overall governance effectiveness, ensuring that board decisions are made with sound judgement and by best practices. Our independent directors play a crucial role within our corporate governance framework. They are dedicated to safeguarding the interests of shareholders and stakeholders while advancing the Company's long-term sustainability goals. In 2023, the Company's board comprised 9 directors, including 3 independent directors and 1 female director.

Corporate Governance Structure



SANY Heavy Industry's Management Level and Major Responsibilities



The Company organizes the General Meeting of Shareholders, Board of Directors Meetings and Board of Supervisors Meetings by applicable laws, regulations and the *Articles of Association*. The convening, deliberation and voting procedures complied with relevant regulations. The Company's and the shareholders' legitimate rights and interests, especially minority shareholders' are safeguarded. In 2023, SANY Heavy Industry held 1 General Meeting of Shareholders, 4 Extraordinary General Meetings of Shareholders, and 7 Board of Directors Meetings, with 100% directors attendance; 7 Board of Supervisors Meetings were held, with 100% member attendance.

Comprehensive Risk Management

Considering the realities of production, operation and management of the Company, to ensure the achievement of the Company's strategic goals, SANY Heavy Industry has established and maintained a standardized and effective risk management and internal control system. The Company has formulated and issued internal laws and regulations, such as the Judgment Guide for Problems, Defects and Risks, the Operation Guide on Internal Control Evaluation, the Audit and Supervision Quality Manual, the Auditing and Supervision Management System, Audit and Supervision Plan and Management Process, and Audit and Supervision Rectification Tracking Management Process. In this way, we continuously improve our capability for preventing risks and the Company's operation and management to ensure the safe and sound operation of the Company.

Risk Management

The Company has established 3 defenses of risk prevention and control, which consist of business divisions, functional headquarters and auditing and supervision headquarters. We define the responsibilities of risk management and integrate the requirements of enterprise risk management into enterprise management and business processes in terms of the responsibilities and functions of different posts, effectively building a risk prevention and control system.

In 2023, SANY Heavy Industry actively utilized digital means, integrated internal and external data, and developed risk assessment models for dynamic risk evaluation. Focusing on key business scenarios with "high risk, high value, high frequency, and large data volume" in the financial, commercial, marketing, and overseas areas, the Company summarized and refined violation characteristics and constructed multidimensional supervision models covering multiple risk aspects such as "fraudulent bid rigging," "false sales" and "false reimbursement." This enabled the Company to identify operational risks and provide real-time alerts for abnormal events, further enhancing the Company's business resilience against risks. Additionally, we regularly conduct risk prevention and control training for employees to strengthen their capabilities in fulfilling their responsibilities for risk prevention and control. In 2023, the Company established over 30 risk repositories, covering 6,196 risks in financial, commercial, marketing, and overseas areas, with 382 audit projects conducted for key clues and issues, identifying and addressing over 4,000 issues and risks.

Three Defenses for Risk Management System

First Defense (Business Divisions)

- Operational and Management Measures
- Internal Control Measures

Second Defense (Functional Headquarters)

- The Business Affairs Headquarters
- The Smart Manufacturing Headquarters
- The Marketing Risk Control Department
- The Securities and Investment Office
- The Process and IT Headquarters
- SANY Legal Affairs DepartmentThe Financial Affairs Headquarters

Third Defense (Auditing and Supervision Headquarters)

Internal Control and Audit

Case

SANY Heavy Industry Organized Risk Control Training

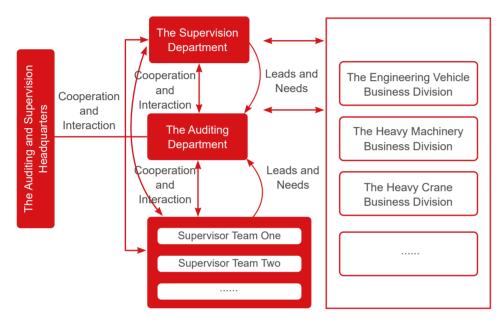
In 2023, SANY Heavy Industry conducted 8 training sessions on risk identification and the use of internal control assessment systems. The training covered basic concepts and principles of risk management and internal control, testing requirements for risk management and internal control, methods for risk identification and analysis, as well as internal rules and evaluation methodologies. The training reached a total of 327 participants in the overseas system, 122 participants in the business system, 327 participants in the financial system, and 259 participants in marketing, effectively enhancing employees' risk awareness.



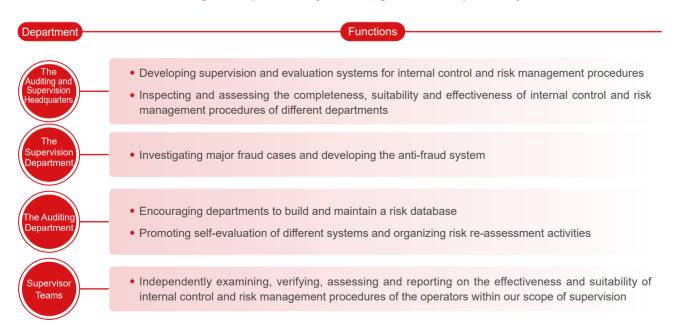
Internal Control and Compliance

The Company is committed to systematically promoting internal control and compliance, effectively harnessing the synergies between internal control and compliance management to foster healthy development. Throughout 2023, we continued refining the internal audit system framework, continually enhancing the audit and supervision mechanisms. Led by the Auditing and Supervision Headquarters, we exercise comprehensive oversight over the Company's compliance operations, with collaboration between the Supervision Department and Auditing Department in conducting audits. Concurrently, by integrating "digitalization" into our audit processes, we are vigorously deploying a digital fraud detection system and actively advancing the implementation of a global compliance framework.

Auditing and Supervision System



Auditing and Supervision System Assignment of Responsibility



Based on the comprehensive "1+8+N"¹ internal control management system, SANY Heavy Industry monitors the core business processes of its subsidiaries, focusing on key clues and issues through audit work, with the *Audit and Supervision Management System* serving as the foundation. Under the guidance of the "digitalization" development strategy, auditing follows a digital development model of "platform + model + data," continuously iterating and upgrading according to management needs with a user-oriented approach. All projects, tasks, and outcomes are completed through the system, with individual indicators automatically calculated, making digitalization an effective tool for auditing.

In response to the globalization strategy, the Company formulates and updates compliance policies based on the legal requirements of countries and regions globally, ensuring compliance with relevant domestic and international laws and regulations, and establishing clear compliance principles and guidelines. Additionally, a compliance management and supervision system jointly coordinated by the Auditing and Supervision Headquarters and the BPIT Headquarters, with compliance officers designated in each operating unit, ensures the implementation and monitoring of compliance policies. For identified compliance risks and violations, appropriate response and corrective measures are promptly taken based on categorized and graded governance standards.

SANY Heavy Industry incorporates compliance management and risk management into its performance assessment. When employees violate compliance and risk management regulations, resulting in losses to the Company, their performance ratings may be reduced, and performance bonuses may be decreased or cancelled. For serious violations causing significant losses and severe damage to the Company's brand reputation, in addition to the aforementioned measures, other disciplinary actions may be taken based on relevant provisions in the *Accountability Management System*.

Through regular global unit internal control assessments and compliance training, we not only enhance compliance awareness among business units but also instill a culture of compliance among employees. During the reporting period, compliance training coverage for the newly recruited and job promotions reached 100%, effectively enhancing the ability to protect the Company's reputation and interests.

Case

Conducting Training Initiative "Marketing Compliance Enhancement Month"

In April 2023, SANY Heavy Industry conducted a monthlong compliance management training. Led by the Auditing and Supervision Headquarters and the Legal Department, centralized training sessions were conducted for all subsidiary business units, reaching over 10,000 internal and agency personnel, further enhancing employee compliance awareness.



"Marketing compliance enhancement month" activity

[&]quot;r1+8+N" refers to clearly defining one risk management organizational structure, division of responsibilities, and overall control framework. Based on this, it establishes eight executable process systems for risk assessment and management, control activities and processes, information and communication, supervision and evaluation, continuous improvement, and internal control compliance talent cultivation. Additionally, it optimizes and improves N-specific execution standards, processes, methods, and plans according to actual circumstances.



Anti-Corruption and Business Ethics

SANY Heavy Industry adheres to the principles of honesty, integrity, and fair competition in business ethics. With a zero-tolerance approach towards corruption, we have established a robust anti-corruption system and fostered a culture of integrity. We are steadfast in implementing anti-money laundering measures, contributing to the creation of a clean and transparent environment. These efforts serve as a solid foundation for the Company's high-quality development.

Integrity Management

SANY Heavy Industry regards internal anti-corruption as a crucial safeguard for the steady development of the enterprise. The Company strictly adheres to laws and regulations such as the *Criminal Law of the People's Republic of China*, the *Anti-Unfair Competition Law of the People's Republic of China*, and the *Interim Provisions on Prohibiting Commercial Bribery*, fully implementing internal policies like the *Conflict of Interest and Integrity Management System*, the *Blacklist Sharing Management Process*, and the *Business Personnel Behavior Management Regulations*. In 2023, we updated the *Accountability Management System*, further refining the Company's red lines and clarifying internal accountability measures. We deepen the awareness of "cannot be corrupt, do not want to be corrupt, and dare not be corrupt," adhere to the "high standards, strict requirements" work discipline, establish a responsibility management and accountability mechanism for fulfilling duties, investigating errors, and questioning responsibilities, thus laying a solid foundation for ethical conduct.

As of the end of the reporting period, we have established a supervision and management structure with clear responsibilities and division of labor. The Board of Directors of the Company directly oversees, guides, evaluates, and supports the achievements of the Auditing and Supervision Headquarters in integrity management. It provides guidance, support, assistance, and decision-making for anti-corruption management work.

Responsible Departments for Integrity Management and their Duties



The principal in charge of each department

Fulfills the main responsibilities for managing conflict of interest and integrity and self-discipline work and reports the conflict of interest according to the rules and regulations.



The principal in charge at each department

May authorize designated personnel to handle and investigate issues related to conflicts of interest and integrity, ensuring the implementation of accountability measures; They are also responsible for receiving returned gifts or presents from employees, managing their disposal, and recording them for documentation.



The Office of the Chairman

Supervises the Auditing and Supervision Headquarters' work on managing conflicts of interest, and cash received as bonuses and gifts.



The Auditing and Supervision Headquarters

Is responsible for the publicity, implementation and declaration of the Conflict of Interest and Integrity System; the interpretation, acceptance & investigation and punishment of infractions of the System.



The Business Affairs Headquarters and the Business Affairs Department of each business division

Are responsible for the declaration, implementation, investigation and auditing of the supplier's conflict of interest as well as the implementation of the results, and accepting the supervision from the Auditing and Supervision Headquarters.



The Human Resources Headquarters / The Human Resources Department of each business division

Are responsible for collaborating with the Office of the Chairman and the Auditing and Supervision Headquarters on the declaration and publicity of conflict of interest issues.

To step up integrity, the Company supervises corruption, and prevents and controls integrity risks by prioritizing the 3 aspects of "before, in progress and after." The Company focuses on the core business processes of auditing and supervision, leveraging our data platform to develop a smart auditing platform centered around risk prevention. This platform, with its core centers for early warning, operations, and decision-making, is designed to enhance corruption governance effectiveness by harnessing the advantages of big data monitoring technology. In 2023, the Company conducted anti-corruption audits across its headquarters and subsidiaries, achieving a full coverage rate of 100%. As a result, 13 instances of fraud were identified and addressed, while 34 individuals faced repercussions due to public opinion.

Anti-Corruption Initiatives

Advance Publicity and Prevention We conduct honesty and integrity training, stage honesty and integrity educational exhibitions, organize honesty, integrity & compliance tests, and offer integrity notifications at festivals for staff in different divisions and departments. We also require staff at key positions to sign an Honesty and Integrity Letter of Responsibility and offer them preventative education and training to ensure that our staff and cadres are clean and honest.

Ongoing Supervision and Governance We improve the processes by utilizing the digital model supervision, reporting and complaint mechanism, senior management supervision and evaluation mechanism, business compliance check, "Ten Rules" supervision of business decision-making, the Supplier contact and visit mechanism, gift and cash declaration mechanism, and conflict of interest and external investment declaration to ensure that risks are controllable.

Punishment and Accountability We focus on investigating and handling major cases, announcing typical cases, and building the blacklist sharing mechanism, tracking mechanism of resigned personnel, and reporting ranking and investigation mechanism. By diversifying accountability measures, we have made them act as a deterrent.

In 2023, the Company underwent a comprehensive upgrade of its smart audit platform, focusing on smart early warning, swift auditing, and precise decision-making. This initiative involved restructuring business processes to gradually achieve online, automated, and smart workflows, thereby empowering and enhancing the efficiency of auditing and supervision tasks.

Five Major Upgrade Directions of the Smart Auditing Platforms

From "Control-Oriented" to "Risk-Oriented"

From "Post-Confirmation" to "Preventive" Approach

From "Emphasizing Supervision" to "Empowerment"

From "Experience-Driven" to "Data-Driven"

From "Traditional Project-Based Auditing" to "Agile Auditing"



Supplier Integrity Management

Preventing ethical risks in the procurement process is one of the Company's key focuses. We adhere to transparent procurement practices, following principles of openness, fairness, impartiality, and honesty, while identifying critical risk factors in dealings with suppliers. Our systems, including the *Supplier Management System*, *Procurement Framework Agreement*, and *Supplier Contact / Visit Management Plan*, all articulate clear requirements regarding supplier integrity.

In 2023, SANY Heavy Industry notably strengthened compliance management among global supply chain partners, ensuring adherence to relevant laws and regulations in the operational regions to prevent suppliers from adversely impacting the Company due to integrity issues. The Company conducted specialized training for procurement teams, emphasizing the prohibition of employees from accepting hospitality or any form of gifts, cash, or vouchers from suppliers. Any instances of bribery or corruption are promptly investigated and rigorously addressed, with relevant information promptly reported to supplier leadership. To uphold the purity and transparency of cooperative relationships, the Company and its suppliers sign an *Integrity Cooperation Agreement* as a joint code of conduct for ethical behavior.

In 2023.



the signing rate for the Integrity Cooperation Agreement / Letter of Commitment with suppliers reached

100%

Supplier Integrity Management Rules

Supplier Management System

Stipulates access requirements of dishonest operations



Procurement Framework Agreement

- Requires suppliers and franchisees to sign the Integrity Cooperation
 Agreement
- Fills in the Conflict of Interest and External Investment Declaration Form on the procurement system



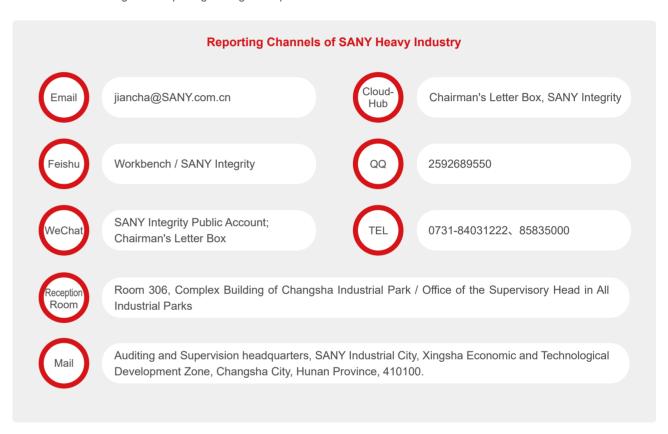
Supplier Contact / Visit Management Plan

- Builds a real-time feedback mechanism through the reporting hotline, WeChat platform and follow-up visit
- Announces infractions of rules and regulations in real time
 Publicizes the Company's policy on honesty and integrity
- Investigates and confirms a supplier's suspected breach of contract



Complaint Reporting

SANY Heavy Industry has enhanced its internal reporting management process of *Reporting Management Procedures* in accordance with the requirements of national disciplinary and supervisory authorities, further standardizing the handling of reports. The Company has established diverse reporting channels to ensure a wide range of sources for anti-corruption feeds and has set up a smart supervision platform. A dedicated department is permanently assigned to handle reports and complaints, with a focus on investigating and addressing reports from suppliers, whether anonymous or named. Individuals can make reports through several channels, including reporting mailboxes, email, hotlines, SMS, WeChat official accounts, Cloud-Hub (mobile office software), Feishu (SANY Heavy Industry's real-time office software), and notifications to the Office of the Chairman. The Company assigns dedicated personnel to regularly collect and summarize problem clues, creating a work ledger for systematic assessment and resolution. In 2023, the Company received 75 complaint cases, all of which were investigated and handled according to the reporting management process.



To safeguard the rights and interests of whistle-blowers, we kept the informants' identity a secret and implemented the withdrawal system while passing the case information and investigating it. If the identity of a whistle-blower or informant were stolen or leaked, the competent department would be held accountable according to the Accountability Management System. If the informant were intimidated or retaliated, the Company would assign dedicated personnel to protect them from harm. If necessary, the Company would report the retaliatory conduct to the judicial authorities and hold anyone who took revenge responsible.

SANY Heavy Industry's Complaint Handling Processes



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Anti-Corruption Training

To uphold fairness in the business environment, the Company continues to advance its efforts in promoting "Diversified" integrity practices, fostering a culture of integrity, and reinforcing ethical conduct to ensure effective integrity management. Upon joining the Company, all employees participate in anti-fraud training, followed by integrity assessments to gauge the effectiveness of the training. Regular communication campaigns are conducted in the workplace to further instill awareness of integrity values. Moreover, the Company conducts integrity policy briefings during the annual supplier conference and sends reminders about anti-corruption policies to suppliers during holidays, thereby strengthening transparent and clean cooperation relationships.

In 2023, the Company organized integrity training sessions for all full-time employees, internal directors, suppliers, and part-time / outsourced personnel. These included onboarding training for 4,200 new employees, learning and exams on accountability management systems and red line criteria covering 100% of employees², and five integrity education sessions for 1,538 suppliers.

Integrity Education Forms

Employee enrollment and promotion

Declaration of conflict of interest and external investment; Training on honesty and confidentiality.

Publicity

 Integrity sunlight week, integrity and honesty education exhibition, Integrity knowledge competition, thematic lecture on the criminal justice system, short videos on integrity and honesty, greetings messages on integrity at festivals.

Evaluation

• Evaluation of integrity and honesty performance; Integrity and compliance test.

Supplier signing

Supplier signing ceremony on integrity and compliance

Anti-Money Laundering

The Company highly values anti-money laundering works and strictly abides by the relevant provisions of the *Anti-Money Laundering Law of the People's Republic of China*. During the reporting period, to prevent financial risks, protect the interests of all parties and improve the compliance level of the Company, we actively strengthened internal control and cooperation, and formulated and revised the *Anti-Money Laundering Internal Control System*, the *Anti-Money Laundering Self-Evaluation System*, the *Rules for Reporting Large Transactions and Suspicious Transactions*, the *Trade (Business) - based Money Laundering Risk Assessment Management Measures*, the *Anti-Money Laundering Evaluation Measures*, the *Anti-Money Laundering Self-Evaluation Implementation Rules*, the *Management Measures for Customer Identification and Customer Identity Information and Transaction Record Preservation*, and the *Measures for Emergency Management of Money Laundering and Terrorist Financing Emergencies*. We enhance the anti-money laundering responsibilities across various departments, refine the criteria for identifying suspicious transactions, develop risk assessment criteria for combating money laundering in products, and establish comprehensive risk assessment criteria for the company. Through these efforts, we collaboratively foster an honest, safe, and stable financial environment.

Anti-Money Laundering Internal Control System

Financial Management

Designate the Legal Compliance Department as the leading unit to take charge of the Company's anti-money laundering effort and appoint one dedicated officer in charge of anti-money laundering in each department.

Develop and revise internal regulations and processes, clarify the anti-money laundering obligations and each department's anti-money laundering responsibilities, and regulate the reporting mechanism for suspicious transactions and money laundering risk assessment process.

Operate the Anti-Money Laundering Information System to automatically identify and evaluate the customer's money laundering risk based on the anti-money laundering monitoring list, customer identity, financial product category and transaction amount, and communicate the money laundering investigation findings to the business segment.

Review the source and flow of specific cash transactions to ensure the compliance and legitimacy of capital flow and to eliminate illicit operations.

Establish the CRM³ system and GSP system to manage customers and supplier files, carry out credit evaluation and review of customers and suppliers, and strictly control cooperative transactions and supplier access.



Additionally, we have established procedures for customer identification, protocols for retaining customer identity information and transaction records, as well as systems for reporting large and suspicious transactions. From both financial management and financial monitoring perspectives, we uphold an internal anti-money laundering control system to ensure the effective implementation of anti-money laundering and anti-monopoly regulations. This further enhances SANY Heavy Industry's capabilities in safeguarding financial security, stabilizing market orders, protecting customer interests, and ensuring compliant operations.



³ CRM is the abbreviation of Customer Relationship Management.

² The accountability management system and red line criteria learning and exams are inclusive of all full-time employees as well as part-time / outsourced personnel.

02

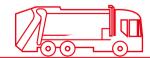
R&D and Product Quality

As a global front-runner in equipment manufacturing, SANY Heavy Industry has always believed in the concept of "Innovation Drives Everything," which has driven the Company to continuously optimize its advanced manufacturing roadmap, and lead with technological innovation for the high-quality development of its diverse array of products and eventually the Company's leapfrog advancement. Customer-oriented and product quality-focused, the Company, through a stable and sustainable supply chain, strives to build an excellent reputation in the industry and create greater value not only for its customers but also for society.

Innovation-Driven Development

Pursue Superior Quality

Jointly-Built Responsible Supply Chain













Innovation-Driven Development

SANY Heavy Industry regards R&D innovation as the primary driver of the Company's growth. Three major strategies of "low carbonization", "digitalization", and "globalization" have underpinned our efforts in consolidating our technological foundations and implementing a well-defined matrix management model through a robust R&D management framework to enhance our core competitiveness in scientific research, which is driven by our talented workforce. Additionally, we place significant emphasis on safeguarding and leveraging intellectual property rights, while promoting external exchanges and collaborations. Our objective is to elevate the Company's level of technological innovation, thereby generating new momentum for its development.

Scientific Research System

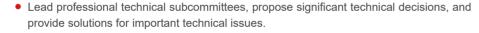
Through efforts to arrange responsibilities and functions at different levels appropriately and enhancing cross-departmental collaboration, the Company has improved the organizational structure of scientific and technological R&D management. We have established a Technical R&D Committee, led by the Chairman and comprised of nine technical committees, to oversee the R&D progress in key areas and coordinate the Company's strategic R&D layout. Furthermore, we have set up professional technical subcommittees within each research field to focus on in-depth research and technological innovation, collectively driving the steady advancement of SANY Heavy Industry's R&D endeavors.

The Organizational Structure of Scientific and Technological R&D Management



Technical R&D
Committee

 Settle on cutting-edge technological directions, devise research and development strategies, and establish plans for technological advancement;





 Comprised experts in nine major technical fields including mechanical, control, hydraulic, testing, simulation and digital twins, new energy, unmanned driving, generalization, and industrial design.



Professional Technical Subcommittees

- Responsible for researching and deliberating on the specific guidelines and medium to long-term planning for the development of professional technology;
- Responsible for researching new products and technologies in the profession, and promoting their application within the Company;
- Responsible for drafting and approving various technical standards and operating procedures within the profession;
- Responsible for facilitating the exchange and sharing of professional technical achievements both within and outside the Company.

The Company has consistently adhered to internal policies such as the *Research and Development Project Management System*, the *Three-generation*⁴ *Parallel R&D Management System of SANY Heavy Industry*, and the *Management Measures for Generic Technologies of Smart Products*. These policies are actively promoted to drive the Company's fundamental technology research. In 2023, under the guidance of the Company's Chairman and the Performance Leadership group, we systematically standardized the procedures and regulations related to R&D planning, project management, and performance evaluation. Additionally, we have established an Integrated Product Development (IPD⁵) project life-cycle management system. This system not only ensures seamless integration of planning, management, and performance evaluation in research and development but also fosters cross-departmental collaboration among business, finance, manufacturing, sales, and service departments. As a result, we can effectively achieve the objectives of our research and development projects.

During the reporting period, we have updated the five major scenarios covered by the Company's research and development projects: new product development, variant product development, custom product development, application technology development, and pre-research technology development and categorized them into four levels: L, A, B, and C, based on their level of importance. We have also clarified the acceptance criteria for each key milestone to further enhance the standardization of research and development project management. In 2023, SANY Heavy Industry invested 6.101 billion RMB in R&D, accounting for 8.33% of the Company's total revenue.





In 2023, SANY Heavy Industry invested

6.101 billion

RMB in R&D

Accounting for

8.33%

of the Company's total revenue

⁴ Three generations refers to the Company's strategic R&D thinking of "One Generation of Marketing, One Generation of Reserve, One Generation of R&D."

⁵ "IPD" stands for "Integrated Product Development", which refers to a set of patterns, philosophies, and methodologies for product development.

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R&D Team

SANY Heavy Industry regards research and development talents as the core competitive advantage of the Company. Based on positions and oriented towards the capabilities and achievements of employees, we have formulated a title evaluation and management system for all R&D personnel. It stipulates that R&D personnel who have obtained a professional title can enjoy corresponding benefits according to the Company's salary system and welfare policies, thereby motivating R&D personnel to continuously improve their technical expertise and accelerating the output of R&D results. Furthermore, to boost the overall capability of the research team, we've devised a management system for R&D project managers. This system entails offering project management training and certification to R&D personnel, fostering the continual enhancement of project managers' expertise.

In 2023, we revised the Research and Development Project Incentive Management Measures and introduced the Research and Development Incremental Profit Bonus Management Measures. These initiatives clearly outline our innovation incentive mechanism. Through a tiered goal and bonus system, we integrate R&D rewards across the entire project life cycle. Furthermore, we allocate bonuses based on the proportion of incremental profits from product categories each year, aiming to fully stimulate the innovation drive and dynamism of our research team. During the reporting period, we disbursed a total of 33 million RMB in bonuses to the R&D team.

The Company prioritizes the construction of its R&D training system, offering customized training courses tailored to the varying levels and capabilities of R&D personnel. This approach has steadily enhanced the efficiency and effectiveness of our research staff. In 2023, training programs of Dean Course with 500 participants, and R&D Lecture Hall with 1,000 participants were offered. In total, seven training sessions of the two training programs were conducted.



R&D Training Programs

Dean Course

The courses of the program cover professional skills for creating hot-selling products, shaping leadership in management, and courses on the digitization of technology. During the reporting period, a total of 8 training sessions of this program were conducted, covering over 80% of researchers in management roles.



R&D Lecture Hall

The courses of the program include experience sharing in creating "Best-selling" products and product development processes and project management, introduction to clean energy internal combustion engine technology, sharing of experimental simulation technology, etc. In 2023, a total of 7 training sessions of this program were conducted, covering 100% of the Company's research personnel.

Intellectual Property Rights

SANY Heavy Industry is committed to both technological innovation and intellectual property protection, striving to enhance its ability to create, utilize, and manage intellectual property rights. The Company strictly adheres to national laws and regulations such as the Patent Law of the People's Republic of China, the Trademark Law of the People's Republic of China, and the Enterprise Intellectual Property Management as well as the Company's internal regulations such as the Management Rules of R&D and Patent Work and the Trademark Management System. During the reporting period, revisions were made to the Management Rules of R&D and Patent Work and guidelines such as the Overseas Patent Application Process Guide Manual and the PCT International Patent Review Process Guide Manual were formulated. Continuously refining mechanisms for managing and protecting overseas product patents, the Company is speeding up the implementation of its global strategy.

The Company is actively building a comprehensive intellectual property service system that encompasses patent application, patent analysis, patent invalidation declaration, patent operation, patent acquisition, and patent asset evaluation processes. This system integrates the creation, utilization, protection, and management of intellectual property services across the entire chain. To advance digitalized management of intellectual property, the Company has employed a Patent Navigation System which allows for various practical features such as patent management, patent information retrieval, and patent shelf, significantly improving efficiency in patent risk prevention and patent asset management.

In a bid to bolster intellectual property protection comprehensively and elevate the legal framework for safeguarding intellectual property, the Company has been leveraging legal avenues to decisively clamp down on various forms of infringement. This action aims to uphold the lawful rights of intellectual property and ensure fair competition in the market. In 2023, our efforts resulted in victorious patent protection cases with enforced settlements amounting to 9 million RMB. Furthermore, we've taken legal action against patent infringers, with 5 cases already filed.

To enhance the Company's ability to address intellectual property risks and improve skills in overseas patent applications, we organized offline training sessions for patent engineers during the reporting period. These sessions focused on various aspects including overseas patent application procedures, patent layout planning, assessment and response to patent infringement risks, development of high-value patents, and enhancement of corporate intellectual property management systems. Seasoned experts from the industry were invited to conduct these training sessions. In addition, we provided foundational patent knowledge training for newly hired R&D personnel and other activities such as competitors' patent interpretation workshops throughout the subsequent R&D process.

Intellectual Property Achievements				
The total number of patents applied for by SANY Heavy Industry and its subsidiaries	Foreign Patent Applications	Granted Valid Invention Patents	Utility Model Patents	
1,533	102	854	588	
Computer Software Copyright	Design Patents	Subsidiaries which have completed the standardizati certification of the intellectual property system		
225 Participating in the drafting and	91 Industry standards	16		
publication of national standards	4		117	



SANY Heavy Industry has been actively promoting the commercialization of R&D achievements, committed to creating outstanding smart products and technologies and setting a benchmark for the smart construction of the industry. In 2023, we achieved remarkable technological breakthroughs and results in three smart product domains: smart driving, smart operation, and smart services.

Commercialization of R&D Achievements in 2023

Smart Operation

Remote control robots for disaster relief, emergency rescue, and bomb disposal scenarios: we have delivered the first disaster relief robot, which can achieve multi-mode remote control and digital twinning of the surrounding environment. It is capable of autonomously returning to its starting point and evacuating from dangerous environments.

Smart all-terrain crane: three core technologies have been achieved, including one-touch telescopic boom, one-touch attachment and detachment of counterweight, variable span. Currently, these technologies have been applied to three international models: 600E, 1500E, and 2500E.



Smart Driving

Self-developed L4 autonomous dump trucks, including both fuel-powered and electric variants: which achieve functions such as automatic unloading, automatic parking and turning, obstacle avoidance and navigation, V2X vehicle-excavator coordination, and coordination with traffic lights and blind-spot intersections. It meets the requirements for unmanned driving in scenarios such as industrial park transportation and mining area transportation.



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Smart Services

SANY Heavy Industry's business is transformed to engineering services, providing customers with full-scene solutions and operation services, based on intelligent hardware and machine decision-making algorithms as the core, providing engineering users with real-time interaction and analysis of the value of data intelligence, creating a smart operation ecosystem covering the full range of 20 major construction scenarios, and realising a new model of one-stop, full-cycle engineering services.



SANY Heavy Industry remains attentive to and has been learning from the latest technological advancements and innovative studies within the industry. We proactively engage in collaborations with universities, research institutions, and industry peers, actively pushing the boundaries of technological research and development to foster innovation.

Pursue Superior Quality

SANY Heavy Industry relies on large-scale industrial bases and mature, comprehensive quality management procedures to strictly control product quality. We are committed to providing customers with the highest value through top-quality products. Through enhanced communication and cooperation with customers, we have earned their trust and recognition, solidifying our brand reputation.

Quality Management

Product quality is the cornerstone of enterprise survival and development. The Company strictly complies with the national laws and regulations of the *Product Quality Law of the People's Republic of China*, standard of Q/SY 011244-2021, and the Company's internal regulations of *Importance Rating and Requirements of Product Quality Properties, Technical Notification Management System*, and 3.3.4.1 Technical Notice Management Procedures. These internal regulations specify principles, content, labelling methods, and management requirements for grading the importance of product quality properties, and provide clear guidelines for triggering technical notices in situations such as after-sales faults, product repairs, and user-specific requirements. The Company requires all its subsidiaries to comply with its quality management system requirements in accordance with standards such as ISO 9001 and IATF 16949.

Among the

Apart from the 3 newly established ones during 2023, the remaining

26

SANY Heavy Industry and its subsidiaries manufacturers of main engine and spare parts

Apart from the 3 newly established ones during 2023, the remaining have passed ISO 9001 or IATF 16949 certification

Quality Management System





The Company is dedicated to the deep integration of digital information technology and quality management practices. We have established a comprehensive quality information system to monitor the entire life cycle of projects, ensuring high standards of delivery quality. In 2023, we planned six major subsystems, refined 40 business modules, and conducted quality monitoring throughout the life cycle of 35 projects, thereby enhancing the efficiency and precision of quality management.

To promote the sustainable development of the Company and enhance product quality, we have developed a quality control map to identify quality risk control points. Process quality engineers, based on product models and production line workstation information, maintain four types of information: quality control documents, common issues and countermeasures, "needto-know" lists, and technical documents. The aforementioned information is displayed in real-time on electronic boards at production line workstations. For employees experiencing job changes, the system automatically assigns "Need-to-Know" exams, and quality management personnel regularly check the exam results to prompt learning and enhance employees' awareness of product quality. The quality control map visually presents the overall status of the Company's quality management, aiding Company managers in accurately controlling the product process. Additionally, based on the quality control map, we periodically summarize key risk positions and quality risk cases, promoting a unified understanding of the importance of product quality among employees, standardizing operational procedures, and facilitating high-quality development.

Operation Process of Quality Control Map

Ouality Boards at Workstations

- Work Procedures
- Kev quality control points at workstations
- Historical failures at workstations
- Safety hazard points
- Quality Trend at workstations



- Critical risks at quality control points
- Ouality Risks at workstations
- Risks Associated with Need-to-Know knowledge and skills



 Knowledge learning andskills training

Need-to-Know

Management

- Exams
- Data Statistics



Ouality Boards at Production Lines

- Ouality Trend at production lines
- Production line personnel information

In response to emergencies such as product safety incidents, the Company has established the Accountability Management System for Major Quality Defects to standardize the emergency handling process for product safety incidents. In the event of a major quality incident, the Company will promptly initiate the emergency response mechanism for product safety incidents and strictly follow established procedures for emergency handling. Additionally, the Company ensures comprehensive reporting of emergency handling situations, as well as the losses and potential impacts resulting from the incident, to the Quality Headquarters and the Board Office within 24 hours. This allows for timely, informed decision-making to minimize the negative consequences of the incident. During the reporting period, the Company did not experience any major product safety incidents.





Customer Service

SANY Heavy Industry vigorously upholds the "Customer-first" principle, basing its approach on high-quality products and delivering outstanding, efficient services to earn customer trust. The Company strictly adheres to laws and regulations such as the Law of the People's Republic of China on the Protection of the Rights and Interests of Consumers, the Advertising Law of the People's Republic of China, and the Anti-Unfair Competition Law of the People's Republic of China, Furthermore, robust management systems to standardize service processes and enhance service quality have been established and continuously improved.

Customer Service Enhancement Initiatives

Smart Dispatch of Service Orders

Smart dispatch, process monitoring, online evaluation, and online settlement for 9 types of orders including fault repair, maintenance, and inspection.

Service Training and Certification

Service personnel are categorized into 10 skill levels, with mandatory certification for essential skills before

Service Evaluation

Assessment and incentives for customer service quality encompass satisfaction levels, complaint resolution, service efficiency, parts supply, and meeting customer demands.

Monitoring of Service Violations

A calculation model for positioning personnel and equipment is used to monitor the standardization of customer service behaviors.

Mystery Client Investigation

Monthly random visits to customer sites to conduct surveys, test service processes, and report and rectify any non-compliant behaviors.



SANY Heavy Industry has been actively constructing a digital marketing platform to enhance customer satisfaction by upgrading service digital management. In 2023, the Company continued its efforts in advancing customer satisfaction surveys, conducting activities such as service roadshows, customer demand surveys, and internet-based customer satisfaction surveys. Through active communication, the Company has maintained robust business relationships with customers and endeavored to deliver superior service experiences.

By integrating features of online parts procurement, new parts marketplace, and integrated service calls, we aim to achieve "More Accurate, Faster, and More Convenient" parts acquisition for customers.

Launching LTC⁶ with 117 optimization requirements and 3 major marketing tools (such as financing calculators, promotional toolkits, etc.) to facilitate initial collaboration within the marketing network (including online reporting, automatic attribution recognition, and performance visualization).



Establish a one-stop smart service assistant and promote remote technical support across the entire Company.

Integrate CRM, financial NC⁷ system, parts forecasting, and cloud taxation data and functionalities across multiple platforms to enable online resolution of comprehensive maintenance, service calls / technical modifications to major repairs, settlement and disbursement, and invoicing, among other business operations.

Construction of Digital Marketing Platform

We follow internal protocols such as the *Customer Complaint Procedures*, the *Service Management System*, and the *Customer Complaint Management Process: From Filing to Settlement*, establishing a robust mechanism for handling customer complaints, feedback, and prompt responses. To ensure timely feedback and opinions from customers, we have set up diverse communication and complaint channels, including a 24/7 service hotline at 4008-87-9318, online customer service on our official website, and private messages on social media platforms. In 2023, the Company received 1,096 complaints, achieving a customer satisfaction rate of 80.3% in complaint resolution.

The Company attaches great importance to customer information security and data privacy protection and is dedicated to providing customers with a premium service experience. In accordance with the *Personal Information Protection Law of the People's Republic of China*, and the Company's internal regulations such as the *Information System Classification Management System*, the *Information Security Incident Handling and Emergency Response Management System*, the *Data Accountability Management System*, the *Data Asset Classification Management Procedures*, the *Supplier Information Security Management System*, and the *Third Party Information Security Management Regulations*, we have established a robust network to ensure information security and data privacy protection. In 2023, the Company conducted one information security awareness training and examination for all employees, with a participation of over 22,389 individuals, achieving a 100% coverage rate among staff members.



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Supplier management

SANY Heavy Industry has formulated the Supplier Management System and Supplier Category Exit Process in accordance with the Law of the People's Republic of China on Tenders and Bids, Regulation on the Implementation of the Law of the People's Republic of China on Tenders and Bids, and relevant legislative provisions in the operating area. These measures establish an open, fair, and just mechanism for supplier admission, tendering, and exit, outlining the responsibilities of relevant departments in the supplier admission, evaluation, and elimination processes.

By internal protocols such as the *Supplier Evaluation Process* and the *High-Quality Risk Supplier Management Process*, we conduct a comprehensive evaluation of all stages from supplier admission, and evaluation, to supplier exit. For newly admitted suppliers, we thoroughly assess criteria such as their establishment duration, compliance with admission standards, validity of quality certifications, environmental qualifications, tax records, and business integrity. We have gradually implemented scenario-based admission controls and have completed compatibility assessments for 13 admission scenarios during the reporting period. Following evaluations, we implement a tiered management strategy based on suppliers' comprehensive capability ratings. Suppliers are categorized as strategic, premium, backup, actively exiting, and passively exiting, ensuring continuous optimization and efficient operation of the supply chain. By the end of 2023, we have completed evaluations for 560 suppliers.

We fully integrate ESG strategies across all facets of supply chain management. By implementing measures like inventory management, qualification reviews, regular assessments, and evaluations, we continuously refine the environmental performance and social responsibility of our supply chain. This proactive approach enables us to effectively identify environmental and social risks associated with our suppliers.



⁶ LTC stands for Lead to Cash, which is an enterprise operational management philosophy and an integrated business process that covers the entire journey from lead generation to cash receipt.

⁷ The NC system is a comprehensive financial information system management and control model.



SANY Heavy Industry's ESG Management Strategy for Suppliers

In the supplier admission review process, we rigorously scrutinize the environmental certificates provided by suppliers, maintaining a zero-tolerance policy towards any instances of environmental certificate forgery or expiration, and proactively taking measures to terminate relationships with non-compliant suppliers.



We require suppliers to voluntarily declare information related to social responsibility and environmental qualifications. This includes aspects such as corporate compliance, taxation, social security contributions, environmental certifications, quality certifications, financial status concerning debts, the association of shareholders and senior executives, as well as information related to the qualifications and capabilities of corporate governance.

We track the validity period of environmental certificates, quality certifications, and other relevant accreditations for suppliers already in our system. In the event of certificate expiration, we automatically freeze business transactions with the supplier, ensuring effective management of supplier ESG-related qualification documents.



We integrate specific criteria including business ethics, employee management, health and safety, energy conservation, and resource efficiency into our supplier evaluation system, promoting the establishment of a green supply chain framework.

We consider fuel consumption as a critical metric and incorporate it into our product procurement evaluations to practice green procurement.



We verify the information provided by suppliers through on-site inspections. In our performance evaluation, we have specifically included clauses related to social responsibility and sustainable development modules. This involves confirming the actual situations concerning various aspects such as labor practices, human rights, corporate culture, and overall employee satisfaction.

To effectively reduce supply chain risks, we have utilized advanced technologies such as big data and smart algorithms to establish a systematic and platform-based supplier risk control system. This system enables us to identify and address potential risks proactively, provide timely warnings for impending risks, and swiftly initiate systematic disposal mechanisms and traceability processes in the event of risk occurrence, thus ensuring the stability and sustainable development of the supply chain.

Number of suppliers of SANY Heavy Industry according to product categories in 20238

Number of Suppliers according to product categories





Supplier Communication

SANY Heavy Industry prioritizes transparent communication and open collaboration with its suppliers. Regular supplier empowerment meetings are organized to foster responsibility awareness and boost supply chain resilience. Customized training programs are tailored to supplier needs, and technological innovation cooperation is actively pursued. High-level visits are conducted regularly, promoting a progression towards mutually beneficial supplier development, from shared goals to collaborative innovation and ultimately, mutual growth.

Supplier Communication Enhancement Initiatives

Supplier Empowerment Training Program

Supplier Must-know Training Camp: covering six modules, including the Company's core values, business processes and systems, quality standards, new product development procedures, financial systems, and logistics management. Throughout the reporting period, 231 suppliers engaged in the training, totalling 313 participants. The graduation exam achieved a 100% pass rate.

Technological Innovation Cooperation

Through initiatives like the tech lecture series and innovation forums, we enhance technical innovation exchanges with alliance suppliers, creating a collaborative ecosystem.

Supplier Improvement Initiative

Using the "Supplier Evaluation System and Supplier Assistance System" and guided by the "Principles of Long-term Thinking, Improvement Mindset, and Practicality", we have assisted 56 suppliers in enhancing quality and reducing costs.

High-level Visits

High-level visits and meetings totalled over 100, fostering a multidimensional and deep cooperative environment together.

Supplier "Must-know" Empowerment Training Camp

On October 24 and 25, 2023, SANY Heavy Industry conducted the Supplier "Must-know" training camp. This training was aimed at newly onboarded production suppliers for the year 2023 who had engaged in procurement activities. It encompassed 11 courses covering the Company's history, values, procurement, quality, R&D, logistics management, etc. The objective was to facilitate a quicker understanding of the Company's business processes and systems for new suppliers, enabling them to conduct business more efficiently. The training camp reached 231 suppliers, with a total of 313 participants registering for training. The pass rate for the graduation exam was 100%.

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⁸ SANY Heavy Industry's supplier data statistics in 2023 include internally assisted suppliers but exclude those eliminated or placed on a blacklist by the end of 2023.

03

Green and Safe Operations

SANY Heavy Industry proactively embraces its "dual carbon" responsibilities, propelling a green shift in its developmental approach. We are committed to fostering low-carbon, ecofriendly modes of production and operations. Adhering to the core principle that "life and safety come first", we are on a continuous path to enhance our safety management practices. This steadfast approach has enabled us to establish a rigorous and effective Health, Safety and Environment (HSE) management system, thereby paving the way for sustainable operations.

- HSE Management System
- Environmental Protection
- **Commitment to Green Development**
- Occupational Health and Safety



















HSE Management System

At the heart of SANY Heavy Industry's operations is a relentless focus on safety and environmental stewardship. Employee health, safety in production, and environmental conservation are cornerstones of our management ethos. Guided by a philosophy of "putting people first, putting prevention first, conserving resources and protecting the environment", we have set forth stringent standards and protocols. These measures are designed to systematically identify, evaluate, and mitigate potential safety hazards, while also implementing robust strategies to cut down on pollutant discharge. Our ongoing efforts to refine the HSE management system are aimed at minimizing adverse HSE incidents and fostering sustainable growth.

Implementation Measures for the HSE Management System



Internal System Improvement

- Issue the HSE Management Manual as per ISO 14001: 2015 Requirements and Guidance for Use of Environmental Management System, ISO 45001: 2018 Requirements and Guidance for Use of Occupational Health and Safety Management System and relevant laws and regulations.
- Formulate or refine HSE procedural documents and management protocols in alignment with
 the legal and regulatory updates. In 2023, we introduced internal guidelines such as the Safety
 Visualization Work Instruction, and advanced methods for environmental factor assessment
 with the revised Environmental Factor Identification, Evaluation, and Control Procedure to
 bolster the efficiency of our HSE framework in an all-around way.



Management Structure Construction

- Centralized management: The Company's president is responsible for reviewing and approving major HSE decisions, and monitoring the occurrence of major HSE abnormal events. In 2023, SANY Heavy Industry conducted 2 president office meetings to discuss major safety production issues.
- Implementation: Establishing a Safety and Environment Committee to promote the HSE work and report progress to the board members to ensure the effective implementation of HSE management system requirements.



Performance and Target Management

- HSE goals setting: Setting annual goals to be achieved in HSE management, and require subsidiaries to develop and split up the annual HSE management goals.
- Linking HSE performance to remuneration: Incorporating HSE performance into the annual
 performance contracts of executives, and establishing the HSE Reward and Punishment
 System with a corresponding manual. The policy that salaries of employees and executives
 are adjusted according to HSE performance specifies a decrease in executives' compensation
 when poor HSE performance occurs, and an increase that when the performance meets
 requirements, to raise the management's attention to HSE and promote management level.

To ensure the compliant operation of our HSE management system, we conduct both internal and external supervision and audits on an annual basis. Any issues identified during these audits are promptly addressed to prevent the recurrence of similar problems and improve operations. Meanwhile, we are steadfast in our efforts to advance HSE management system certification at our core business operation sites. In 2023, among our 26 mainframe and components manufacturing subsidiaries, 10 subsidiaries achieved ISO 14001 environmental management system certification, accounting for 38.5% of the total. Additionally, 11 obtained ISO 45001 occupational health and safety management system certification, covering 42.3% of our operations. Furthermore, 17 subsidiaries attained GB33000 safety production standardization certification, with 10 at level two and 7 at level three, encompassing 65.4% of the business.

Auditing Situations Related to HSE at SANY Heavy Industry in 2023

Environment



External independent audits are conducted annually, complemented by internal site audits every six months and internal online audits monthly, ensuring full coverage across all factories.

Health and Safety



Annual external audits and certifications for health and safety, including certification of management systems and standardized safety production, are carried out across all factories.

Our actions are guided by the *HSE Management Manual*, which standardizes our approach to HSE work. We implement HSE management measures for self and related parties, including environmental assessment and management, hazard identification, emergency management, HSE reviews, and agreement signing, aiming to ensure the comprehensive and effective implementation of the HSE system and build a safe, healthy, and environmentally friendly workplace.

Measures for Whole-Process HSE Management

Environmental impact assessment



We conduct comprehensive assessments to evaluate potential adverse impacts and risks to the
environment throughout the project life-cycle, in line with local laws and regulations before the
project starts. We also implement sound and effective risk response measures to minimize or
eradicate adverse effects, ensuring a harmonious coexistence with the environment.

Environmental Monitoring



- Each company crafts monitoring plans tailored to its unique circumstances and establishes a robust environmental monitoring system. This system integrates various methods such as environmental monitoring, automated supervision, manual monitoring, and commissioned testing;
- We rigorously enforce adherence to emission standards, supported by third-party assessments of emission permits. In 2023, we successfully obtained 100% necessary emission permits without any violations.



"Four New" Introduction Management



- When introducing new equipment, materials, technologies, or processes (collectively referred to as the "Four New"), we meticulously identify and assess project hazards and environmental factors to ensure compliance with safety and environmental regulations:
- Comprehensive HSE training is provided before the introduction of any new processes, technologies, materials, or equipment, thereby enhancing employee safety awareness and operational efficiency;
- Standard acceptance procedures are established for projects involving the "Four New".

Emergency Response



- We proactively manage and mitigate potential environmental and safety incidents or emergencies within the Company, ensuring prompt and effective response measures;
- We develop and regularly rehearse emergency plans to bolster employee response capabilities and proficiency.

Employee Training



• We design customized training programs and competency requirements for employees in various job roles, focusing on risk management, case studies, and emergency prevention/preparedness, thus enhancing their HSE knowledge and response skills.

Stakeholder Management



- We form specialized agreements with stakeholders that specify responsibilities and effective measures for managing safety, environmental protection, fire safety, occupational health, and public security;
- Essential reviews of safety, environmental protection, and fire safety protocols are conducted by project contractors and suppliers, maintaining compliance with all relevant standards and requirements throughout the duration of the project;
- We carry out safety and environmental assessments of stakeholders, imposing economic penalties for non-compliance to effectively influence and regulate their behavior.

Case

SANY Heavy Machinery's Annual Environmental Compliance Inspection

In 2023, following local government directives, SANY Heavy Machinery conducted its annual environmental compliance inspection. This process included manual monitoring and involved accredited third-party testing agencies, which carried out extensive tests on pollutants including wastewater, exhaust gases, and volatile organic compounds. The inspection strictly followed national testing standards, such as the Comprehensive Wastewater Discharge Standard and the Comprehensive Atmospheric Pollutant Discharge Standard. The results confirmed that SANY Heavy Machinery achieved 100% compliance in its pollutant emissions, demonstrating its commitment to environmental stewardship.

Environmental Protection

SANY Heavy Industry adheres to the principle of clean production, by strengthening the control of harmful environmental emissions such as wastewater, exhaust gas, and waste to reduce pollution from the source, and improving the quality of the ecological environment while protecting biodiversity. In 2023, SANY Heavy Industry invested RMB 183 million in environmental protection.

Environmental performance of SANY Heavy Industry in 2023:



Wastewater, exhaust gas, and on-site noise emissions met 100% of standards, and all

hazardous waste was disposed of in compliance with regulations.

Exhaust Gas Management

Pollutants such as volatile organic compounds, welding/cutting fumes, exhaust gas from natural gas combustion, etc., are produced in the process of coating, welding, cutting, heating, and drying. The Company always follows laws, regulations and standards, including the Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution and the Air Pollution Prevention and Control Action Plan issued by the State Council, to implement in-house requirements for pollutant emissions strictly, and introduce advanced production technologies with low emissions to ensure legal compliance of exhaust emissions.

In 2023, we set reduction targets for exhaust gas pollutants. The VOCs emission concentration in 2023 was 0.00136 tons per million yuan of revenue, a 23% decrease from the base year with the target achieved.

Targets for reducing atmospheric pollutants

Target achievement status

Annual VOC emissions per million yuan of revenue to decrease by 10% compared to the baseline year of 2021



In 2023, we continued to improve equipment and process flows to reduce exhaust gas emissions. We use environmentally friendly coatings on the painting line, promote water-based paint electrostatic spraying to reduce the smoke and dust particles generated by traditional electrostatic spraying; improve the construction process of cleaning agents, replace the use of obsolete paint pumps for washing workpieces, adopt manual wiping and pump flushing methods, saving nearly 30% of the cleaning agent usage, and reducing VOCs by 44 kilograms per shift.

Case

VOCs Reduction Project on Painting Production Line at SANY Heavy Industry's Changsha Company

In 2023, the Changsha Company, a subsidiary of SANY Heavy Industry, completed a transformative upgrade to its production line painting process. The company switched from using traditional oil-based paints to environmentally friendly water-based electrophoretic primers, significantly increasing the utilization rate of coatings. Additionally, the introduction of innovative methods such as dry spray painting, dry filter paper boxes, and activated carbon adsorption substantially reduced emissions of VOCs. By the end of the year, these changes resulted in a reduction of VOC emissions by 73.84 tons, achieving a 94.1% reduction rate and markedly enhancing the project's environmental benefits.



Wastewater Management

Production wastewater and domestic wastewater are the main sources of wastewater discharge by SANY Heavy Industry. Wastewater pollutants primarily include chemical oxygen demand (COD) and ammonia nitrogen. While the Company manages wastewater discharge by the Water Law of the People's Republic of China, the Law of the People's Republic of China on the Prevention and Control of Water Pollution and other regulations, our subsidiaries fashion and enforce their management system for sewage disposal, and strictly control the disposal and discharge of industrial wastewater through advanced wastewater treatment techniques and on-line monitoring.

In 2023, we established a target for reducing the total volume of wastewater. By the end of the year, the wastewater discharge intensity was 5.42 tons per million in revenue, a 38% reduction compared to the base year, successfully meeting our target.

Wastewater Pollutant Reduction Targets

Target achievement status

Reduce the annual wastewater volume per million in revenue by 10% annually from the base year of 2021



Case

SANY Zhongxing Company Completed Environmental Wastewater Upgrade Project

In December 2023, SANY Zhongxing completed an upgrade project for wastewater treatment. The project involved the use of low-temperature atmospheric evaporators and condensers to concentrate wastewater effluents. The steam generated was collected by the condensers, and the resultant condensate was reused for washing parts on the production line. This process not only treated wastewater effectively but also enabled the reuse of water resources, enhancing the efficiency of wastewater management.

Waste Management

As per the Law of the People's Republic of China on Environmental Protection, Law of the People's Republic of China on Prevention and Control of Environmental Pollution by Solid Waste and other relevant regulations, SANY Heavy Industry establishes a special system to manage waste in a normalized way, including Waste Management Guideline, which is to ensure that waste of all kinds are well disposed of and keep at bay impact of waste discharge on the surrounding environment. In 2023, we further optimized our institutional framework and updated waste management policies.

In 2023, we continued to promote the switch from oil-based paint to water-based paint and reduce hazardous solid waste such as paint slags and paint barrels. Hazardous waste incurred shall be stored in a closed container to prevent re-contamination before being handed over to a certified third party for disposal.

In 2023, SANY Heavy Industry established emission reduction targets for hazardous waste. The total production of hazardous waste in 2023 was 4,845,184.50 kg, a decrease of 2.04% compared to 2022, achieving the set target.

Hazardous Waste Reduction Target

Target achievement status

2% reduction in total hazardous waste production compared to the previous year



Case

SANY Heavy Machinery Kunshan Branch's Oil-Water Separation Project for Machine Tool Cutting Fluid

During the machining process, a large amount of waste oil is mixed into the cutting fluid, floating on its surface and accelerating its deterioration, resulting in significant hazardous waste production. In December 2023, SANY Heavy Machinery Kunshan Branch completed the oil-water separation project for machine tool cutting fluid. This project employs physical separation with a processing speed of up to 1,000 liters per hour, achieving multipurpose usage and effectively reducing cutting fluid loss. It results in a reduction of over 12 tons of hazardous waste annually per single plant.



Ecological Protection

SANY Heavy Industry places high importance on biodiversity conservation, adhering to the philosophy of "respecting, complying with, and protecting nature", to minimize the impact of business operations on ecosystems. We implement effective measures to protect vital ecosystems, species, and genetic resources for the safety of ecological systems.

We strictly comply with legal requirements and conduct environmental surveys and assessments during the preparatory phases of all new construction or renovation projects. We ensure that our operation and construction activities do not encroach upon legally designated ecological protection areas9, as well as important habitats10 and regions with significant ecological functions that are crucial for the conservation of biodiversity.

Moreover, we perform a tiered assessment of environmental sensitivity at project sites. Follow-up work will be carried out after confirming that the project will not have a significant impact on ecological resources and habitats, to avoid any damage to the ecosystem as much as possible.

Pollutant Emission Data in 2023

Indicator		Unit	2023 Value
Exhaust Gas Emissions	Total exhaust gas emissions	Cubic meter	12,130,314,056.00
	SO ₂ emissions	Tonne	1.98
	NO _x emissions	Tonne	32.09
	VOCs (volatile organic compounds) emissions	Tonne	99.35
	Total soot emissions	Tonne	87.74
	Total water discharge	Tonne	397,090.35
	Biochemical oxygen demand (BOD) discharge	Kilogram	5,330.36
Wastewater Discharges	Chemical oxygen demand (COD) discharge	Kilogram	31,664.00
	Suspended solids (SS) discharge	Kilogram	7,289.25
	Ammonia nitrogen (NH ₃) discharge	Kilogram	4,204.28
Waste	Total hazardous waste discharge	Kilogram	4,845,184.50
vvaste	Total general industrial solid waste discharge	Tonne	160,941.60

Commitment to Green Development

SANY Heavy Industry actively responds to the national goals of "carbon peak and carbon neutrality", and embraces the concept of green development. We are committed to integrating green production with green living, with a focus on whole-process carbon reduction initiatives and the development of green industrial parks. Starting from the source, we strictly control carbon emissions and promote the efficient use of resources and energy, striving to create a green, low-carbon, and circular sustainable development ecosystem.

Whole-process Low-carbon Operation

Faced with the global challenges of climate change. SANY Heavy Industry is unwavering in its commitment to implementing carbon reduction measures throughout the entire production process. Our goal is to establish a green production chain that starts with carbon reduction at the source, maintains inter-connectivity throughout, and emphasizes emission reductions at every stage, thereby ensuring an efficient and environmentally friendly approach to production.

Carbon reduction from the source

Fossil fuel combustion is a major contributor to global greenhouse gas emissions. The extensive use of fossil fuel since the Industrial Revolution has intensified global warming trends, posing risks to both ecological environments and human health. SANY Heavy Industry is committed to transforming our energy infrastructure. We promote projects such as photovoltaic and proprietary hydrogen production and effectively cut emissions by bolstering the use of clean energy sources like solar and hydrogen. Additionally, adopting energy-saving measures like LED lighting helps us to reduce carbon emissions at critical points in our industrial chain.

By the end of 2023,



SANY Heavy Industry had installed photovoltaic power generation systems in 21 subsidiaries, with clean

energy usage totalling 44.8159 million kWh, proportion of clean energy utilization¹¹

accounting for 6-55%

To enhance energy management, SANY Heavy Industry establishes an energy management team to set energy consumption targets, implement energy-saving measures, and conduct feasibility studies on clean technologies. The team also performs daily inspections to monitor energy consumption at all production stages and provides weekly energy usage reports. This proactive monitoring allows us to quickly identify and address issues, optimizing energy use and minimizing our carbon footprint from the start.

In 2023, SANY Heavy Industry set energy-saving and consumption reduction targets

Target achievement status

Through digital and integrated management initiatives, reducing energy consumption in non-production areas by 13%



By digitally upgrading processes and equipment, lowering the energy consumption per RMB 10,000 of production value in production areas¹² by 10%. In 2022, this figure was RMB 44.26, which fell to RMB 39.53 in 2023, achieving a reduction of 10.7%



¹¹ The calculation method for the proportion of clean energy utilization: the ratio of photovoltaic power consumption converted into energy consumption to

⁹ Legally designated ecological protection areas: Defined or confirmed by laws, regulations, policies, and other normative documents as national parks, nature reserves, natural parks and other natural protected areas, including World Natural Heritage sites, ecological protection red lines.

¹⁰ Important habitats: These include natural concentration areas and habitats of key species, spawning grounds, foraging areas, overwintering sites, and migration pathways for significant aquatic life, as well as critical breeding grounds, stopover sites, wintering areas, and migration routes for migratory birds and other wildlife

¹² The calculation method for energy consumption per RMB 10.000 of output value in the production area; energy consumption cost incurred during the operation of the production area / the output value × 10,000



Carbon reduction via the inter-connectivity system

Clean Energy Initiatives in 2023

Phase II PV Power Plant, Changde SANY Machinery Co., Ltd.

SANY Heavy Industries' subsidiary, Changde SANY, developed the Phase II PV plant, which started to generate power and connect to the grid on June 14, 2023. The facility boasts a capacity of 1.87 MW, generating 1.65 million kWh annually, which represents 18% of its total yearly electricity needs.



Anren PV Power Plant, Zhuzhou Zhongren Machinery Manufacturing Co., Ltd.

SANY Heavy Industries' subsidiary, Anren Company launched the Anren PV plant, funded with an investment of about RMB 20 million. It connected to the grid on June 19, 2023. The plant's capacity is 5.56 MW, with annual generation reaching 4.68 million kWh, covering 90% of its yearly electricity consumption.



Shaoyang Lake Auto PV Phase II Power Station, SANY Special Vehicle Co., Ltd.

SANY Heavy Industries' subsidiary, Shaoyang Company, set up the Shaoyang Lake Auto PV Phase II station, which connected to the grid on June 25, 2023. This project has a capacity of 6.53 MW and produces 5.32 million kWh annually, amounting to 25.8% of its annual electrical usage.



Case

PV Rooftop Installation at the Cylinder Base Industrial Park

The newly established Cylinder Base Industrial Park has a rooftop area of 240,000 square meters, ideal for photovoltaic generation. In 2023, the installation of photovoltaic panels on these rooftops created a 13-megawatt distributed PV system, expected to generate 11.7 million kWh per year. This initiative not only reduces fossil fuel use and greenhouse gas emissions but also decreases electricity costs, enhances environmental quality, and achieves an annual energy cost saving of approximately RMB 500,000.



Expected to generate

11.7

million kWh per year

¥)

Achieves an annual energy cost saving of approximately RMB

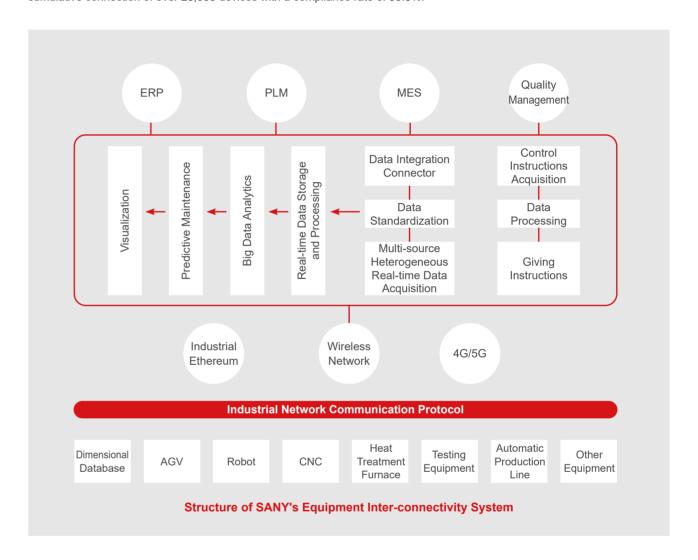
500,000

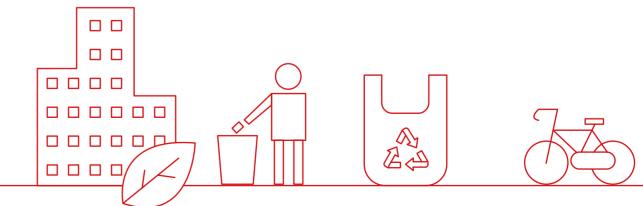


Effective grid connection of the distributed PV system at the Loude SANY cylinder base

Carbon reduction via the inter-connectivity system

SANY Heavy Industry is dedicated to green, efficient and sustainable growth. SANY Heavy Industry follows standards such as the *Code for Construction and Acceptance of Industrial Automated Meter Engineering* and the *Engineering Technical Specifications for Energy Consumption Measuring System of Large Public Buildings* to establish its equipment inter-connectivity system, to continuously promote technological advancements and smarter management of production processes. This approach not only boosts production efficiency but also minimizes energy consumption, laying a robust foundation for sustainable growth. In 2023, 2,173 energy-measuring devices were connected to our system. As of the end of the reporting period, we achieved a cumulative connection of over 25,000 devices with a compliance rate of 99.5%.





ASANY

We actively engage in energy conservation and emission reduction efforts by setting up standards for measuring and accounting for carbon emissions. Leveraging interconnected equipment technology, we capture the real-time carbon emission data, ensuring the timeliness and accuracy of data. By employing scientific statistical and analytical techniques, we delve into the carbon emission data to detect underlying patterns and potential issues, thus providing strong data support for targeted reduction strategies within the Company.

Case

SANY Heavy Industry Develops a Smart Carbon Emission Management Platform

SANY Heavy Industry has pioneered an advanced smart carbon emission management platform utilizing ROOTCLOUD technology. This platform facilitates the online collection of data for water, electricity, oil, and gas, capturing diverse energy consumption metrics both accurately and instantaneously. Moreover, the platform is designed aligning with ISO 14064 international standards and the national greenhouse gas accounting guidelines set by the National Development and Reform Commission, enabling automated carbon emissions calculations. Equipped with up-to-the-minute carbon emissions data, the Company has installed a carbon monitoring display on-site. This display vividly presents the carbon emission and reduction statuses across various sectors such as factories, processing centers, and products, thereby helping to swiftly pinpoint critical carbon emission insights and support decision-making for emission reductions.



Carbon monitoring display





In-process carbon reduction

SANY Heavy Industry integrates energy-saving measures into every facet of its production activities to deepen carbon reduction initiatives. We optimize operational workflows and strategically schedule equipment use to minimize energy wastage. The Company also embraces state-of-the-art energy-saving techniques and high-efficiency equipment, further curtailing energy consumption and carbon emissions, and propelling our commitment to sustainable development. In 2023, our energy conservation projects during operational processes yielded an estimated energy cost saving of around RMB 112 million.

SANY Heavy Industry Energy-Saving Initiatives in 2023

Project Name

Initiatives and Results

Optimization of the Painting Process

- Adjusted the painting process timing for containers, reducing individual work time by 15 minutes and improving energy efficiency by 25%-30%, saving a total of 1.324 million cubic meters of natural gas annually;
- Shifted from single to double hanging production and seasonally adjusted the drying temperature
 of the production line, shutting down parts of the hot air circulation baking, which improved
 production line efficiency and reduced energy waste, saving a total of 413,000 cubic meters of
 natural gas annually.

Enhancing Machining Efficiency

Synchronized operation with multiple power heads and optimized parameters, reducing machine
cycle time by 56.67% and decreasing electrical energy consumption during operations, applied to
41 different blade models, saving a total of 3.175 million kWh of electricity annually.

Improving
Powder
Coating
Process

 Replaced regular paint with low-temperature powder coatings, reducing natural gas consumption during the heating and curing process by approximately 53.21% compared to the same period last year, saving a total of 427,000 cubic meters of natural gas annually.

Managing
Idle Equipment
Energy
Consumption

 Used an "Equipment-Electric Meter" smart IoT model to monitor shutdown and standby energy consumption anomalies, promptly turning off high-energy consuming controllers and peripheral equipment power, saving a total of 1.93 million kWh of electricity annually.

Replacing with Energy-Efficient Gas Furnaces

 Opted for gas furnaces with high combustion efficiency and good insulation properties, replacing old brick furnaces. The new furnaces feature waste heat recovery and furnace door opening control functions, effectively reducing heat loss and lowering natural gas consumption by about 60%, saving a total of 196,000 cubic meters of natural gas annually.



The Company's Energy Resource Usage and Carbon Emissions in 2023

Indicator		Unit	2023 Value
	Purchased electricity	kWh	426,142,502.10
	Gas	Cubic meter	24,508,850.00
	Gasoline	Liter	13,648.44
Energy use	Clean energy	kWh	44,815,944.50
	Diesel	Liter	907,595.16
	Combined energy consumption ¹³	tce	89,196.51
	Scope 1 ¹⁴	tCO₂e	84,120.07
Greenhouse gas emissions	Scope 2 ¹⁵	tCO₂e	129,708.80
	Total of Scope 1 and Scope 2	tCO₂e	213,828.87



¹³ Combined consumption: The sum of all kinds of energy consumed in the production of a product or provision of a service during the statistical reporting period, as converted according to the corresponding prescribed calculation methods and units. Calculation basis: General Principles for Calculation of Combined Energy Consumption (GB/T 2589-2020).

Green Industrial Parks

SANY Heavy Industry continues to build green industrial parks, takes energy and resource-saving measures across various scenarios such as offices and accommodations, leverages digital technologies to aid in energy-saving and emission reduction within the parks, while promoting a circular economy to minimize environmental pollution. The Company endeavours to create a low-carbon, eco-friendly, and sustainable living and working environment, contributing to climate change mitigation efforts through the "SANY Power".

Initiatives Highlights of Green Industrial Parks in 2023

- Adheres to the Non-production Area Energy Consumption Management System and issued energy consumption control system such as the Notice on Promoting Energy Consumption Management in Industrial Parks, conducting grid inspections and energy consumption controls;
- Retrofitted 394 solar street lamps and installed 2,032 timer-controlled power strips, saving approximately 3.889 million kWh of electricity;
- Advanced the construction of distributed photovoltaic power stations on rooftops in nonproduction areas, with completion in Zhuzhou campus generating 3.62 million kWh annually;
- Analyzed GPS data to detect and reduce unauthorized use of company vehicles, thereby decreasing carbon emissions;
- Digitized vehicle fuel consumption data to control vehicle use based on fuel metrics;
- Implemented segmented lighting in public areas and introduced voice-activated lights to avoid unnecessary energy consumption when equipment is not in use;
- Set air conditioning temperatures based on environmental conditions to minimize energy waste from overloading while maintaining indoor comfort.



- Implemented 2.5D visualization of workstation resources on the campus, effectively improving the utilization rate of office areas;
- Maintenance requests can be submitted online via SANY+ software and other platforms like Feishu, facilitating automatic dispatch and online closure of service requests. In 2023, SANY+ was rolled out across 21 campuses nationwide, serving over 30,000 user sessions.



- Transparent dormitory and guest house resources with accurate occupancy data, utilizing paperless electronic contracts for complete online processing from booking to check-in, reducing paper usage;
- Utilized smart locks and smart utility meters to analyze abnormal data and promptly address and rectify issues, reducing energy consumption;
- Developed dormitory-related business operations online, achieving 95% automation in settlements, saving manpower and energy costs for dormitory staff.

Direct GHG emissions (Scope 1) mainly include emissions from the combustion of gasoline and diesel fuel in administrative vehicles and transportation vehicles, and emissions from the use of natural gas. Calculations are as per the *Greenhouse Gas Emissions Accounting Methodology and Reporting Guidelines for Machinery and Equipment Manufacturers (Trial Implementation)*. Fuel intensity is based on the *Energy Statistics Workbook* (Energy Division, National Bureau of Statistics, 2010).

¹⁵ Indirect GHG emissions (Scope 2) mainly include emissions from purchased electricity and purchased heating. The national grid emission factors are based on the *Notice on the 2023-2025 Work Related to the Management of Corporate Greenhouse Gas Emissions Reporting in the Power Industry.*



Integrated Resource Management Measures of Industrial Parks in 2023

Water Resource Management

- Conduct regular silent inspections to identify and seal leaks
- Install sensor faucets in washbasins in restrooms
- Adjust non-residential area water pressure

Food Waste Reduction



- Monitor inventory data to minimize food waste due to oversupply
- Advocate the "Clean Plate Campaign" to enhance employee conservation awareness

Sustainable Packaging | |



- Reduce the use of disposable packaging
- Implement packaging redesign and reuse

Case

SANY Heavy Industry's Packaging Redesign and Circular Use

Disposable packaging often uses non-renewable resources such as paper and wood, which can lead to resource wastage and environmental pollution if not properly managed. SANY Heavy Industry explores circular use of packaging, undertaking redesign initiatives for cardboard and wooden boxes. Based on the demands of packaging materials and components, disposable wooden boxes are upgraded to collar boxes and specialized tooling for circular packaging, while disposable cardboard boxes are transformed into more durable and ecofriendly iron boxes packaging for reuse, reducing costs and waste. In 2023, this initiative saved RMB 2.2 million in packaging material costs and significantly reduced the generation of general solid waste



Retrofitted recycled iron box

2023 年公司资源使用数据

Indicator		Unit	2023 Value
Water Resource Usage	Municipal Supply Water	Tonne	2,895,168.00
Packaging Material Usage	Packaging Materials	Tonne	2,942.10

Occupational Health and Safety

SANY Heavy Industry places a high priority on the health and safety of employees, suppliers, and other stakeholders, thus continuously refining its occupational health framework. The Company provides solid support across various dimensions including safety risk management, health screenings, safety equipment provision, and expansive training programs. The Company is dedicated to fostering a safe, healthy, and comfortable work environment, contributing significantly to the Company's stable growth.

Work Safety and Training

SANY Heavy Industry strictly complies with the Law of the People's Republic of China on Work Safety, the Provisions on Safety Training of Production and Operation Entities and other laws and regulations. The Company has implemented robust safety management systems such as the 3R Management System, 6S Management of 3R Data, and Accident Reporting, Investigation, and Handling System, which standardize the management of safety-related activities. Regular monthly safety self-inspections are performed to maintain a thorough and effective safety production system. In 2023, SANY Heavy Industry introduced additional internal protocols including the Team Safety Management System and Production Site Safety Management System, which detail specific safety management requirements for personnel and equipment and enforce strict actions against non-compliance to guarantee the effective execution of safety duties.

To ensure the safety of its personnel and maintain stable production, the Company adheres to the *Basic Norms for Safety Production Standardization of Enterprises* (GB/T 33000-2016) and performs hazard identification, risk assessment, risk listing, and risk alerts, aiming to proficiently manage safety risks and minimize the frequency of safety incidents. In 2023, the Company further refined its safety risk management frameworks, introducing systems such as the *Safety Risk Identification and Graded Control System* and *Daily Safety Inspection and Hidden Danger Management System*, enhancing the scrutiny and management of risks and supporting the prompt identification and correction of safety hazards.

Safety Risk Management

Hazard Identification

Departments undertake detailed, systematic, and multi-faceted hazard identifications for both regular and irregular activities, personnel, and production equipment.

Risk Assessment Risks are scientifically evaluated using the job condition hazard analysis method (LECD), with assessments based on the likelihood of hazardous events, the frequency of exposure to hazards, and the potential consequences of accidents. Risks are rated and categorized into four levels - major, high, moderate, and low - each marked by a color code (red, orange, yellow, and blue, respectively), with tailored management and monitoring strategies for each level.

Risk List

A comprehensive risk register is maintained, listing potential hazards, associated accidents, risk levels, likely locations, and mitigation strategies, and is updated as necessary.

Risk Visualization A color-coded safety map is created to illustrate risks and their locations, aligned with evacuation plans to establish practical escape routes and emergency assembly points, thereby enhancing emergency response capabilities.

Risk Warning

A Safety Visualization Work Instruction Manual is developed, identifying areas requiring safety signs, such as high-risk machinery, storage areas, and chemical handling sites, and ensuring that these signs are both prominent and clear.



Case

Utilizing the *Emergency Response Plan Management Measures* from the Ministry of Emergency Management, the Company has developed the *Emergency Preparedness and Response Management System*. This system includes tailored emergency response plans based on accident types, encompassing risk analysis, organizational roles, response procedures, on-site actions, and necessary emergency resources. The *Emergency Drill Ledger* tracks drill performance, continuously refining these plans and enhancing the company's capability to handle safety incidents effectively, thus bolstering its commitment to safe production.

SANY Heavy Industry has also established an extensive safety training program for both internal and external personnel, aimed at boosting safety awareness and skill levels among employees. The company has introduced an evaluation and incentive scheme to foster a culture of continuous learning. In 2023, the company conducted four professional exams including safety management personnel tests and comprehensive safety accountability training, significantly advancing the professionalism of safety practices. Over the year, more than 207,118 individuals participated in these safety training sessions, accumulating over 271.313 hours of instruction.

SANY Heavy Industry's Safety Training System

Internal



On-boarding Training: A minimum of four hours of group-level On-boarding safety training and testing.



Three-Level Safety Training: Company-wide, workshop, and team On-boarding includes no less than 24 hours of safety training. Developed 26 company-level, over 100 workshop-level, and over 300 team-level safety training course wares.



On-the-Job Safety Training: Establish annual safety training plans, and conduct monthly safety theme training, covering topics such as mechanical injuries, electrical injuries, confined spaces, fire prevention, and occupational health.

External



Certification Training: Use of an HSE digital platform to establish a certification list, ensuring 100% implementation of external training certifications.



Expert Training: Inviting safety experts from various local administrative law enforcement bureaus and safety expert pools to conduct diverse and rich safety and health topic training.

Safety Training at SANY Heavy Industry Changsha Park

In November 2023, SANY Heavy Industry Changsha Park invited safety experts from the Changsha County Administrative Law Enforcement Bureau to conduct a safety training session. Focused on the "Legal Responsibilities of Safety Management Personnel", law enforcement officers explained common safety production and emergency legal knowledge and answered questions raised by attendees. The training was conducted both online and offline, covering over 260 participants, including the company's full-time and part-time safety managers and workshop supervisors.



Safety training scene

Occupational Health and Safety

SANY Heavy Industry has implemented internal frameworks such as the HSE Management Manual, and HSE Incentives and Punishment System while enhancing the system of quantitative indicators for health and safety performance. The Company undertakes a thorough monthly review of HSE metrics, focusing on critical indices like the thousand-person injury rate, accident rate, occupational disease incidence, and instances of unsafe conditions. To ensure accountability, executive compensation is directly tied to health and safety performance, with specific provisions for salary reductions when performance metrics decline.

2023



Health and Safety Objectives: Thousand-person injury rate 16 at 2000

100% completion rate of three-level safety education training.

Health and Safety Outcomes: Thousand-person injury rate at 1.3%00,

100% completion rate in three-level safety education training. O occupational disease

injuries, occupational health examination compliance at

100%

¹⁶ An injury rate in a thousand workers(%) = Number of staff injured by the work/total number of staff×1,000, number of staff injured by work is the sum of deaths and staff with slight or severe injuries.



SANY Heavy Industry adopts rigorous measures in occupational disease prevention, operational compliance, and health screenings to mitigate the potential impacts on employees' physical well-being due to work environments and operational procedures. In 2023, the Company updated the *Employee Health Management System*, enhancing and detailing various medical and psychological health support initiatives, to foster a safer and healthier workplace and safeguard the physical and mental health of all employees.

Occupational Health and Safety Initiatives

Occupational Disease Prevention



Rigorous application of occupational health "simultaneous consideration" protocols for new, altered, or expanded projects, implementing pertinent occupational disease prevention efforts.

Standard Operational Protocols



Employees must adhere strictly to labor discipline, safety regulations, and operational guidelines.

Health and Safety Risk Assessments



Performed by trained teams, involving employee or representative participation, clearly stating the right to refuse tasks that threaten life or health.

Provision of a Safe Environment



Ensuring a healthy and safe workplace and living environment that meets legal standards for drinking water, sanitation, fire safety, lighting, and ventilation, and taking adequate precautions to minimize workplace hazards.

Safety Equipment Provision



Supplying protective gear that meets standards tailored to specific job conditions.

Health Screenings



Systematically organizing and performing health screenings, offering occupational health examinations before, during, and after employment for those exposed to occupational hazards, and maintaining individual records.

Psychological Support



Implementing an Employee Assistance Program (EAP), engaging professional counseling services to provide psychological support to employees.

Stakeholder Health and Safety

In addressing stakeholder health and safety, SANY Heavy Industry demonstrates a high level of professionalism and an official stance. We are committed to fostering a safe, healthy, and sustainable work environment through close collaboration with stakeholders.

The Company has established the *Stakeholder Safety, Fire, Security, and Environmental Management System* and signs *Safety Management Agreements* with stakeholders, ensuring their strict adherence to health and safety regulations while continuously enhancing health and safety measures to preempt potential occupational injuries.

Health and Safety Assurance Measures for Stakeholders



All short-term contract workers, temporary staff, and interns must sign employment contracts and complete tiered safety training. Those operating specialized equipment or engaged in specialized tasks are required to hold the appropriate certifications before work.



During the vetting process, adherence to the ISO 45001 Occupational Health and Safety Management System is evaluated. Suppliers must pass a thorough qualification review covering business licenses, company credentials, staff qualifications, transportation capabilities, and operating licenses. We also ensure that all supplier personnel receive safety training and are provided with necessary protective equipment. Additionally, a comprehensive *Safety, Environmental Protection, Fire Safety, Occupational Health, and Security Agreement* is executed.



We conduct a thorough review of all contractors' credentials. Certified operators for specialized tasks and equipment are mandatory. Contractors must rigorously follow our Company's safety, environmental, fire prevention, occupational hazards, and security regulations and receive health and safety training upon entry.



We verify all necessary qualifications and provide clear information about potential hazards at the leased premises, along with details of our safety, environmental, and fire safety protocols.



These groups are fully integrated into our safety management framework. We conduct regular safety training and periodic safety audits to ensure compliance and safety continuity.



Safety training and briefings for these personnel are managed by the appropriate supervisory departments, ensuring they are well-informed and compliant with our safety standards.

04

Workplace and Employees

SANY Heavy Industry is committed to a people-centric and diverse development philosophy, striving to create a fair and inclusive workplace that aligns employee career growth with company objectives. Through an inclusive talent strategy, a robust talent development system, and competitive compensation and benefits, the company fosters personal achievement and mutual success for both employees and the organization.

- Safeguarding Employee Rights
- Focus on Talent Growth
- Focus on Employee Welfare













Safeguarding Employee Rights

SANY Heavy Industry maintains compliance in its recruitment and employment practices, actively nurturing a diverse and equitable work environment. The company offers fair career opportunities, ensuring every employee can showcase their talents and contribute value.

Compliant Employment

SANY Heavy Industry follows the Labor Law of the People's Republic of China, the Labor Contract Law of the People's Republic of China and its implementing regulations, and the Provisions on Prohibition of Child Labor, among other relevant laws. The Company has set up detailed internal policies and procedures that enhance the human resources management system.

The Company opposes any form of child labor and forced labor, and adopts specific measures to prevent such practices. Prior to recruitment, specific training and awareness sessions are provided to HR personnel to deepen their understanding of the dangers and consequences of employing child labor and forced labor. During the recruitment, candidate identities are verified to ensure compliance with hiring standards, thereby preventing child labor from the outset. Moreover, SANY Heavy Industry defines work hours, including daily working time and rest periods, in compliance with labor laws to prevent forced labor. During the reporting period, there were no incidents of child or forced labor, and the labor contract signing rate was 100%.

Furthermore, the Company commits to providing equal opportunities for all employees at various stages of employment, including recruitment, appointment, compensation, benefits, training, promotion, resignation, and retirement. We respect and embrace the cultural diversity of our staff, striving to foster an inclusive and diverse workplace. In 2023, we introduced the *Data Platform Privacy Policy*, which upholds and protects employee privacy and prohibits any discrimination or harassment based on race, ethnicity, religion, gender, age, health, nationality, or other individual characteristics. Our efforts are dedicated to eliminating employment discrimination and ensuring workplace equality.

Talent Attraction

The Company places high importance on attracting and developing talent, and expands its recruitment channels to include a diversity of sources. By hosting multiple online presentations, utilizing public information platforms, and organizing offline job fairs, we have successfully attracted a broad range of exceptional talents from various backgrounds, thereby strengthening and expanding our team. As of the end of 2023, the Company has a total of 25,930 full-time employees, including a 10% representation of women in the executive team.

In 2023,

SANY Heavy Industry was honored as

the Forbes China Best Employer of 2023, Liepin's Extraordinary Employer of 2023, and Zhaopin's Top Employer in China for 2023



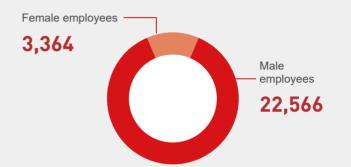


The Company's Employee data in 2023

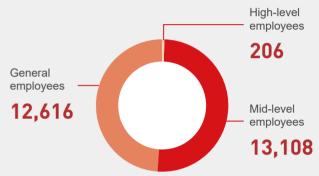
Total number of full-time employees

25,930 persons

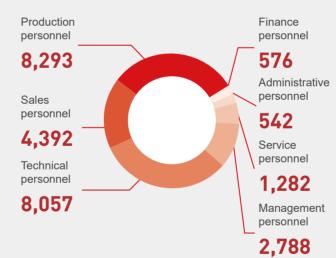
Number of employees by gender



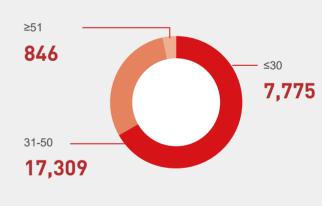
Number of employees by rank



Number of employees by role type



Number of employees by age



Representation percentage of women in the executive team



ASANY

Focus on Talent Growth

SANY Heavy Industry is committed to creating a robust talent development system assisted with a variety of career paths. We place great importance on employee career growth by offering structured training programs and clear promotional tracks. This approach improves employees' skills and competencies, helping them to reach their professional aspirations.

Training and Development

SANY Heavy Industry prioritizes employee development and provides an extensive array of training opportunities and modalities. Aligned with our strategic goals, we have established and enforced several internal regulations, including the *Training Management System*, *New Employee Training Management*, and *Training Needs Analysis Management*. These measures have created an all-around framework for talent cultivation, including both domestic and international training, capacity building for key and core roles, and cross-role development for high-potential employees, ensuring that our workforce's capabilities advance in step with the Company's needs.

SANY Heavy Industry's Talent Training System

Domestic Training

Centered around manager appointment and talent assessment mechanisms, this system aims to significantly enhance both the general and specialized skills of employees.

It includes an extensive training program covering nine key areas: business management, R&D, marketing, processes, manufacturing, quality assurance, commerce, finance, and human resources, aiming to establish a holistic, product-focused training approach.

Overseas Training

Built on expatriate assessment and ongoing support mechanisms, this training emphasizes resolving business challenges and boosting front-line operational skills.

It covers five essential dimensions for critical talents: basic knowledge training, risk management, language proficiency, and professional development, ensuring that employees perform effectively and safely in international roles.

Key Position Training This focuses on enhancing capabilities, recognizing talent, and fostering good practices. It ensures that employees in pivotal roles gain the necessary skills and knowledge through targeted training, improving their job performance and efficiency.

Core Position Training This training is dedicated to deepening cultural understanding, learning about process standards, and achieving job-related certifications. Through this system, employees in core positions will thoroughly grasp the company culture, master crucial business processes, and boost their market competitiveness with professional certifications.

We have developed specific training plans tailored to different job responsibilities and levels, precisely addressing the needs of various employee groups. Moreover, we pool advanced internal teaching resources and build an exceptional training team through regulated management and selection of trainers under the guidance of the *Instructor Management*, the *Lecturer Title Evaluation Management*, and the *Outstanding Lecturer Selection Management*.

SANY Heavy Industry Training Plan in 2023

Management Talent

Senior Managers: Develop strategic thinking from a global perspective, enhance leadership capabilities, and improve critical decision-making skills.

Mid-Level Managers: Bolster skills in business process improvement, increase team collaboration efficiency, and elevate hands-on management capabilities.

Entry-Level Managers: Improve daily operational management skills, enhance execution, and better manage employee relations.



Technical Talent

R&D Leaders: Foster innovation, boost product development efficiency, and enhance insight into market trends.

Senior Technicians: Expand specialized skills and technical expertise, rapidly apply new technologies, and address technical challenges.

Technical Operators: Hone operational techniques, adopt new processing methods, and strengthen safety consciousness.



Marketing Leaders: Forge comprehensive market strategies, effectively manage customer relationships, and boost brand value.

Sales Experts: Develop advanced sales techniques, enhance service quality, and strengthen market analysis skills.

Marketing Promoters: Improve the impact of product promotions, execute promotional strategies, and precisely identify customer needs.



International Talent

Overseas Operations Managers: Develop internationally competitive management skills, enhance cross-cultural communication, and fortify risk management.

Overseas Business Professionals: Boost operations in international markets, improve foreign language proficiency, and deepen understanding of international regulations.

Overseas Project Team Members: Increase the efficiency of international project execution, solve on-site challenges, and raise customer satisfaction levels.



Skilled Talent

Skill Leaders: Enhance technical guidance and project management skills, fostering technological innovation.

Advanced Skilled Personnel: Master advanced operational techniques, improve precision in tasks, and advance process optimization.

Production Operators: Reinforce fundamental skills and awareness of efficiency, ensuring high-quality and safe operations.





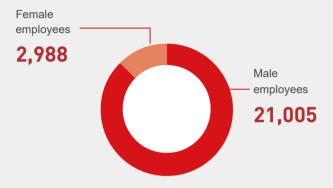
In 2023, we held 394 training sessions for 23,993 employees, with a participation rate of 93%. The average training duration per employee was 121.4 hours, totalling an expenditure of RMB 56 million.

SANY Heavy Industry Employee Training Data in 2023

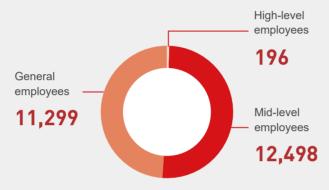
Number of employees trained

23,993 persons

Number of employees trained by gender



Number of employees trained by rank



Number of hours of training per employee

121.40 hours

Number of hours of training per employee by gender



Percentage of employees trained

92.52%

Number of hours of training per employee by rank

High-level employees	78.40
Mid-level employees	134.00
General	109.01



"Pathways to Digital Transformation" Training Program

In 2023, SANY Heavy Industry actively responded to the trend of digital transformation by launching a series of trainings titled "Pathways to Digital Transformation". This training program delved into key topics such as the optimization of corporate organizational structures, digital transformation of business processes, and strategic application of digital technologies in the digital era. Through this program, a total of 10,438 mid-to-senior level managers underwent systematic learning. They not only enhanced their understanding of the importance of digital transformation but also acquired practical skills and strategies.



"Pathways to Digital Transformation" Training Session

"Project Management" Training Program

In 2023, SANY Heavy Industry organized a specialized training program on project management to enhance the project management capabilities of its employees, unify the project management language across different levels of the Company, and enable staff to master efficient project management tools and techniques. This training was attended by 10,245 mid-to-senior level managers, and an assessment was conducted at the end of the training. This provided strong support for improving the Company's project organization and management efficiency.



"Project Management" Training Session

Case

Case



Compensation and Benefits

In its continuous effort to enrich and maintain a high-quality talent pool, SANY Heavy Industry has established a fair, equitable, and competitively market-aligned compensation and benefits incentive system. On top of basic salaries, the system includes end-of-year performance bonuses, medium and long-term equity incentive plans, profit-sharing schemes, exceptional target rewards, special bonuses, and mid-year (annual) raises, creating a floating compensation system covering all employees. To fully engage employee enthusiasm, the Company continued to implement an employee stock ownership plan (ESOP) in 2023, allowing employees to share in the Company's operational success.

2023 Employee Stock Ownership Plan

SANY Heavy Industry is committed to longterm principles, continuously enhancing the Company's incentive and restraint mechanisms, and advancing the employee stock ownership plan.

- In 2023, the Company issued an ESOP worth approximately RMB 591 million for its core technical and managerial staff, directors, supervisors, and senior management, involving 7.131 participants.
- Directors, supervisors, and senior management were granted shares worth RMB 25 million, representing 4.74% of the plan.
- Middle management, key position holders, and core business (technical) personnel were granted shares worth RMB 457 million, accounting for 95.69% of the plan.



Performance Appraisal

To objectively and fairly assess employee performance and support their continuous development, SANY Heavy Industry has established a *Performance Management System* for all employees. We have not only clarified the core philosophy of performance management but have also detailed the management methods for performance evaluation, and introduced a series of effective performance management tools

After the performance evaluation, the direct supervisor of an employee will analyze his performance, achievements, and future focuses based on the evaluation results. Together, they will plan personal growth plans and work objectives for the next assessment period, outline clear action plans, and provide necessary support.



Core Philosophy of Performance Management

The whole organization's performance system ensures every key position is set with clear objectives that consider both short-term operational results and long-term capability development.

Differentiated performance design for core management roles to evaluate performance and long-term contributions, select key indicators based on organizational functional needs, and apply a unified performance model.

Performance indicator design adheres to the "Competence + Weight + Focus" principle to achieve fairness and efficiency in performance management.

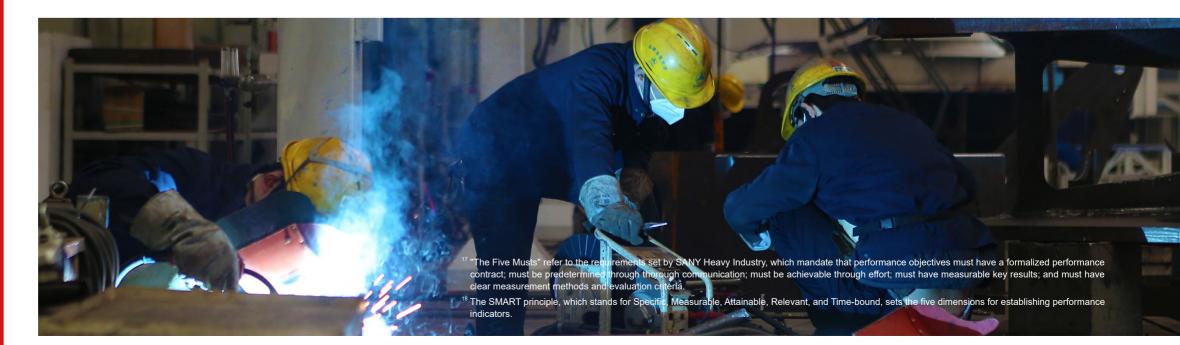
Performance Assessment Management Methods

Composed of four main parts: performance models, performance targets, performance calculations and measurements, and performance incentives.

- Performance Models: The models rely on indicators and weights, with key position indicators divided into operational performance and long-term capability, adapted to different sectors and stages of operation, ensuring a uniform model for similar positions.
- Performance Targets: The targets are divided into basic and challenging categories to prevent low-standard achievements and must adhere to the "Five Musts" and the SMART criteria established and documented through bi-directional communication.
- Performance Calculation and Measurement: We clearly define indicator parameters, calculation rules, and data sources to ensure the feasibility of evaluations.
- Performance Incentives: The incentives are aimed at fulfilling basic objectives and encouraging employees to surpass challenging goals, with additional performance scores and bonuses as incentives.

- We take advanced management tools and techniques like the Balanced Scorecard, Ishikawa diagrams, and Performance Flywheel to offer support for performance
- These tools help in setting clear performance targets, quantifying evaluation standards, identifying root causes of issues, formulating improvement measures, and tracking performance progress, ensuring that each employee's work objectives are closely aligned with the Company's strategy.

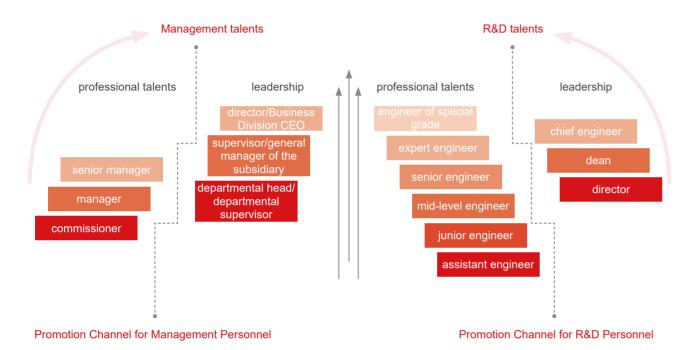
assessments.





Employee Promotion

At SANY Heavy Industry, we are committed to offering more promotion opportunities for our employees' career growth. We've implemented the *Management Personnel Rank Management System* and the *Cadre Management System*, establishing a performance-based framework for talent development and promotion. This ensures that employee contributions are recognized and rewarded both fairly and equitably. Every January and July, we kick off our promotion process, which is characterized by stringent evaluations and approvals, guaranteeing that promotion opportunities are both fair and transparent. Additionally, we offer tailored career development by role types and position features, ensuring that each employee has a tailored growth plan to fulfill their professional aspirations.



SANY Heavy Industry Career Promotion Channels

Moreover, we actively facilitate our employees' applications for professional titles by providing extensive support and convenience.

Case

Establishment of a Senior Professional Title Review Committee

In July 2023, with authorization from the Work Leadership Group of Professional Technicians Title (Professional Qualification) in Jiangsu Province, SANY Heavy Industry established a Review Committee of Senior Professional Titles of Mechanical Engineering. This Committee evaluates senior professional qualifications, including the highest senior levels, and simplifies the professional title assessment process for our staff.

Focus on Employee Welfare

SANY Heavy Industry offers a range of non-salary benefits and organizes a variety of cultural and sporting activities, fostering a healthy work-life balance for our employees. We are attentive to the needs of all our staff, particularly women, and are committed to enhancing employee satisfaction by actively engaging with and listening to their feedback.

Employee Benefits

SANY Heavy Industry provides a package of benefits beyond mere compensation, as specified in our *Employee Benefits Management System*. This system elaborates on various benefits mechanisms, ensuring comprehensive coverage for all employees. This includes the mandatory five social insurance and one housing fund for all employees, as well as commercial insurance for our overseas employees and employer liability insurance for interns.

SANY Heavy Industry Employee Benefits System

Statutory Benefits	 In accordance with national policies, we fully contribute to employees' pensions, unemployment, work-related injury, medical and maternity insurance, and housing provident fund. We ensure employees are entitled to statutory holidays, including but not limited to home leave, marriage leave, bereavement leave, maternity leave, and sick leave.
Health Checkups	 We organize specialized health checkups for high-risk occupations such as painters and welders to ensure their health. Adhering to the Labor Law of the People's Republic of China and Regulations on Work-related Injury Insurance, we achieved a 100% coverage rate for employee entry health checkups in 2023. We provide annual health checkups for eligible employees, prioritizing their health and well-being.
Additional Commercial Insurance	As per the Employee Commercial Insurance Management Measures, we provide commercial insurance for specific employee groups, including interns and foreign experts.
Employee Housing	Through the Employee Housing Management Measures, we address accommodation issues, providing dormitories for all employees.
Transportation Benefits	 Shuttle services are arranged between industrial parks for commuting employees. Special vehicles are provided on weekends and holidays. Vehicle expense subsidies and car purchase subsidies are offered to eligible employees.
Festival Gifts	 On traditional festivals such as the Spring Festival, Dragon Boat Festival, and Mid-Autumn Festival, we distribute holiday gifts to employees as per the Festival Materials Distribution Standards, bringing festive warmth to our staff.
Clothing Benefits	According to the Work Clothing Management Measures, we provide free work attire to all employees.
Catering Benefits	 We offer a monthly meal subsidy to all employees, ensuring a balanced diet. As per the High Position Restaurant Dining Management Measures, dining services are provided for eligible employees.
Employee Children's Education	We assist employees with their children's schooling and enrollment issues.
Welfare Holidays	We offer paid annual leave and an additional day of paid leave on March 1 st each year.



Case

Cultural and Sports Activities

To ensure employees get proper relaxation from their busy work schedules, the Company offers a variety of cultural and entertainment activities.

Case

Fun Sports Festival

On April 21, 2023, SANY Heavy Industry held an innovative Fun Sports Festival, allowing employees to boost team spirit with light-hearted and creative sports events. The day was filled with laughter and enjoyment, with bonuses and trophies awarded to participants who displayed energy and enthusiasm during the events.



Fun Sports Festival

Case

The 7th Employee Swimming Competition

To enrich the cultural and spiritual lives of our employees and foster a healthy sports atmosphere, the Company organized the 7th Employee Swimming Competition on July 30, 2023. Medals, honor certificates, and cash prizes were specially prepared for the winners, highlighting the Company's commitment to the physical and mental health of its employees.



The 7th Employee Swimming Competition

"SANY Romance · Dopamine" Singles Social Event

On August 19, 2023, SANY Heavy Industry organized a singles social event, providing a platform for single employees to meet and interact. The event attracted 80 participants, and they deepened mutual understanding through interactive games and discussions.



"SANY Romance · Dopamine" Singles Social Event

Case

The 4th Annual SANY Heavy Industry's Charity Run

On November 5, 2023, SANY Heavy Industry hosted a 10-kilometer charity run open to all employees to encourage their physical fitness and teamwork. Trophies, honor certificates, finisher medals, and certificates were awarded to the winning individuals and teams. This event not only fostered communication and collaboration among employees but also created a healthy and joyful work environment.



The 4th Annual SANY Heavy Industry's Charity Run

ASANY

Employee Care

At SANY Heavy Industry, we deeply value each employee's health and well-being. We've established mental health care services that provide all employees with free psychological counselling. This initiative helps them manage emotional challenges and stress, both in the workplace and in their personal lives, thus protecting their overall mental health.

In 2023, we launched a significant care initiative for employees facing serious illnesses and alleviated medical expenses for 829 participants via an annual medical mutual aid program. For the ill family members of employees, we actively organized charitable fundraisers to rally companywide support. That year, we provided financial assistance to 39 employees in need, totalling RMB 1.011 million in subsidies.

We also offer comprehensive support for our female employees, including maternity leave, parental leave, and maternity insurance, to ensure their legal rights are fully protected during pregnancy and child-rearing.

Case

Celebrating Women on International Women's Day

On March 8, 2023, SANY Heavy Industry celebrated International Women's Day with the "Flowers of Dedication - Creating Beauty Together" themed handicraft event. Female employees were invited to create DIY eternal flowers and texture paintings. Following the event, 31 lucky participants received exquisite gifts, adding a unique and enjoyable dimension to the celebration. This event not only bolstered team spirit but also demonstrated our appreciation and respect for our female employees.



International Women's Day Event

Employee Communication

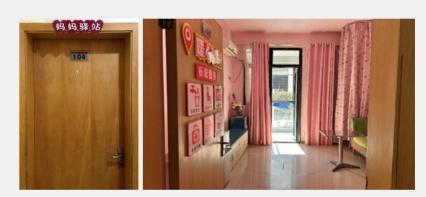
At SANY Heavy Industry, we prioritize effective communication with our employees and have implemented several measures to ensure open and smooth dialogue. We conduct monthly administrative service satisfaction surveys and forums that encompass all staff to gather their feedback and address their concerns promptly. Additionally, we are constantly expanding the channels through which employees can voice their opinions, effectively bridging the "last mile" in communication. Our management of "Employee Suggestions and Feedback" includes platforms such as the Chairman's Mailbox, email, and specialized sections on the ISANY APP, enabling rapid, multi-channel responses to employee issues.

In 2023, we carried out a satisfaction survey among our staff, and 94.81% of employees participated in the survey and shared their satisfaction feedback on the Company's systems and administrative procedures, culture, benefits, work environment, catering, accommodation, and IT services. The results revealed an overall satisfaction score of 90, indicating widespread approval of our performance in key areas and guiding future efforts to enhance and optimize the employee experience.

Case

Addressing the Needs of Working Mothers

In 2023, insights gathered from the ISANY APP's employee voice platform highlighted the challenges faced by working mothers. In response, we quickly set up a well-equipped nursing room, alleviating the concerns of working mothers and ensuring their workplace comfort.



SANY Heavy Industry Nursing Room



05

Giving Back to Society

SANY Heavy Industry is deeply committed to shouldering its social responsibilities. We firmly believe that a company's sustainable development hinges not only on economic prosperity but also on the social value it delivers. Hence, we actively participate in diverse public welfare initiatives, translating sustainable public welfare principles into tangible actions, and endeavoring to make significant contributions to societal advancement.

- Public Services and Voluntary Activities
- Empowering Rural Revitalization
- Social Rescue Engagement















Public Services and Voluntary Activities

At the core of SANY Heavy Industry's ethos lies a profound commitment to aiding others and enriching society. To effectively manage volunteer resources and public welfare endeavors, we have instituted the "SANY Public Welfare" employee volunteer platform. Through convenient channels like the ISANY APP, SANY Feishu, and our public WeChat account, employees can enlist as volunteers on this platform. To incentivize participation, we reward employees with points and recognition upon completing online and offline volunteer assignments. Furthermore, we foster a culture of volunteerism by encouraging employees to form their volunteer teams and partake in voluntary activities.



¥

The "SANY Public Welfare" platform boasts

17,002

The company's various social welfare fund donations amounted to approximately RMB

27.8720

As of December 31, 2023, the "SANY Public Welfare" platform boasts 17,002 registered volunteers, comprising 51 volunteer teams and involving 714 participants, who collectively contributed 2,266.2 hours of volunteer service. In the same year, we organized 76 public welfare and volunteer service events, drawing participation from 11,200 individuals. In 2023, the company's various social welfare fund donations amounted to approximately RMB 27.8720 million.

Case

"Explorer School Visit Officer" Initiative by SANY Foundation

In December 2023, to nurture scientific aspirations and instill career awareness among rural children, the SANY Foundation initiated the "Explorer School Visit Officer" program. Volunteers visited Yanjing Township Central Primary School in western Hunan and discussed with students there to understand their academic, personal, and emotional needs.

During the event, volunteers not only partook in flag-raising ceremonies and sports activities but also facilitated interactive sessions to impart scientific knowledge, fostering scientific literacy among the students. Furthermore, a dedicated sharing session highlighted SANY Heavy Industry's entrepreneurial journey and the charm of construction machinery, igniting the children's career aspirations and promoting vocational education.





Explorer School Visit Officer

Empowering Rural Revitalization

SANY Heavy Industry has been at the forefront of propelling rural revitalization endeavors. Leveraging our industrial prowess, we determine multifaceted revitalization strategies and propose innovative projects through the SANY Foundation. Serving as a testament to our commitment, Daotong Village in Lianyuan City, Hunan Province, acts as a focal point for implementing initiatives, such as infrastructure, healthcare, rural governance, and industrial revitalization, to catalyze holistic rural rejuvenation.

Infrastructure Enhancement

In rural areas, insufficient infrastructure poses a major obstacle to economic advancement and daily life, prompting significant demand for modernization. However, inherent constraints result in uneven infrastructure development. Therefore, improving infrastructure is essential for achieving comprehensive rural revitalization. Leveraging our strengths, we actively participate in renovating and constructing rural infrastructure, laying a solid foundation for revitalization.

Case

Longtang Lake Water Quality Improvement Project

In 2023, we overhauled Longtang Lake, a crucial water source for the village, from the following four aspects:

Reservoir seepage control: Implementing anti-seepage measures along the perimeter wall to prevent water leakage effectively.

Water purification: Installation of state-of-the-art water purification equipment and associated infrastructure to enhance water quality.

Facility construction: Establishment of a new water purification facility to safeguard equipment functionality.

Surrounding infrastructure refurbishment: Renovation of adjacent roads, installation of guardrails, and infrastructure upgrades to ensure the village's access to safe drinking water.



Longtang Lake Water Quality Improvement Project



Healthcare and Elderly Care

The issue of elderly care in rural China is a pressing societal concern, and the comprehensive revitalization of rural areas hinges on addressing the challenges in rural healthcare and elderly care. This not only impacts the well-being of the elderly population in rural areas but also significantly enhances their quality of life and sense of happiness. We are actively taking measures to contribute to the construction and improvement of rural healthcare and elderly care facilities through various means.

Case

Construction of Rural Healthcare and Elderly Care Center

In 2023, the SANY Foundation completed the construction of the Dao Tong Village Healthcare and Elderly Care Center. This center provides comprehensive and professional medical and elderly care services to all villagers. By the end of 2023, the center had provided 12,595 instances of elderly care services and 3,248 instances of mobile medical services, receiving a 100% satisfaction rating. The establishment of the healthcare and elderly care center effectively addressed the healthcare and elderly care issues in Dao Tong Village, thereby enhancing the quality of life for its residents.



Dao Tong Village Healthcare and Elderly Care Center

Case

"Age-Friendly" Renovation

The SANY Foundation initiated the "Age-Friendly" renovation project for 17 households in Dao Tong Village in August 2023 and completed the project inspection on November 28th. The project adopted personalized designs for each household, with a focus on providing support to families facing difficulties, as well as disabled and semi-disabled elderly individuals, and elderly individuals living alone. The aim was to meet the home accessibility needs of the elderly and offer them a more comfortable and secure life in their later years.





Age-Friendly Renovation of Kitchen and Bathroom

Cultural Revitalization

Cultural revitalization, integral to the overall revitalization of rural areas, includes preserving history, customs, and traditional arts, while also fostering innovation in rural cultural ecology. Acknowledging its importance, we actively support rural cultural activities and projects to cultivate harmony, stability, and prosperity within rural communities.

Case

Harvest Celebration Event

On September 23, 2023, the SANY Foundation organized a "Celebrating the Harvest in Daotong Village" event. The festivities included cultural performances, sports games, legal awareness campaigns, medical consultations, and village visits, bringing joy to the hardworking villagers. This celebration fostered a deep appreciation for agriculture, rural life, and farmers, while also uniting them in their quest for a better future. It provided significant momentum and support for the comprehensive advancement of rural revitalization.



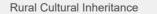
Harvest Celebration Event

Case

Rural Cultural Inheritance

In the summer of 2023, we organized the "SANY with Me, Grateful for You" series of parent-child study tours. Employee families visited Daotong Village to experience the natural beauty of the rural seasons, taste local organic crops, and gain firsthand insight into the charm of rural life. Additionally, they learned about the history of bamboo weaving culture in Daotong Village from local officials, gaining a deep appreciation for folk art and traditional craftsmanship. This experience enhanced participants' understanding and support for rural culture and intangible heritage protection.







Local Bamboo Weaving

ASANY

Case

Industrial Revitalization

Rural industrial revitalization plays a vital role in driving rural revitalization in an all-around way. It boosts economic growth, enhances farmers' living standards, and fosters harmonious rural-urban relationships. Leveraging our technological and resource advantages, we actively participate in rural industrial revitalization projects. By providing technical support, industrial guidance, and talent development, we aim to optimize and upgrade rural industries, promoting sustainable economic growth and contributing to overall rural revitalization.

In Daotong Village, we have introduced advanced ecological agricultural technologies and management practices, such as organic fertilizers, soil and water quality testing, and "zero chemical additives" field management. By offering precise agricultural solutions, we have achieved natural, healthy, and flavorful crop growth. The innovative application of these technologies and management strategies has significantly enhanced crop quality and generated substantial economic benefits for local farmers, facilitating the transformation and modernization of agricultural production methods.

Case

Establishment of a Strawberry Planting Industry Demonstration Base

In 2023, leveraging our industry demonstration base, we formed a mutually beneficial partnership with the village collective economy. We invested over 600,000 RMB to expand 11 acres of high-standard steel frame greenhouses for strawberry cultivation. Additionally, we constructed a new agricultural processing plant and cold storage facilities to further strengthen the agricultural industry chain, increasing the collective income of the village and creating more job opportunities for residents.











View of the Strawberry Planting Base

Education Revitalization

Revitalizing education is crucial for holistic rural development, significantly enhancing the growth potential and talent development in these areas. By providing high-quality educational resources, we not only raise the cultural standards of rural communities but also develop vital talents for their rejuvenation. We are committed to promoting fairness and innovation in rural education by leveraging strengths from the engineering machinery sector. In alignment with the "Vocational Education On-Site Engineer Special Training Program," we partner with the SANY Foundation to advance the "Explorer Education" initiative. This project offers high-quality, inclusive technical and engineering education through hands-on technical activities. These encourage learners to engage in immersive, creative experiences, fostering engineering thinking and boosting scientific literacy.

Optimization of Explorer Education Project

In 2023, the SANY Foundation's Explorer Education project refined its curriculum framework, developed standardized course offerings, and partnered with 210 institutions across 21 provinces. The initiative trained over 500 teachers who now implement Explorer Education across China, benefiting more than 21,000 students with over 174,400 hours of class. These enhancements led to an impressive average course completion rate of 87.5% for the year. Additionally, the satisfaction rate among teachers regarding the course content and training averaged 9 out of 10.



Explorer Education curriculum and materials kit

Case

Participation of Explorer Education Project in the 2023 International Technical Education Association Annual Conference

In 2023, the Explorer project launched by the SANY Foundation made an appearance at the 2023 International Technical Education Association Annual Conference, showcasing experiences conducted in Chinese rural areas and communities to nearly 500 global engineering and science education practitioners and researchers. Attendees were briefed on the project's innovation and practicality, demonstrating its significant role in promoting science and technology education and community development.









Explorer Education showcased at the 2023 International Technical Education Association Annual Conference

Case

Scientific Literacy Training for Rural Teachers

On September 18, 2023, we invited a leading figure in the field of science education from Nanjing to conduct a one-day scientific literacy training for 44 relevant teachers from over 30 local primary schools in Wuxi. This training, which integrated front-line teaching experience, shared practical aspects of starting science courses and how to conduct region-specific scientific literacy education. This training, not only did it broaden the teaching horizons of teachers in Wuxi, but it also injected new vitality into rural education.



Scientific Literacy Training for Rural Teachers



Social Rescue Engagement

SANY Heavy Industry recognizes the critical need for rapid and effective responses to natural disasters and emergencies. Leveraging our strengths, we actively participate in rescue missions by providing technical and equipment support for disaster relief and reconstruction. Additionally, based on our extensive experience, we develop comprehensive rescue protocols for

engineering machinery and conduct thorough training. This ensures our rescue teams consistently display high professionalism and efficiency in every operation.

Morocco On September 9, 2023, a 6.9-magnitude earthquake hit Morocco, causing significant destruction. SANY quickly dispatched rescue teams and equipment to Sidi Hssaine, the hardest-hit area, initiating swift rescue operations and working to restore vital connections for disaster relief.

W. Committee

Disaster Relief in Morocco

Turkey

On February 6, 2023, a devastating 7.8-magnitude earthquake struck Turkey. In response, the SANY Foundation deployed a team comprising structural collapse rescue experts and local employees with engineering machinery to the disaster zone. They managed to search an area of 6,000 square meters (covering 8 buildings), rescuing one survivor and discovering 22 casualties.



Earthquake Rescue in Turkey

China-Gansu

On October 24, 2023, a sudden 3.1-magnitude earthquake jolted northern Gansu. The SANY engineering machinery rescue team was immediately sent to the area, where they located 7 missing persons, helped excavate and transport 172,000 cubic meters of silt, constructed 260 meters of emergency access roads, and filled in 650 cubic meters of stone. Additionally, SANY donated 2,000 emergency rescue kits to the affected residents, containing food, drinking water, warm clothing, and essential daily supplies to meet their urgent needs.



Emergency Disaster Relief in Gansu

China - North China

In late July 2023, Typhoon Dusurei hit North China, triggering significant precipitation disasters in the Beijing-Tianjin-Hebei area. The SANY Engineering Machinery Rescue Team swiftly responded with effective rescue operations. We evacuated more than 470 individuals, provided urgent assistance to five emergency patients, helped manage the discharge of over 80,000 cubic meters of sewage, and distributed upwards of 200 boxes of emergency supplies.



Rainstorm and Flood Disaster Relief in the Beijing-Tianjin-Hebei Region

China - Guangdong

On September 5, 2023, a sudden and severe rainstorm led to flooding and mountain collapses in Xinyi City, Maoming, Guangdong Province. In response, SANY rapidly deployed two excavators and forklifts to Qianpai Town, the area most affected by the disaster. Their mission was to clear obstructed roads and undertake rescue operations, crucially helping to restore essential lifelines for the villagers.



Rainstorm Disaster Rescue in Xinyi



Case

Publishing Standards for Engineering Machinery Rescue Teams

In 2023, drawing upon our extensive experience in disaster relief and rescue operations, the SANY Foundation took the lead in proposing two standards for engineering machinery rescue teams to the China Association for Disaster Prevention: the Guidelines for Collaborative Training of Engineering Machinery Rescue Teams and the Minimum Requirements for Participation of Engineering Machinery in Rescue Missions. These standards are designed to optimize the utilization of engineering machinery in rescue efforts, enhance emergency response effectiveness, mitigate rescuerelated risks, foster technological advancements, and standardize industry practices. Ultimately, they serve to advance the field of emergency rescue and contribute significantly to its ongoing development.



Publishing Standards for Engineering Machinery Rescue Teams

Case

Specific Training for SANY Engineering Machinery Rescue Team

We handpicked team members from our global workforce to compose the SANY Engineering Machinery Rescue Team. To ensure their proficiency in rescue operations, we provide systematic training sessions for the team every week. In 2023 alone, we conducted a total of 25 training sessions, comprising 6 in-person and 19 virtual sessions, with a participation count of 500 trainees. Many members of the SANY Engineering Machinery Rescue Team acquired national vocational qualification certificates for emergency rescue personnel, WAFA (Wilderness Advanced First Aid) certifications, as well as swift water and coastal rescue endorsements. This robust training regimen guarantees that our team members adhere to the highest standards in engineering machinery rescue, enabling us to swiftly mobilize and respond to large-scale disasters, both domestically and internationally, based on the distribution of affected areas.







Training and Teaching for Rescue Teams

Key Quantitative Performance Indicators

Environmental

Indicator	Unit	2023	
ISO 14001 certification coverage	%	38.5	
Significant environmental incident	Number	0	
Atmospheric pollutants			
Total exhaust gas emissions	m³	12,130,314,056.00	
SO ₂ emissions	Tonne	1.98	
NO _x emissions	Tonne	32.09	
VOCs (volatile organic compounds) emissions	Tonne	99.35	
Total soot emissions	Tonne	87.74	
Water contaminants			
Total water discharge	Tonne	397,090.35	
Biochemical oxygen demand (BOD) discharge	Kilogram	5,330.36	
Chemical oxygen demand (COD) discharge	Kilogram	31,664.00	
Suspended solids (SS) discharge	Kilogram	7,289.25	
Ammonia (NH ₃) discharge	Kilogram	4,204.28	
Solid waste			
Total hazardous waste discharge	Kilogram	4,845,184.50	
Total general industrial solid waste discharge	Tonne	160,941.60	
Energy/resource consumption	•		
Purchased electricity	kWh	426,142,502.10	
Gas	m³	24,508,850.00	
Gasoline	Liter	13,648.44	
Clean energy (solar electricity)	kWh	44,815,944.50	
Diesel	Liter	907,595.16	
Combined energy consumption	tce	89,196.51	
Municipal water supply	Tonne	2,895,168.00	
GHG emissions			
Scope 1: Direct GHG emissions	tCO ₂ e	84,120.07	
Scope 2: Indirect GHG emissions	tCO ₂ e	129,708.80	
Total GHG emissions	tCO ₂ e	213,828.87	
Packaging material consumption	•		
Packaging material used	Tonne	2,942.10	



Social

Indicator	Unit	2023	
Employees			
Number of employees	Person	25,930	
Number of employees, by gender			
Male	Person	22,566	
Female	Person	3,364	
Number of employees, by rank			
High-level employees	Person	206	
Mid-level employees	Person	13,108	
General employees	Person	12,616	
Number of employees, by role type			
Production personnel	Person	8,293	
Sales personnel	Person	4,392	
Technical personnel	Person	8,057	
Finance personnel	Person	576	
Administrative personnel	Person	542	
Service personnel	Person	1,282	
Management personnel	Person	2,788	
Number of employees, by age group			
30 and below	Person	7,775	
31-50	Person	17,309	
51 and above	Person	846	
Development and training			
Employees trained	Person	23,993	
Number of employees trained, by gender			
Male employees	Person	21,005	
Female employees	Person	2,988	
Number of employees trained, by rank			
High-level employees	Person	196	
Mid-level employees	Person	12,498	
General employees	Person	11,299	
Average number of hours of training for employees	Hour	121.40	

Indicator	Unit	2023	
Average number of hours of training for employees, by gender			
Male employees	Hour	122.10	
Female employees	Hour	116.70	
Average number of hours of training for employees, by rank			
High-level employees	Hour	78.40	
Mid-level employees	Hour	134.00	
General employees	Hour	109.01	
Health and safety			
ISO 45001 certification coverage	%	42.3	
Injury rate in a thousand workers	%	1.3	
Completion rate for third-level safety education training	%	100	
Occupational disease	Person	0	
Coverage of occupational health checkup for those on professional posts	%	100	
Attendance of health and safety training	Person-time	207,118	
Total health and safety training hours	Hour	271,313	
Supply chain management			
Number of suppliers	Number	7,784	
Suppliers, by product category			
Production (procurement of raw and auxiliary materials) suppliers	Number	3,223	
Non-production (project procurement) suppliers	Number	669	
General suppliers	Number	1,190	
Specialized suppliers	Number	2,702	
Quality management			
ISO 9001 or IATF 16949 certification coverage	%	23	
R&D and innovation			
R&D and innovation	RMB 100 million	61.01	
Patent applications	Number	1,533	
Patents granted	Number	854	
Computer software copyrights granted	Number	225	



Indicator	Unit	2023	
Customer services			
Customer satisfaction	%	80.3	
Customer complaints	Number	1,096	
Community			
Community investment	RMB 10,000	2,787.20	

Governance

Indicator	Unit or description	2023
Number of risk management training sessions	Number	8
Employees covered by risk management training	Person	1,035
Suppliers covered by integrity and compliance tests	Number	1,538
Percentage of suppliers signing supplier integrity agreement/ statement	%	100

GRI Index

Statement of use: SANY Heavy Industry has reported the information cited in this GRI content index for the period of January 1, 2022 to December 31, 2022 with reference to the GRI Standards.

GRI 1 used: GRI 1: Foundation 2021

GRI STANDARD		LOCATION
GRI 2: General Disclosures	2021	
2-1	Organizational details	P5-P6
2-2	Entities included in the organization's sustainability reporting	P6
2-3	Reporting period, frequency and contact point	P1-P2
2-6	Activities, value chain and other business relationships	P8-P9
2-7	Employees	P73-P74
2-8	Workers who are not employees	P70
2-9	Governance structure and composition	P25
2-10	Nomination and selection of the highest governance body	P25-P26
2-11	Chair of the highest governance body	P25
2-12	Role of the highest governance body in overseeing the management of impacts	P9, P26-P28
2-14	Role of the highest governance body in sustainability reporting	P25-P28
2-15	Conflicts of interest	P29-P30
2-16	Communication of critical concerns	P9-P10
2-17	Collective knowledge of the highest governance body	P34
2-18	Evaluation of the performance of the highest governance body	P28, P51
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