



2023

NARI Technology Co., Ltd.

Environmental, Social and Governance (ESG) Report

Introduction

This is the second environmental, social, and governance (ESG) report and the 12th corporate social responsibility (CSR) report of NARI Technology Co., Ltd. ("NARI" or "the Company") since 2012. Following the principles of being objective, standard, transparent, and comprehensive, it discloses the Company's management philosophy, practices, and performance from the perspective of governance, environment, and social responsibility in 2023 in detail. The Company commits that there is no false record or mis leading statement in the Report and takes responsibility for the authenticity, accuracy, and integrity of the Report. The Report is released upon the confirmation of the Board of Directors.

Scope of Organization

The scope of organization of the Report covers the Company, subordinate companies, and all of its branch companies and subsidiaries.

Scope of Time

The Report is released annually. It covers the period spanning from January 1 to December 31, 2023. To improve the Report's integrity or comparability, some contents are traced back or extended properly.

Reference Standards

Guidelines to the Central State-owned Enterprises Directly Under the Central Government on Fulfilling Corporate Social Responsibilities issued by the State-owned Assets Supervision and Administration Commission of the State Council (SASAC)

Reference Indicator System for Listed Companies Controlled by Central State-owned Enterprises to Prepare ESG Reports issued by the State-owned Assets Supervision and Administration Commission of the State Council (SASAC)

Guidelines No. 1 of Shanghai Stock Exchange for Self-regulation of Listed Companies — Standardized Operation issued by

ISO 26000:2010 Guidance on Social Responsibility issued by the International Organization for Standardization (ISO)

GRI Sustainability Reporting Standards (GRI Standards) issued by the Global Reporting Initiative (GRI)

GB/T 36001-2015 Guidance on Social Responsibility Reporting issued by the Standardization Administration of the P.R.C. (SAC)

Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises (CASS-ESG 5.0) issued by the Chinese Academy of Social Sciences (CASS)

UN Sustainable Development Goals (SDGs)

Data Specification

The financial data in the Report are from the Annual Financial Report and official documents of NARI Technology Co., Ltd. Unless otherwise stated, the currency amounts mentioned in the Report are measured in RMB.

Terminology

For the sake of clarity, the terms "we", "the Company" and "NARI" in the Report all refer to "NARI Technology Co., Ltd."

Access

The Report is available in both printed and electronic formats. The electronic version can be downloaded from <http://www.naritech.cn/>. If you need a hard copy of the Report or have any questions or suggestions regarding its contents, please contact us:

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Message from the Chairman

In the wake of the passage of time, the year 2023 comes to an end amidst our resolute strides. Throughout this year, confronted with a myriad of challenges and pressures arising from the intricacies of the global economy and the rapid evolution of technologies and industrial landscapes, among other uncertainties, we have assumed the mantle of a socially responsible enterprise, collaborated closely with all stakeholders to address various difficulties, and successfully achieved our annual objectives, with key performance indicators reaching unprecedented heights, reinforcing and propelling the trajectory of high-quality development.

We pursue reliable operations and robust growth by improving both ethical standards and capabilities, fully embodying NARI's philosophy of modern governance. Our efforts include refining our corporate governance mechanism to align with modern enterprise system requirements, which involves clearly defining the rights and responsibilities of the General Meeting of Shareholders, Board of Directors, Board of Supervisors, and executives, and enhancing protocols for the selection and appointment of the Company's leaders. Additionally, we have further established the ESG Committee to integrate sustainability into daily management and operations to foster innovation in our business model and optimize operational efficiency. Furthermore, we have continued to refine our compliance and risk management systems under the guiding principle of ethical management, ensuring adherence to ethical business practices, enhancing management transparency, and establishing a solid foundation for the Company's transformation, upgrading, and pursuit of high-quality development. In 2023, the Company earned inclusion in the long lists of Technical Reform Model SOEs and the ESG Pioneer Index Top 100 Central SOEs by the SASAC.

We uphold the principles of nature and recognize the ecosystem as the fundamental source of life, remaining steadfast in realizing NARI's vision of green growth. To accomplish our goals of achieving carbon peaking

and carbon neutrality and to establish an innovative electrical power system, we have been actively engaged in Climate Action initiatives and, leveraging our advanced technologies, reliable equipment, and quality services, have integrated more clean energy sources into the grid to advance energy transformation and carbon management practices. We have also spearheaded the widespread adoption of low-carbon, emission reduction, and energy conservation technologies. Notably, we have achieved significant milestones in the large-scale deployment and application of a series of new-generation systems, including power dispatching, centralized control, power consumption data collection, and power spot market systems. Furthermore, we have accelerated breakthroughs in strategic emerging industries such as offshore wind power and energy storage. In addition, we have implemented low carbon operation plan, guided by the energy conservation and environment protection ethos of "actively fulfilling corporate social responsibilities through energy conservation-based efficiency improvement and green development", and formulated corresponding annual objectives, which have been meticulously delineated, tracked, and assessed at each organizational level, ensuring the effective implementation of all environmental protection measures. In 2023, the Company was honored with the titles of "National Model Green Factory" and "Nanjing Model Enterprise in Water Conservation".

We uphold the highest ethical standards while harnessing the wealth of knowledge available in today's digital and intelligent age to fortify our brand with a focus on quality and integrity. We have embraced an innovation-driven development strategy, establishing a comprehensive three-tier technical system encompassing "field, sub-field, and specialty". Our approaches include a roadmap designed to systematically address real-world challenges through our research and development endeavors and refined mechanisms for cultivating innovative talents, thereby making breakthroughs and original contributions in critical areas such as UHV transmission, flexible transmission, safety and stability of

large electric systems, electric dispatch networks, and relay protection, embodying a pioneering spirit and fostering innovative thinking. Furthermore, we have put the spirit of craftsmanship into practice, prioritizing safety and quality to continually improve the quality of our products and services. Through initiatives such as "eight standards", we have refined our quality assurance system, ensuring the delivery of robust technological solutions, reliable products, and quality services, ultimately culminating in the establishment of a corporate identity synonymous with high-quality standards recognized both domestically and internationally. As of the end of 2023, the Company led the publication of 15 IEC standards, 1 IEEE standard, and 3 CIGRE technical reports in areas of EV charging and battery swapping, power grid dispatching and power generation. Altogether, we led the development of 30 IEC/IEEE/CIGRE technical standards and reports, showcasing China's leading technical expertise and standardization efforts on a global scale. In 2023 alone, the Company won 169 scientific and technological awards, including 123 provincial and ministerial awards, along with 88 quality awards.

We remain steadfast in pursuing our overarching goals and actively contribute to the nation's prosperity and well-being by fulfilling our corporate social responsibilities guided by the principle of "co-building and sharing". We have continued to uphold a people-centered development approach, emphasizing the values of common prosperity and win-win cooperation. This commitment extends to sharing the fruits of our achievements with our employees, local communities, and other stakeholders. To translate our commitments to employee welfare and personal growth into tangible reality, we have offered diversified medium and long-term incentive programs as comprehensive health benefits by establishing diversified training systems and optimizing career paths. Furthermore, aligned with China's strategic initiatives such as the Belt and Road Initiative and other regional development strategies and plans, we have been actively engaged in upstream and downstream supply chain management, and

continued to deepen our collaborations with industry partners to co-build a sustainable industrial ecosystem. We have also continued to improve our work and presence in various public welfare programs and initiatives, including emergency rescue, disaster relief, and rural revitalization efforts, thereby strengthening our bonds with communities and contributing to enhancing the overall quality of life for all people. In 2023, the Company organized 306 volunteer activities, totaling up to 7986 hours of service.

As the river of time flows unabated, we remain unwavering in our pursuit of progress. The battle trumpet call to embark on a new journey toward a new era has sounded. NARI will continue to persist in our mission to innovate the power system landscape and achieve the dual carbon goals, guided by our corporate ethos of "go beyond and strive for excellence", staying true to our original aspiration. Through relentless innovation, we aim to propel industry development and foster market prosperity, building ourselves into a "World-class, Internet of Energy-Based, Leading High-tech Enterprise", support the advancement of the New Type of Power System paradigm, and make substantial contributions to the sustainable development of the economy, society, and environment.

NARI Technology Co., Ltd.

Shan Shewu, Chairman

About Us

Company Profile

NARI is a leading enterprise in China's energy, power, and industrial control sectors, recognized globally as a premier provider of integrated solutions for Internet of Energy (IoE) technology, and one of the Technical Reform Model SOEs designated by the SASAC. The Company specializes in the advancement of measurement control, digital convergence, power electronics, and related technologies, providing a range of software and hardware products alongside integrated solutions tailored for various industries, including energy, electric power, municipal and public utilities, energy conservation and environmental protection, water conservancy and utilities, rail traffic, as well as industrial and mining sectors. Our products and services currently find applications across China and extend to over 100 countries and territories worldwide. The Company has also earned numerous accolades and distinctions, including recognition as a "Key High-Tech Enterprise of the National Torch Program" and a "Key Software Enterprise of the National Blueprint", with software products being lauded as among the "Top 10 Innovative Software Products in China".

At present, there is a robust emergence of a new phase in industrial transformation, driving the advancement of high-end, intelligent, and green evolution within traditional industries. This impetus underscores

the imperative for advancements in innovative power systems and new energy systems, as well as the increasingly pronounced imperatives for energy and electric power security, digital energy transformation, high-quality new energy development, and new industrialization. Moreover, the trend toward cross-border integration and development of different industries is gaining clarity. To align with these shifts in the industrial landscape, optimize industrial layout, enhance resource allocation capabilities, improve managerial efficacy, and refine customer service, the Company has undertaken a restructuring and realignment of its operations, centered on four key business segments: smart grid, data and energy integration, low-carbon energy, and IIOT, aiming to promote the seamless integration of digital technologies (e.g., artificial intelligence, edge computing, digital twins, blockchain, and security protocols), advanced communication technologies, and control technologies, with energy and electric power technologies (e.g., flexible DC, renewable energy integration, and coordinated control of "source, grid, load, and storage"), thereby augmenting core competencies. Presently, the Company has ascended to a leading listed company with total assets of RMB 86.087 billion, annual revenue of RMB 51.573 billion, and market value exceeding RMB 200 billion.



Our products and services
have a reach extending
across China and

Over
100
countries and
territories



Total assets

RMB
860.87
billion



Annual revenue

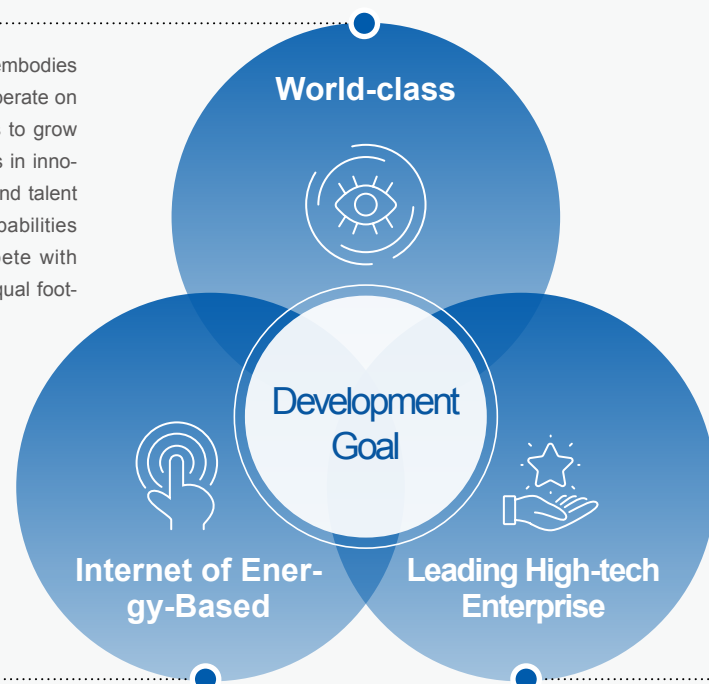
RMB
515.73
billion

Development Goal



Development Goal: Building a "World-class, Internet of Energy-Based, Leading High-tech Enterprise"

The pursuit of "world-class" embodies our aspiration to think and operate on a global scale, propelling us to grow our comprehensive strengths in innovation, industrial influence, and talent cultivation, fostering our capabilities and competencies to compete with global industry leaders on equal footing.



The "Internet of Energy" serves as our primary business focus, directing our strategies toward key responsibilities and tasks while facilitating proactive adaptation to industry changes. We are committed to spearheading the development of the Internet of Energy and showcasing our value.

The pursuit of "leading high-tech enterprise" is a fundamental approach guiding our business development, prioritizing technological advancements as the primary catalyst. This entails dedicating ourselves to pioneering original and leading technological breakthroughs, cultivating and securing a broader array of key technologies, and maintaining leadership in technological research and development within the energy and electric power sectors.

Complete all early-stage preparations and establish the prototype of a "World-class, Internet of Energy-Based, Leading High-tech Enterprise", providing more reliable safety and security measures, more advanced technological guidance, and more cost-efficient deliverables to the grid. These efforts drive the transition toward clean and low-carbon energy, fostering contributions to economic and social development.

By 2025

Cultivate a mature, world-class enterprise distinguished by high-quality products and services, a high-value and high-performing brand, leading-edge innovation capabilities, and modern corporate governance practices.

By 2030

Build a comprehensive "World-class, Internet of Energy-Based, Leading High-tech Enterprise".

By 2035

Essence of Development Goal

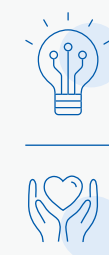
Build NARI into a responsible enterprise with a strong sense of patriotism

We will uphold the "Top Priorities of the Country" as a guiding principle, actively participating in and serving major national strategies, and striving to position NARI as a benchmark enterprise within China's electric power equipment industry. We also aim to establish NARI or NR as internationally renowned brands and solidify the Company's reputation as the most reliable partner for all customers. Demonstrating unwavering dedication to fulfilling our social responsibilities, we are also willing to spearhead coordinated development among all upstream and downstream enterprises, positioning NARI as a key driver in advancing the green, low-carbon energy transformation and fostering economic and social development.



Build NARI into an innovative enterprise maintaining industry leadership

We will position technological innovation as NARI's hallmark, driving industrial upgrading through innovation initiatives and leveraging industrial development to foster R&D capabilities, thereby facilitating high-quality enterprise development driven by technology. We also aim to harness the technological innovation system, characterized by open innovation, collaborative efforts, and joint innovation within the industrial chain, to achieve substantial milestones, ultimately positioning NARI as an important source of pioneering original technology within the energy and electric power sectors.



We will continuously seek vitality, impetus, and benefits from changes, overcoming bottlenecks constraining high-quality development by challenging conventional thinking and actions and liberating ourselves from reliance on established approaches. We will also fully leverage the market mechanisms to optimize resource allocation and facilitate efficient flow, combination, and value-added benefits, positioning NARI as a benchmark enterprise driving state-owned enterprise reform through self-innovation and continuous self-improvement.

We intend to build a community of shared development conducive to the growth of both the organization and individuals, extending the benefits derived from enterprise growth to a broader base of employees, which entails enhancing workspace comfort, thereby garnering greater industry respect. We will also ensure continuous introduction of high-quality talent into NARI, fully and effectively unleashing their potential, and strive to imbue all stakeholders with a heightened sense of achievement, security, and commitment, making NARI an appealing destination for talented individuals seeking personal and professional success.

Build NARI into an agile enterprise proactively embracing changes

Build NARI into a fulfilling enterprise fostering mutual growth with its employees

Organizational Structure



Industry Associations We Join

Name of the associations	Our Role
IEC SC 8C "Network Management in Interconnected Electric Power Systems"	Secretariat
IEC SyC SET "Sustainable Electrified Transportation"	Secretariat
Committee of Power System Automation of Chinese Society for Electrical Engineering (CSEE)	Secretariat
Technical Committee on Protection and Control of New Energy Power System of China Energy Research Society	Secretariat
Technical Committee on Multi-energy Complementary and Hydropower Optimal Operation of China Energy Research Society	Secretariat
Technical Committee on Power Source-Grid-Load-Storage Collaborative Operation and Control of China Energy Research Society	Secretariat
China Chamber of Commerce for Import and Export of Machinery and Electronic Products	Member
China Federation of Electronics and Information Industry	Member
China Nuclear Energy Association	Member
China Association of Metros	Member
China International Contractors Association	Member
China Security & Protection Industry Association	Member
National Association of Financial Market Institutional Investors	Member
China Association for Public Companies	Director
Jiangsu Society for Electrical Engineering	Executive Director
Jiangsu Electrotechnical Society	Executive Director
Jiangsu Province Renewable Energy Industry Association	Deputy Director-General
Jiangsu Association for Public Companies	Vice Chairman
Committee of Power System Automation of Jiangsu Society for Electrical Engineering	Secretariat
Shanghai Civil Engineering Society	Member
Nanjing Mass Transit Industry Association	Deputy Director-General
Nanjing Association of Foreign Economic and Technical Cooperation	Executive Vice President

Social Recognition and Honors

Prizes	Awarded Projects
Gold Award at the 48th International Exhibition of Inventions of Geneva	Flexible control device for low-voltage distribution network (photovoltaic mate)
First Prize for Financial Management Innovation Achievement of SOE in 2023 (at the 9th Annual Conference of SOE Management)	"Digital Taxation" intelligent control system
First Prize for Quality Management Innovation Achievement of Electric Power Industry in 2023	Construction and implementation of management mechanism for production-research integration of electricity utilization terminal equipment
First Prize for Quality Technology Innovation, granted by China Association for Water and Electricity Quality Management	Construction and implementation of management mechanism for production-research integration of electricity utilization terminal equipment
First Prize for Quality Technology Innovation, granted by China Association for Water and Electricity Quality Management	Development and application of digital quality management system driven by full-factor integration
First Prize of Scientific and Technological Progress Award, granted by China Electrotechnical Society	Key technologies and engineering applications of customized high-voltage and high-power IGBT chips and devices
First Prize of China Electric Power Scientific and Technological Award	Development and application of key technologies and devices for synchronized phasor measurement and operation control in complex distribution networks
First Prize of China Electric Power Scientific and Technological Award	IEC 63119 Information Exchange for Electric Vehicle Charging Roaming Service" and its application
First Prize of Beijing Scientific and Technological Progress Award	Key technologies and applications of large-scale new energy flexible DC transmission
First Prize of Jiangsu Provincial Scientific and Technological Progress Award	Key technologies and large-scale applications of endogenous defense against threats to industrial control of the electric power industry
First Prize of Jiangsu Provincial Scientific and Technological Progress Award	Key technologies and applications of safe, economical, and high-quality control of flexible DC interconnected distribution networks
First Prize of Jiangsu Provincial Scientific and Technological Progress Award	Key technologies and industrialization of high-frequency electrical energy measurement and control systems covering over 10 million users
First Prize of Jiangsu Provincial Scientific and Technological Progress Award	High-efficiency power electronic transformer and its safe and reliable operation technology
First Prize of Zhejiang Provincial Scientific and Technological Progress Award	Key technologies and applications of sensor multi-physical field security detection
First Prize of Gansu Provincial Scientific and Technological Progress Award	Technologies and applications of wide-area coordination, optimization, operation, and efficient accommodation of wind and solar power storage and transmission at large-scale new energy facilities
First Prize of Shanxi Provincial Scientific and Technological Award	Key technologies and applications of interactive protection system for regional power grid at new energy source end

Prizes	Awarded by
National Excellent Engineer Team	The Central Committee of the Communist Party of China and the State Council
National Intelligent Manufacturing Demonstration Factory (NR Electric Co., Ltd.)	The Ministry of Industry and Information Technology of the P.R.C. and other four ministries
Special Assessment Champion of the 8th Batch of National-level Manufacturers (NARI-TECH Nanjing Control System Co., Ltd. and Changzhou Borui Electric Power Automation Equipment Co., Ltd.)	The Ministry of Industry and Information Technology of the P.R.C.
SOEs ESG Pioneer 100 Index	The State-owned Assets Supervision and Administration Commission of the State Council (SASAC)
China's Top 100 ESG Listed Companies	China Media Group
China's Top 30 Technological Innovation Pioneers Among ESG Listed Companies	China Media Group
2023 CSR Bull Award "ESG Pioneer Enterprise"	CSR Cloud Research Institute
CSI China Reform Central-SOEs ESG Growth 100 Index	China Securities Index Co., Ltd.
2023 Wind Top 100 Listed Companies of ESG Best Practices in China	Wind ESG Rating
China Reform ESG Assessment - Grade A	China Reform
2022-2023 Disclosure Work Assessment - Grade A	Shanghai Stock Exchange
2022 Best Practice and Excellent Case Award for Annual Report Briefings	China Association for Public Companies (CAPCO)
Corporate Governance Best Practice Award	China Association for Public Companies (CAPCO)
2023 Best Practice and Excellent Case Award for Board of Directors Among Listed Company	China Association for Public Companies (CAPCO)
Outstanding Entrepreneur Award	China Securities Journal
Highest Investment Potential Award	China Securities Journal



Empower The New Type of Power System with Digital and Intelligent Technologies

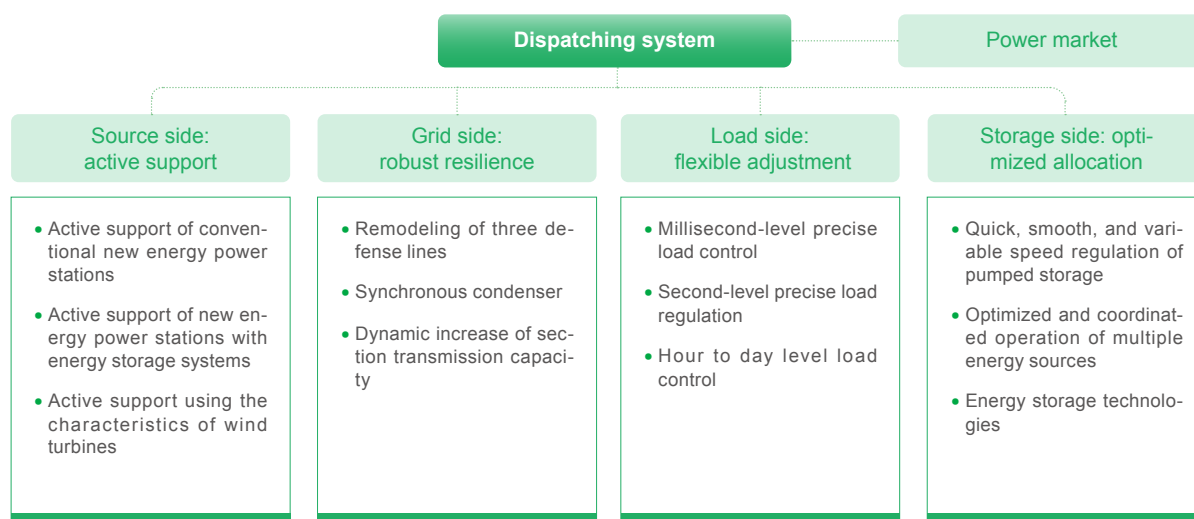
Take the Lead in Implementing the Net Zero Goals

Special Topic

Building a New Type of Power System is not only an essential component of the energy and power transformation, but also an important way to achieve the "dual carbon" goals (carbon peaking and carbon neutrality). NARI takes actions actively and quickly to fully support The New Type of Power System and serve the "dual carbon" goals of China based on our advanced technologies, reliable equipment, and high-quality services by guaranteeing the safe and stable operation of the large-scale power grid and focusing on the power system with high percentages of new energy and power electronic equipment, the low-carbon energy transformation and the green development of society.

Play a leading role in supporting the New Type of Power System

NARI has devoted greater efforts to developing new technologies and new devices for the power system with high percentages of new energy and power electronic equipment, to enhance our capacity for active support at the power source side, robust resilience at the power grid side, flexible adjustment at the load side, optimized allocation at the energy storage side, and dispatching of power market resources. We have also made full use of the dispatching system as a "command center" in controlling the operation of the large-scale power grid, realizing the intelligent and agile dispatching upon the integration of source, grid, load, and storage and ensuring the safe, efficient, clean and low-carbon operation of the power grid.



Source side

We have provided end-to-end integrated solutions for offshore and onshore wind power and photovoltaic power generation, which are widely used in major Chinese power utilities. We have developed a panoramic control system for wind-solar-storage combined power generation, which reduces the impact of fluctuated and random properties of new energy sources on the power grid. We have developed a new energy panoramic monitoring system and a comprehensive control system for new energy source grid connections to facilitate the safe and stable operation of new energy sources.

Grid side

We have remodeled the three defense lines to build a security defense system based on risk criteria. We have innovated an on-line calculation and management system for section stability limit during dynamic capacity increase, which can increase the section transmission capacity. We have developed a "short-circuit current online precise calculation and aided decision-making system", to solve the conflicts between the grid structure and voltage support, and improve the operation efficiency along with the power grid safety.

Load side

We have aggregated various resources at the load side by time and space into an adjustable load resources pool, which can cope with wind/solar curtailment, high system power shortage, and other problems arising after a large number of new energy sources are connected to the grid. We have developed a precise load control system with functions such as frequency regulation, virtual peak shaving, and well-organized electricity consumption, which has been applied in Jiangsu, Zhejiang, Hunan, and other areas in China, to enhance the friendly interaction between the power grid and load.

Storage side

We have created an integrated solution for high-voltage energy storage units, an integrated control and automation solution for pumped-storage power stations, and an integrated solution for electrochemical energy storage systems. We have offered many core products such as independently controllable energy storage inverters for different power levels, intelligent energy management systems for energy storage power stations, and primary frequency regulation systems. We have deeply participated in many grid-side energy storage projects, such as Nanjing Jiangbei Station, and a great number of demonstration projects of power generation, consumption, and microgrid energy storage.

Power market

We have developed a new-generation regulation system and achieved seamless matching between market clearing results and dispatching strategies, to effectively deal with the spot transactions and improve resource dispatching. We have developed a virtual power plant management platform and aggregated operation system and created the first provincial-level virtual power plant support platform in China with "demand response - provincial/interprovincial auxiliary services". We have developed the first interprovincial spot electricity purchase-aided decision-making system in China, which has been widely applied in more than ten provinces and cities in China, including Beijing, northern Hebei, eastern Mongolia, and Hunan.



Case

Research on key technologies and equipment for 1500V 3450kW energy storage converter

Facing the increasingly homogeneous competition of centralized energy storage converters, NARI has conducted an in-depth market survey on various energy storage converter manufacturers and integrated its technological advantages, optimized control algorithms, improved underlying configurations, and innovatively developed a new type of high-capacity energy storage converter with higher integration and better applicability. Our product is 21.9% smaller and 4% lighter than other similar products on the market, significantly reducing the costs and increasing the competitive advantages. At present,

our energy storage inverters have been successfully applied in the Chengde Energy Storage Project in Hebei Province, and the Nanjing High-Speed Gear Factory. We have also upgraded the grid-forming (GFM) technology based upon this hardware, to actively support the operation of low short-circuit ratio microgrids and adapt to the needs for connecting more new energy sources. This technology has been applied in the Yangzhong Grid-forming Energy Storage Microgrid Project and the Yancheng Dafeng Grid-forming Energy Storage Microgrid Project.



Chengde 15MW/30MWh Energy Storage Project in Hebei Province



Yangzhong 2MW Grid-forming Energy Storage Microgrid Project



Case

The first protection device supporting the New Type of Power System in Jiangsu was put into operation

On June 16, 2023, two sets of newly upgraded main transformer relay protection devices supported by NARI were officially put into operation at the 500kV Jineng Substation in Jiangsu Province, which means that the new power system relay protection devices were connected to the grid in Jiangsu for the first time. The 500kV Jineng Substation is located in Rudong County, Jiangsu Province. It is the first dedicated offshore wind power boosting and transmission station in Jiangsu Province and an important part of the Jiangsu offshore wind power transmission project. This substation provides 17.5TWh of clean energy to Nantong every year. The newly upgraded transformer protection devices, which were put into operation at the 500kV Jineng Substation, are designed with differential protection

technology immune to harmonic characteristics and transformer protection technology based on excitation inductance parameter recognition. These technologies improve the speed and reliability of protection in the event of internal faults and minor inter-turn faults in the transformer in the context of power electronic harmonics, and in turn, enhance the performance of existing transformer protection. This is a breakthrough in improving the relay protection performance of the New Type of Power System with the increasing penetration of new energy sources and is also the deliverable for the major special research project "Research on the Architecture and Key Technologies of New Power System Relay Protection" undertaken by NARI.



Aerial view of 500kV Jineng Substation



Mid-year meeting in 2023 to promote major technological breakthroughs for the New Type of Power System



Case

The "Construction and Demonstrative Application of Pure New Energy Power System Based on Grid-forming Technologies" Project in Ejina was put into operation successfully

In June 2023, NARI worked closely with Inner Mongolia Power (Group) Co., Ltd. to successfully implement the "source + grid + load + storage" integrated demonstration project in Ejina covering a power supply range of 114,600 square kilometers. It is the world's first "source + grid + load + storage" New Type of Power System demonstration project with independent operation capability and low capacity of short circuits, crossing voltage classes and covering a wide area. To solve the problems and difficulties in the operation of the power system with high percentages of new energy sources, NARI has proposed an approach containing steady-state optimization, rapid coordination, and emergency stability control and developed a "source + grid + load + storage"

integrated solution based on the grid-forming technologies, including a complete set of devices. This project has realized the black start of wide-area large-scale grid pure new energy sources for the first time; realized the full-area off-grid medium and long-term operation for the first time; and realized the manual short-circuit fault ride-through for the first time. It has realized the stable operation of grid-forming energy storage allowing the proportion of new energy sources ranging from 0% to 100% and can be seamlessly connected to or disconnected from the main grid, laying the core technological foundation for large-scale accommodation of new energy sources and providing a new model for the construction of the New Type of Power System across China.



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The successful construction of this New Type of Power System is a meaningful exploration from theory to practice during the construction of the new energy source system in China. This project is second to none in China in terms of wide coverage, high practicability, and favorable effect, and there are almost no similar projects in other countries. Its success in the integration of technologies and the demonstration of feasibility are crucial to such endeavors across China in the future.

—Highly appraised by the assessment panel represented by five academicians including Chen Shijie and Guo Jianbo

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Do a good job in serving the low-carbon energy transformation with practical solutions

To promote the low-carbon energy transformation, NARI has carried out systematic low-carbon transformation planning and carbon management practices; kept on deepening the research on the framework of Cyber-Physical-Social System in Energy (CPSSE); tackled the key issues in the research paradigm, simulation tools, and coordinated optimization enabling the power system to actively support the energy transformation; and developed a dynamic simulation platform for large energy systems based on the "energy + electricity + emission + social behavior" hybrid simulation technology, to effectively serve the development of national and regional energy transformation.

Build the carbon management system

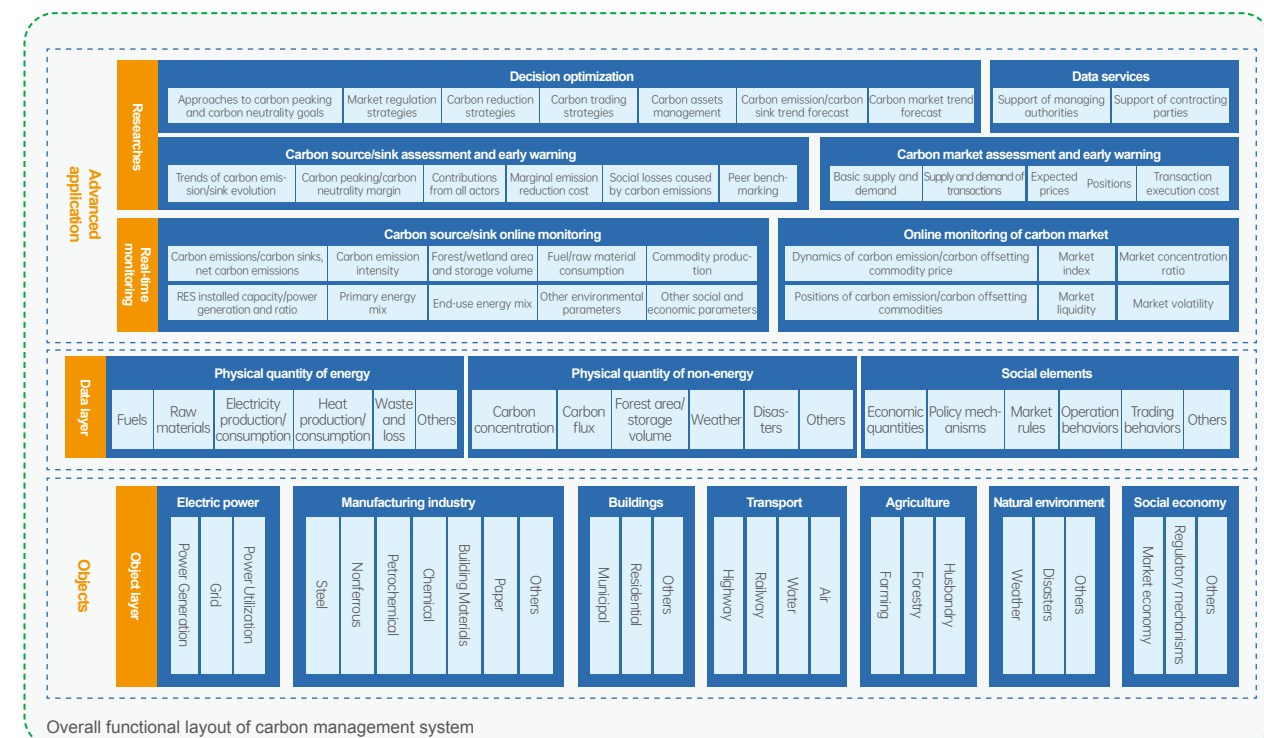
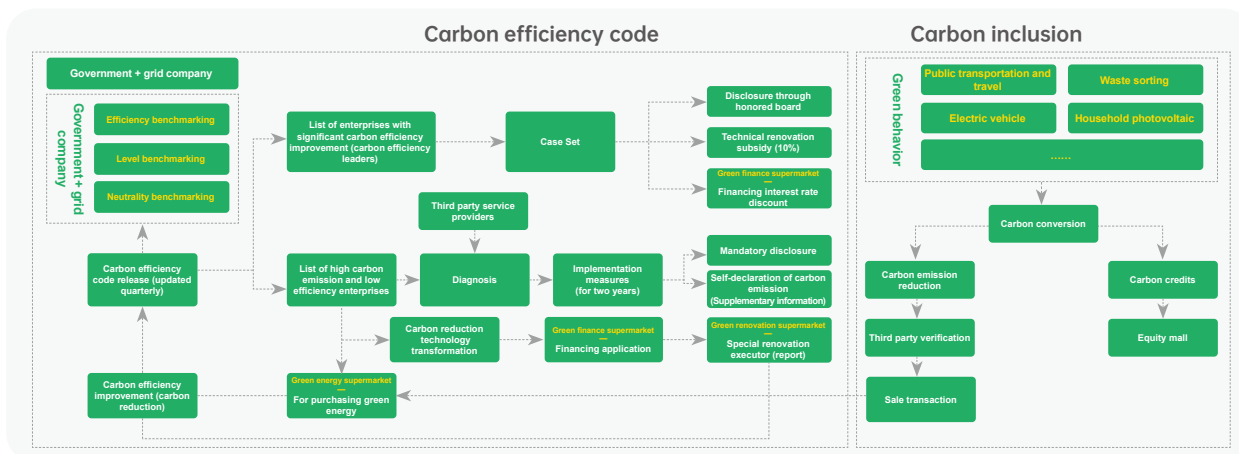
We have fully leveraged the pivot role of the power grid platform and the carbon emission characterization value of energy and power model data to support the monitoring, evaluation, early warning, and forecast of carbon emissions, carbon sinks, and carbon markets by governments at all levels, power grid companies, power generation companies, industrial parks, and related entities, as well as the planning of the "dual carbon" path. The relevant products have been implemented and applied in Guizhou Province and other regions.

Support new energy cloud

We have expanded the carbon neutrality support functions of the new energy cloud platform and established four major systematic applications, including carbon credibility, carbon value, carbon research, and carbon ecology, to provide services to the Zhejiang government and tens of thousands of enterprises and extend credit for the enterprises to get green finance loans.

Case Keep on carrying out innovative demonstrations of carbon neutrality management to guide the green and low-carbon transformation of the entire society

In 2023, NARI continued providing carbon reduction management services for enterprises, institutions, and individuals and supporting State Grid Zhejiang Electric Power and State Grid Huzhou Power Supply Company in building carbon neutrality support service platforms based on new energy clouds. We developed the scenarios for applying the carbon efficiency codes in the manufacturing industry, covering 49,345 manufacturing enterprises and 206 financial institutions in Zhejiang Province, which has helped the enterprises obtain their green finance loans of more than RMB 65 billion, facilitated the green electricity purchase transactions up to 1.86TWh, provided services to the government for conducting scientific evaluations on the enterprise carbon emission levels, and helped the manufacturing enterprises above the specified size improve their quality and efficiency of carbon management. We launched the carbon-inclusive application scenarios covering residential life, by which we gathered over 15 million pieces of data related to, for example, public transport, electric vehicle-based mobility, household photovoltaic power generation, and waste sorting, benefited more than 20,000 household photovoltaic owners, and organized large-scale carbon neutrality activities to reduce carbon emissions by 405.2 tons, guiding the residents to participate in the low-carbon actions in their daily lives.



Application in the manufacturing enterprise

We have deployed our applications in Jiuquan Iron & Steel Group Limited Company (JISCO) and realized the panoramic monitoring of end-to-end carbon emissions of JISCO's power sector from source, grid, and load, as well as the lean assessment and diagnosis of green and low-carbon capabilities. This effectively supports JISCO in scientifically making the power generation and operation plans for its affiliated power generation enterprises, realizes the lean energy and carbon asset management and decision-making, assists them in formulating the strategies for participating in carbon market transactions, and provides a quantitative analysis basis for implementing the "dual carbon" schedule, roadmap and blueprint.

Application in the power grid operator

We have deployed our applications in the Zhengding power grid in Shijiazhuang, realized the lean evaluation on the indirect carbon emissions from electricity consumption by the consumers within the distribution area in a scenario with a high proportion of distributed photovoltaic power sources connected to the grid, and conducted quantitative analyses on the carbon reduction benefits from the distribution network actively supporting new energy accommodation, to provide decision-making basis for low-carbon planning, low-carbon operation, sharing of green and low-carbon benefits, and promoting the interactions between the electricity and carbon market mechanisms.

Application in the high-tech park

We have deployed our applications in the Haidian Environmental Protection Science and Technology Park in Beijing and realized the lean evaluation on the green and low-carbon capabilities and grades of all object enterprises within the park, to provide data basis and evaluation criteria for building a zero-carbon park, support the park to plan their development paths and "dual carbon" approaches scientifically for building a model park in achieving the "dual carbon" goals.



Take the initiative in promoting the green development of society

The *Guidelines for Further Electric Energy Substitution* jointly issued by ten government agencies, including the National Development and Reform Commission and the National Energy Administration of China requires promoting the electric energy substitution and integrated energy services and increasing the proportion of electricity in the end-use consumption. NARI has actively responded to these policies, enhanced its integrated energy services, promoted the electric energy substitution widely and deeply, expanded the applications of energy saving, emission reduction, and energy efficiency improvement technologies, and made active efforts to promote the green, low-carbon and circular development and serve the electrification of energy consumption.

Integrated energy services

With mature integrated energy management and control systems, regional Internet of Energy technologies, and application laboratories, we can provide technical consulting, equipment supply, system integration, planning, design, operation and maintenance proxy, and other services, including distributed energy sources, regional energy interconnection, energy-saving renovation and electric energy substitution, etc. We have developed a provincial-level smart energy service platform and various end-use energy control systems such as smart parks and smart buildings, to provide energy efficiency diagnosis, multi-energy complementation, electricity sales agent, energy management, and other services, which have been widely applied in Shandong, Shanxi, Fujian, and other areas.

Promoting electric energy substitution

We have deepened the research on the "ChaoJi" charging system to provide high-power charging solutions. We have developed intelligent integrated shore power piles, ship-shore cable management systems, and other core equipment used in the Three Gorges Dam area of the Yangtze River, including the upstream and downstream port berths. We have developed advanced applications and energy routers for energy optimization in the transformer service areas, provided support to the pilot energy optimization projects in high-quality transformer service areas in, for example, Jiangsu and Anhui, and promoted the local accommodation of clean energy sources. We have developed intelligent energy consumption products for electrification in rural regions and completed the construction of rural area electrification demonstration projects in many counties, such as Shouguang, to empower rural revitalization.

Case Our building energy and carbon monitoring system empowered the building of green Xiong'an

The "Zero Carbon Smart Park" project of State Grid Xiong'an New Area Power Dispatching Center is one of the earliest zero-carbon building technology demonstration projects filed to the Ministry of Housing and Urban-Rural Development in 2022. With the technological advantages and rich experience in the field of integrated energy control, NARI has independently developed a building energy and carbon monitoring system which is about to be put into operation in this project, helping to create a smart and flexibly interactive model for zero-carbon/near-zero energy consumption buildings. The building energy and carbon monitoring system can perceive and integrate physical equipment and its status information on site, intelligently control the global and local lighting, air conditioning, office equipment, and other systems of the building, and further improve the integrated energy utilization efficiency of the building through energy/carbon detection and energy efficiency analysis, to reduce carbon emissions of the building.

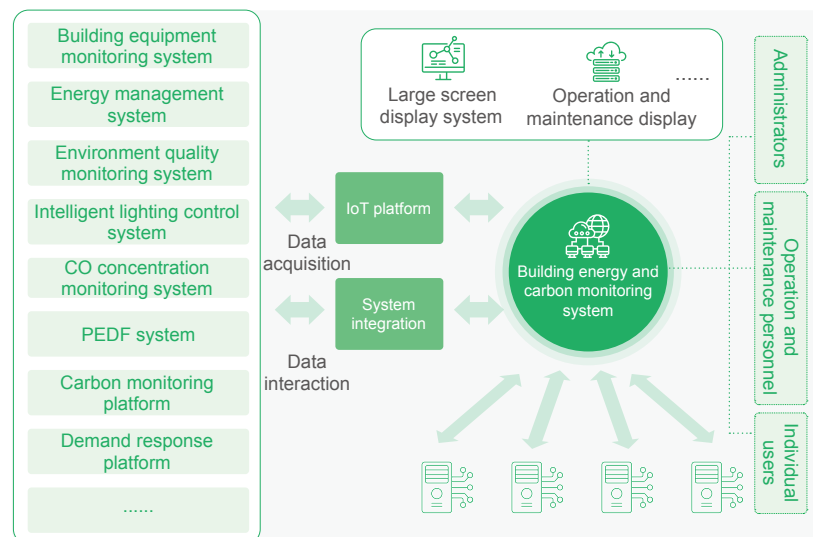


Diagram of building energy and carbon monitoring system

Case

The Shore Power Project Phase I of the International Passenger Transport Center undertaken by NARI was put into operation at the North Bund of Shanghai

On November 23, 2023, the Shore Power Project Phase I of State Grid Shanghai Integrated Energy Services Co., Ltd., undertaken by NARI, was officially put into operation at the North Bund of Shanghai. This project is equipped with 16 shore charging devices in total, including 14 double-port charging piles, one triple-port charging pile, and one quadruple-port charging pile, to meet the power charging needs of different types of ships, such as inland passenger ships, sightseeing ships, small yachts, and pilot ships. With an output capacity of 2,000 kilowatts, it can provide charging services for 35 ships at the same time and is expected to reduce CO2 emissions by 9,607 tons annually, helping the International Passenger Transport Center upgrade the North Bund into a "green port".



Case

The largest centralized electric vehicle charging station in Tianjin Binhai New Area undertaken by NARI was completed and put into operation

On July 21, 2023, the largest centralized electric vehicle charging station in Tianjin Binhai New Area, Tianjin Binhai Yujiapu Dual Carbon Innovation Charging Station, undertaken by NARI, was completed and put into operation. This station is located to the southwest of the Cultural Center in Binhai New Area, covering an area of over 4,000 square meters. It has 77 charging spaces and can serve transportation hubs, commercial squares, and more than 10 residential areas around it. After this station is put into operation, it is expected the annual charging capacity will exceed 2 million kWh and that carbon emissions can be reduced by 2,500 tons per year. This station has adopted, for the first time in China, two sets of megawatt-level IGBT (Insulated Gate Bipolar Transistor) integrated power supply devices, to enable the dynamic and reasonable allocation of power consumption capacity among 18 charging piles across the station, greatly improving the charging efficiency.



01 Practitioner Take the Lead in Promoting Scientific Operation

Improving the business management level is essential to the high-quality development of an enterprise. NARI keeps on exploring and perfecting its corporate governance structure, establishes and refines its internal management and risk control mechanisms, further standardizes its management and operation processes upon integrity and self-discipline, makes efforts to improve the information disclosure and investor relations management, and continuously enhances its corporate governance and value creation.

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Perfecting Corporate Governance

NARI adheres to fulfilling its responsibilities in accordance with all applicable laws and regulations based on the integrity, compliance, and transparency principles, is devoted to upgrading its corporate governance structure, improves its internal management policies and rules, strengthens its internal control and risk management, and continuously improves its modern corporate governance and high-quality growth, to ensure the sustainable development of the Company.

Honors and Credentials

We won the

"Corporate Governance Best Practice Award"

of the China Association for Public Companies

We were listed by the SASAC as one of the

"Technical Reform Model SOEs"

Lawful operation

In strict accordance with the requirements of the *Company Law of the P.R.C.*, the *Securities Law of the P.R.C.*, the *Code of Corporate Governance for Listed Companies*, and other applicable laws and regulations enacted by the China Securities Regulatory Commission, NARI has established a clear hierarchical corporate governance structure consisting of the General Meeting of Shareholders, Board of Directors, Board of Supervisors, executive management, and functional departments, to form a scientific and effective corporate governance system and workflow, fully leverage the role of each stakeholder of corporate governance in major decision-making, business management, and supervision, and ensure the stable and efficient operation of the Company.

Governance performance of the General Meeting of Shareholders, Board of Directors, and Board of Supervisors

General Meetings of Shareholders	Deliberated proposals	Meetings of the Board of Directors	Deliberated proposals
3	19	12	75
Meetings of the Board of Supervisors	Deliberated proposals		
9	19		

Perfect the modern corporate governance structure

Checklist-based and transparent management

Establish the "multiple checklists to one form" accountability system covering 93 task items to clearly define the authorities and responsibilities.

Standardized and refined management

Establish the Board of Directors in the Company and all of its subsidiaries which need such governance bodies to enhance the operational and managerial compliance.

Optimize governance measures



Improve systems

We have sorted out the latest regulatory provisions in the applicable laws and regulations and formulated and revised 14 corporate governance systems, including the *Articles of Association*, the *Regulations on Related Transaction Decisions*, the *Regulations on External Guarantees*, the *Regulations on Liability*, and the *Regulations on External Donations*.



Strengthen the building of professional committees under the Board of Directors

We have added the Technology Innovation Committee under the Board of Directors to strengthen the role of the Board of Directors in leading technological innovation through the development of strategies. We have deepened the Environmental, Social and Governance (ESG) work and separated the ESG functions from the Strategy Committee to newly establish the ESG Committee responsible for building the ESG system, discussing major ESG issues, and identifying ESG-related risks. We have renamed the Audit Committee to the Audit and Risk Management Committee newly vested with risk management and law-based governance to enhance the corporate governance efficiency.



Strengthen the supervision and performance evaluation by the Board of Directors

The Board of Directors has exercised decision-making power on major issues of the Company in accordance with legal procedures and the *Articles of Association* and strengthened the supervision of the executives. We have optimized the authorization management of the Board of Directors and formulated the *Regulations on the Delegation of Powers by the Board of Directors*, in order to clarify the procedures for the delegation of any powers by the Board of Directors to the chairman and executives in connection with any matters, refine the list of authorized matters, establish mechanisms for evaluating the power exercise reports and tracking the implementation of resolutions, and ensure that the delegation decisions of the Board of Directors are reasonable and controllable. The executives have implemented the resolutions under an effective supervision mechanism and are required to report regularly to the Board of Directors on the implementation of the resolutions, to ensure that all decisions are executed orderly.



Improve the Directors' abilities to perform their duties

The Company prepares the *Brief Report on Market Value Dynamics and Regulatory Policies of Listed Companies* every month to inform the "key minorities", including the directors, supervisors, and executives, of the dynamics and changes in the capital market and applicable regulatory rules, and organized the "key minorities" to participate in the training on the reform of independent director system, corporate governance, and other topics, to improve their abilities to perform their duties.

General Meeting of Shareholders

The Company convenes the General Meeting of Shareholders in strict accordance with the *Company Law of the P.R.C.*, *Articles of Association*, *Rules of Procedures for the General Meeting of Shareholders*, and other relevant regulations and requirements to ensure that all shareholders have equal rights to know and make decisions on major matters, thus protecting their legitimate rights and interests. On the premise of a legal and valid General Meeting of Shareholders, we have utilized online voting channels to facilitate the participation of minority shareholders in voting and make their rights fully executed.

Board of Directors

The Company selects and appoints directors in strict accordance with the *Articles of Association*, with the number of directors and their composition conforming to the applicable laws and regulations. All directors faithfully, honestly, and diligently perform their duties in accordance with the *Articles of Association* and the *Rules of Procedures for the Board of Directors*. They also take an active part in relevant knowledge training and familiarize themselves with applicable laws and regulations. Independent directors independently perform their duties and powers in accordance with the *Rules for Independent Directors of Listed Companies*, the *Articles of Association*, and the *Working System for Independent Directors* and other regulations, and give independent opinions on the matters involving the interests of small and medium-sized investors, such as related transactions, to ensure the standardized corporate operation. In 2023, we formulated a plan for the implementation of the powers of the Board of Directors, the regulations on the delegation of power by the Board of Directors, and the standardized reporting procedures for the Board of Directors, to strictly track and supervise the implementation of the resolutions made by the Board of Directors, improve the reports by the Board of Directors, and improve the fulfillment of duties by all Directors, and ultimately to enhance the capabilities of the Board of Director in making scientific and reasonable decisions.

Board diversity

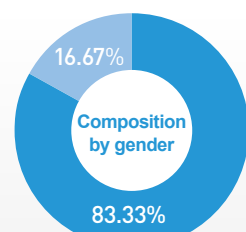
The Board of Directors adopts a meritocracy in the appointment of directors and objectively considers the benefits of board diversity in choosing the candidates, including different genders, ages, ethnic groups, native places, educational backgrounds, experience, professional backgrounds, etc., to ensure the best candidates are selected to maintain a reasonable balance in diversified skills, experience, and ideas and make the Board of Directors more effective.

Board independence

Under the Board of Directors are six specialized committees: Strategy Committee, Audit and Risk Management Committee, Nomination Committee, Remuneration & Appraisal Committee, Technology Innovation Committee, and ESG Committee. In the Audit and Risk Management Committee, Nomination Committee, and Remuneration & Appraisal Committee, two-thirds of the members are independent directors, including the convener. The rules of procedures of the committees stipulate that the matters for deliberation shall be approved by more than half of the committee members to ensure the three committees operate independently and professionally.

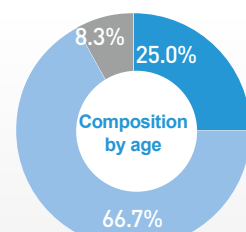
As of the end of the reporting period, the composition of the Board of Directors is as follows:
8 non-independent directors, 4 independent directors, and 2 female directors

In 2023



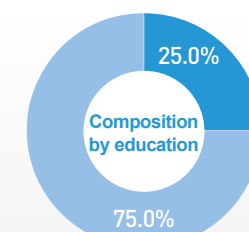
Male

Female



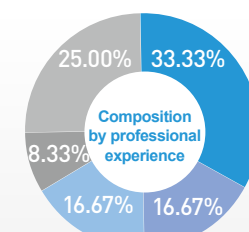
40-49 years old

50-59 years old



Doctor's degree

Master's degree

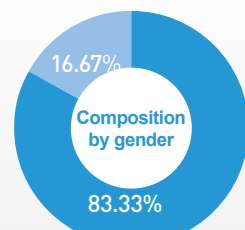


Fellow-level senior engineers
Senior engineers
Attorneys
Professors
Professor-level senior engineers

Board of Supervisors

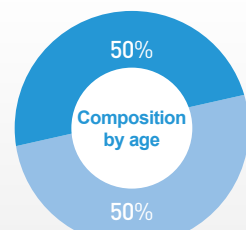
The Board of Supervisors performs its duties and powers in strict accordance with the *Articles of Association*, *Rules of Procedures for the Board of Supervisors*, and other regulations. It supervises the financial status, fund-raising, related transactions, regular reporting, and the compliant performance of duties of the directors and executives, and voices opinions on the Company's major issues, ensuring the Company's standardized operation and safeguarding the legitimate rights and interests of the Company and shareholders. The Board of Supervisors includes an appropriate portion of members representing the Company's shareholders and employees. The members representing the employees are democratically elected by the Company's employees through the Workers' Congress, Workers' Assembly, or other ways.

As of the end of the reporting period, the composition of the Board of Supervisors is as follows:
2 employee supervisors and 4 other members



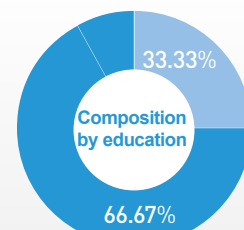
Male

Female



40-49 years old

50-59 years old



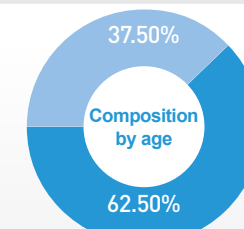
Doctor's degree

Master's degree

Executives

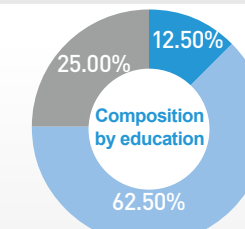
The Company's executives actively implement the decisions and arrangements of the Board of Directors and the General Meeting of Shareholders and perform duties in accordance with the *Company Law of the P.R.C.*, *Articles of Association*, and *Working Rules for General Managers*. The Company has one general manager and several deputy general managers, who are appointed or dismissed by the Board of Directors. In 2023, the Company formulated the *Regulations on the Term of Office and Agreement-based Performance Management of Executives (Trial)* and the *Regulations on the Performance Evaluation and Compensation Management of Executives (Trial)*. All executives of the Company and all of its affiliates signed the "one agreement and two letters" (Job Agreement, Letter of Commitment for Annual Performance, and Letter of Commitment for Performance within Term of Office), which can effectively stimulate the vitality of the executives.

As of the end of the reporting period, the composition of the executives is as follows:



40-49 years old

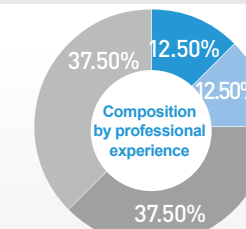
50-59 years old



Doctor's degree

Master's degree

Bachelor's degree



Certified public accountant

Fellow-level senior engineers

Professor-level senior engineers

Senior engineers

Compliance Management

NARI adheres to business integrity, establishes and keeps on improving the compliance management system, takes practical and effective measures against major compliance risks, regularly reviews and strictly complies with all applicable laws and regulations, industry norms, and regulatory rules for business operations, conducts compliance education and training at different levels, continuously enhances the compliance awareness of all employees, and effectively guarantees the lawful and compliant operation of the Company.



Honors and Credentials

NARI and three of its affiliates were awarded the title of "Jiangsu Provincial Credible Enterprise in Fulfilling Contractual Obligations"

Advance the compliance management system

We have deeply implemented the principle of conducting corporate governance in strict accordance with all applicable laws and regulations, improved the construction of a new regulatory system around the articles of association, conducted the legality and compliance review of major decisions, established and kept on perfecting our compliance management system in line with the actual conditions of the Company.

Improve the legality and compliance review mechanism

We have kept on promoting the standardization of review processes to improve the quality and efficiency of reviews and ensure the legality and compliance of major decisions.

Optimize documents of rules and regulations

We have extracted the key provisions of any rules and regulations to be published as an essential requirement, to promote the implementation of such rules and regulations.

Innovate the modes of education on rules and regulations

We have carried out knowledge competitions on the application and observation of rules and regulations in practices and produced animated videos for education on contract management rules, to create a strong atmosphere of "learning and abiding by regulations".

Check for updates on all applicable laws and regulations in connection with our "eight standards" system

We have required and organized all affiliates and divisions to identify and adopt 594 updates in the applicable laws and regulations, as well as other applicable rules and requirements, to ensure that we always act in compliance with all applicable laws and regulations, as well as all internal rules and regulations.

Strengthen compliance risk prevention

We have kept on improving the compliance risk emergency response plan, actively conducted studies on compliance policies, focused on compliance governance in key areas, attached more importance to credit building, and standardized the contract performance, to make contributions to the building of a business environment based on compliance and integrity.

Lay a solid foundation for risk prevention

We have prepared the Compliance Risk Repository, the Checklist of Compliance Obligations for Important Jobs, and the Checklist of Compliance Management for Business Process Control, and worked out risk response measures, to lay a solid foundation for the prevention and mitigation of compliance risks.

Closely track compliance developments

We have released *Briefs on Legal Compliance* to regularly provide early warning of legal compliance risks and put forward suggestions and countermeasures.

Focus on international business risks

We have identified legal compliance risks related to international business activities, laid down response measures against the risks that might arise from overseas operations, bidding, and project implementations, and strengthened the review of international business activities to achieve 100% legal compliance of overseas projects.

Emphasize the standardized performance of contracts

We have diagnosed and analyzed contract management issues, prepared and published 36 contract diagnosis opinions, and tracked the implementation of these opinions.

Make efforts to foster a compliance culture

Focusing on the "key minorities", we have optimized the regular compliance training mechanism and carried out education and training through multiple channels, to foster a compliance culture and continuously enhance the compliance awareness of all managers and employees.

Setting an example

The chairman has published signed articles on "100 Managers Discussing Compliance" through many media channels and taken the lead in signing the Letter of Commitment on Contract Businesses and Letter of Commitment on Intellectual Property Compliance, to enhance compliance awareness among all employees.

Educating at all levels

We have conducted compliance training at different levels, organized more than 110 compliance training sessions, and trained more than 14,500 participants. Leaders, newly appointed managers, and outstanding young leaders have participated in a total of 10 compliance management training sessions throughout the year.

Educating in different ways

We have organized special legal education activities and carried out a series of special legal education activities, such as World Intellectual Property Day on April 26 and National Constitution Day on December 4.

Educating in innovative ways

We have expanded our new media legal education platform, provided an online legal compliance zone, and opened characteristic columns such as "Case Study" and "Law Update" to answer various online legal consultations. We have published more than 200 legal education articles and received over 20,000 thumbs-up online.

Risk prevention and control

NARI has formulated the *Comprehensive Risk Management and Internal Control Measures* to promote the full integration of risk management into enterprise operations and enhance risk prevention and management capabilities.

NARI in Figures



Complete the 2023 internal control effectiveness evaluation and report to the Board of Directors

Deepen the construction of risk control system

We have strengthened the establishment and implementation of the risk prevention and control system involving "all staff, all businesses, and all processes", formulated and refined the annual risk control work plans, clarified the tasks, and orderly promoted the implementation of risk control measures. Regarding functional management and industrial operation, we have adopted professional scoring, questionnaire surveys, risk interviews, and other methods to evaluate major risks from multiple dimensions and realize more scientific and accurate risk identification. We have adopted early warning practices for major risk and operational risks and strengthened online risk supervision, to improve intelligent risk monitoring.

Enhance the efficiency of audit supervision

We have continued to improve the construction of the audit system and mechanism, implemented audit supervision on key areas, weak links, and key positions in business management, as well as standardized management of power exercise. We have also conducted compliance audit inspections on major issues, such as the deposit and use of funds raised by NARI, related transactions, derivative transactions, and overseas investments. We have fully leveraged the role of internal audit in corporate governance to promote the standardization of internal management and the normalization of risk prevention and control and enhance our resistance to risks.

Optimize the internal control system

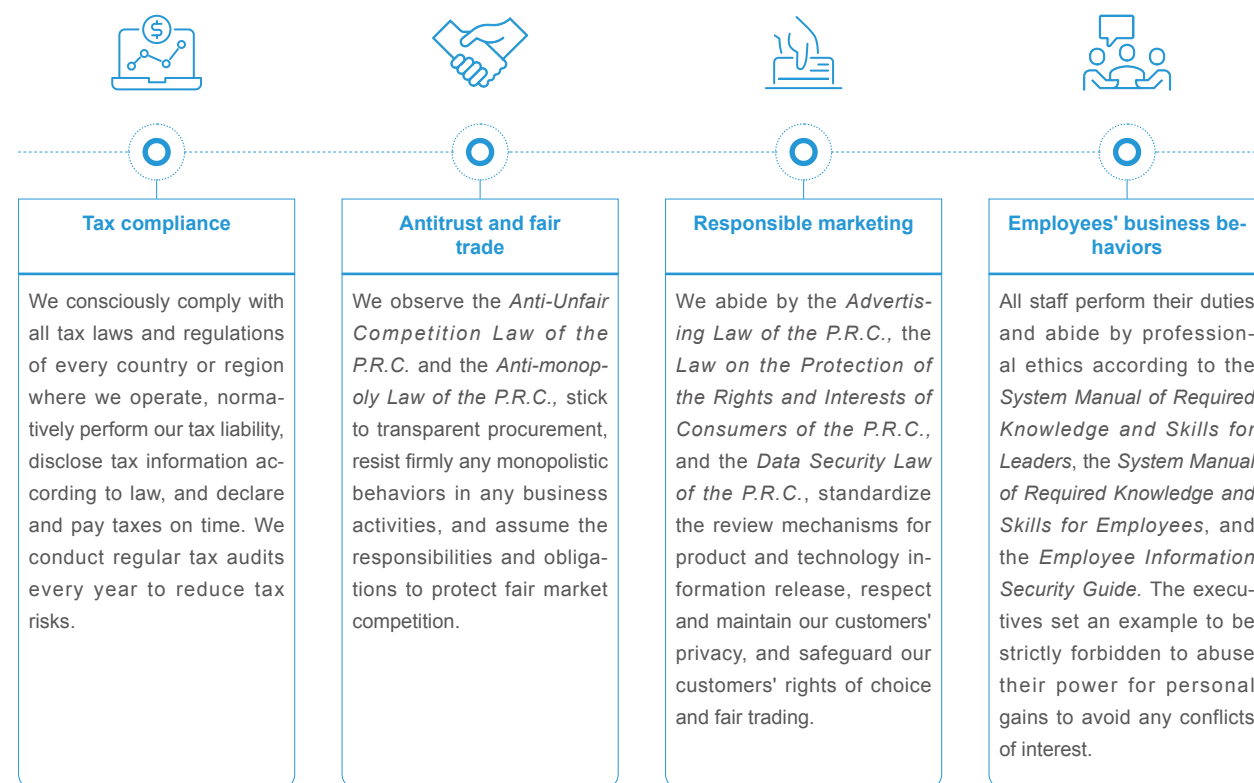
We have continued to optimize the internal control system and operating mechanism and established the "three defense lines" for risk management composed of business departments, risk control offices, and supervisory departments, to provide organizational support for the orderly development of our risk control work. We have dynamically updated the internal control handbooks and employee job performance standards according to the compliance and applicability of business processes, to improve the business risk prevention abilities of all employees during their daily work. We have regularly reviewed and evaluated the implementation of internal control in our affiliates to promote the continuous optimization of the internal control system.



Adhering to Business Ethics

Code of business ethics

NARI always treats its employees, shareholders, customers, suppliers, government representatives, and other stakeholders honestly and fairly; abides by strict rules and regulations in promoting standardized and closed-loop management to ensure that our business and operation activities are in full compliance with laws and regulations and fulfill our corporate social responsibilities.



Anti-corruption and integrity

NARI integrates anti-corruption and integrity into the enterprise management, continuously improves the corruption risk prevention and supervision system, and carries out training and education on anti-corruption and integrity, to enhance the honesty and self-discipline awareness and abilities of the staff, and create a standardized and legal operating environment.



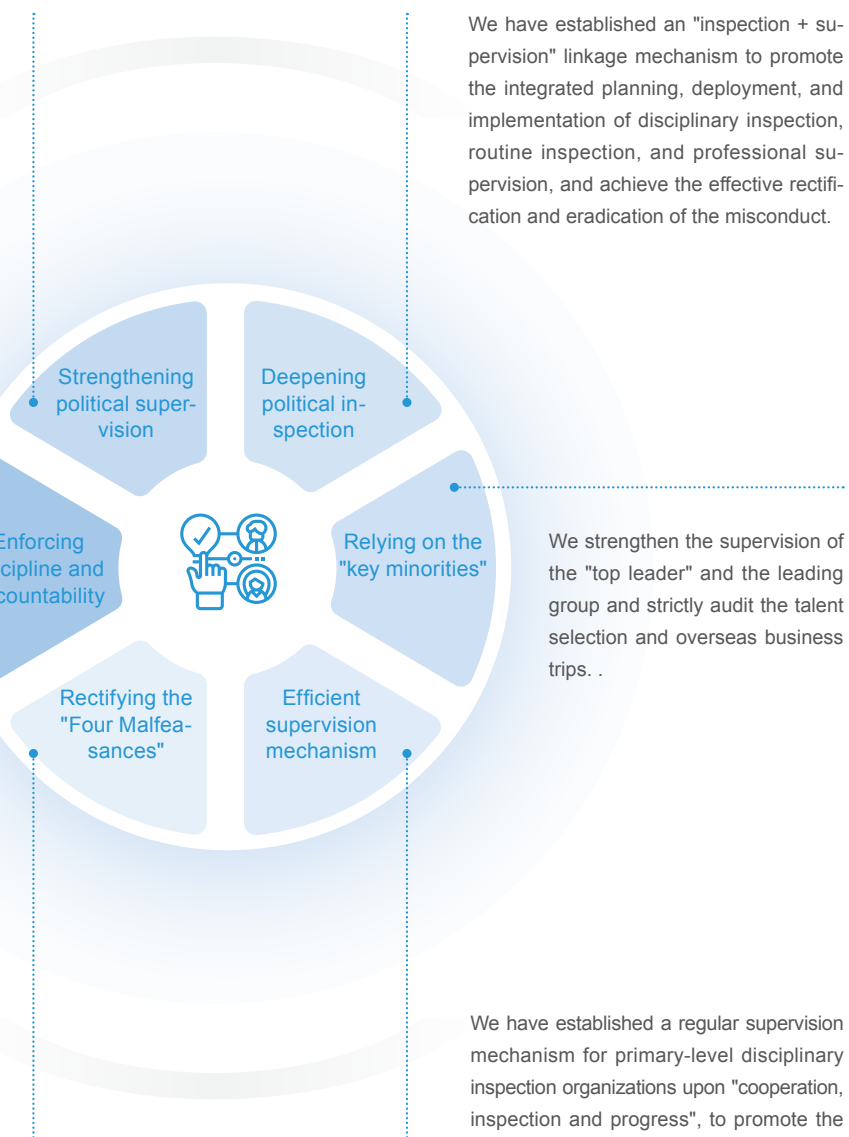
Improving Party conduct, upholding integrity, and combating corruption

The Company consistently adheres to strict principles, rigorous controls, and a serious atmosphere, to continuously improve its ability to fight against, manage, and supervise corruption issues, and provide strong disciplinary guarantees for the high-quality development of the Company.

We focus on strengthening supervision in areas such as technological self-reliance, power supply guarantee, and safety production, and promote the secretaries of Party organizations at all levels to fulfill their responsibilities as the "first responsible person" and Party organization members to fulfill their duties in both their jobs and their roles in improving the Party conduct.

We adopt unified working procedures to deal with the reporting clue, identify the reporting obstacles, control the scale of investigation, and review the work records, to enhance the effectiveness of discipline enforcement.

We persistently implement the spirit of the CPC Central Committee's eight-point decision on improving Party and government conduct, continuously deepen the rectification of the "Four Malfeasances" (formalism, bureaucratism, hedonism, and extravagance), focus on rectifying formalism and bureaucratism, and promote the normalization and permanency of Party conduct construction.



Integrity and self-discipline

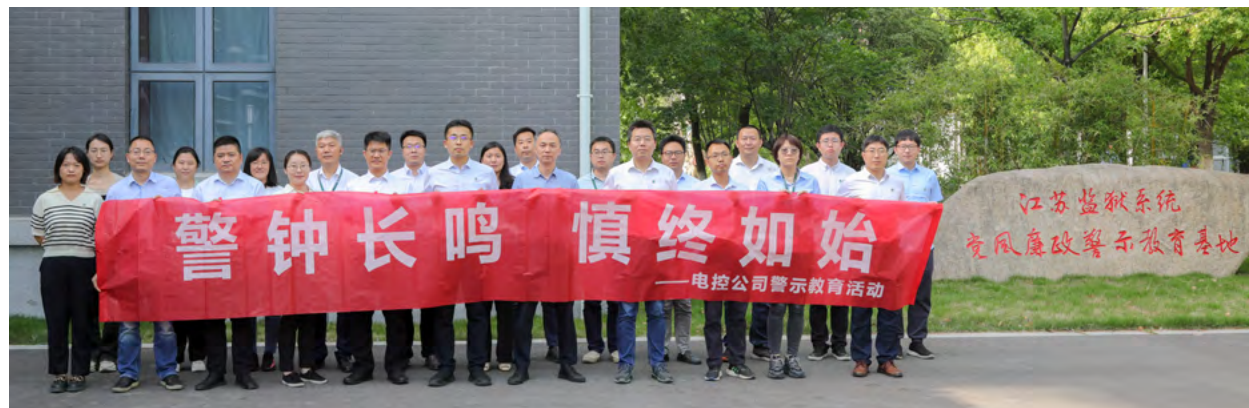
The Company actively educates employees to be honest and self-disciplined; establishes a group learning system for exchanging and learning professional systems, processes, and norms regularly; researches hot topics; guides primary-level units to use information technology to carry out integrity and warning education; and supervises the establishment of a clean, diligent, and dedicated work style. In addition, the Company also strengthens the communication and contact with local discipline inspection and supervision commissions; establishes and improves the mechanisms for coordinating cadre training, referring reporting clues and feedback, and sharing educational resources, to drive the Company with "integrity power" and create a fair and honest corporate culture.



Case

The Electrical Control Branch Company organized its Party members, cadres, and key personnel to visit Jiangning Prison for education

On May 15, 2023, the Electric Control Branch Company organized a total of 26 Party members, cadres, and key personnel to visit the Jiangning Prison for warning education, to continuously improve the Party conduct and integrity, as well as the awareness of honesty and self-discipline of Party members and cadres. At the education base, they visited several warning education-themed sections accompanied by the guide and read a large number of real cases. Thereafter, they went to the second floor of the base to watch videos on which the prisoners told their own stories and experiences. Touched by the vivid narration of the prisoners, the visitors are all aware of the heavy price of corruption. After the education, all visitors said that they would abide by the discipline and rules, bear alert and respect in mind, and always remain vigilant, introspective, and self-disciplined against any misconduct.



Unlocked reporting channels

NARI maintains a zero-tolerance attitude towards corruption and violations of business ethics. The Company has established a well-rounded whistleblowing and complaint mechanism and opened a special hotline, to receive complaints and reports on any actual or suspected violations of business ethics from our employees at all levels and all external parties with direct or indirect economic relations with the Company. The Company has dealt with the reported information with caution, clarified the complaint handling procedures, processing time limits, and settlement criteria, and put forward classified handling opinions on whistleblowing content in time. Furthermore, the Company has established a clear mechanism for protecting the whistleblowers, to strictly keep confidential the information in each stage such as acceptance and survey. The Company safeguards all legitimate rights and interests of whistleblowers following the law and protects them against any form of retaliation.

NARI anti-corruption reporting channel

Tel: 025-81092966

Safeguarding Shareholders' Rights and Interests

NARI has a strong sense of responsibility to "respect, revere, and protect investors". We have established effective mechanisms step by step to protect the rights and interests of all shareholders based on their needs, built a diversified communication platform, and developed strict information disclosure rules to present the Company's key achievements and business performance and enhance the mutual trust with investors.

Active communication

NARI attaches great importance to investor relations management. The Company has revised and perfected the *Investor Relations Management Regulations* and expanded and diversified investor communication and interaction platforms upon multi-channel, multi-dimension, and multi-level communication strategies, to actively pass on the Company's business philosophy, performance, and development goals to its investors, and create a mutual trust and win-win atmosphere. Moreover, the Company also expects more small/medium investors to express their wishes and opinions promptly through our platforms, and actively participate in the corporate governance decision-making processes, facilitating the healthy development of the Company.

NARI in Figures

	Performance briefings	3		
	Investor relations promotion activities	132	Activities for domestic investors	61
			Activities for international investors	71
	Regular report interpretation sessions	3	Regular report interpretation sessions	100+
	Meetings of securities firms on policies and strategies participated in	14	Special reports issued by analysts	44
	Replies made at the SSE e-interactive platform	24	Response rate to questions	100%

Honors and Credits



The Company was awarded the "2022 Best Practice and Excellent Case for Annual Report Briefings" by the China Association for Public Companies

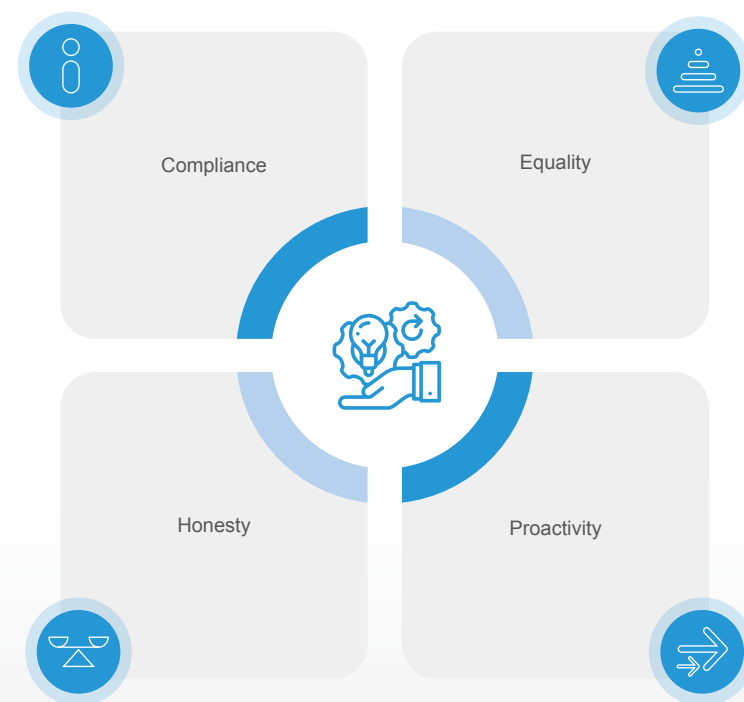


The Office of the Board of Directors (Securities Department) was awarded the "2023 Best Practice and Excellent Case Award for Board of Directors Among Listed Company"



The Secretary of the Board of Directors was rated Grade 5A (highest level) by the China Association for Public Companies for his performance of duties in 2023

Basic principles of investor relations management



Holding performance briefings

We regularly hold performance briefings, prepare visual financial reports, and adequately pass on the Company's development trends and investment value to the market, to boost investor confidence. We listen to and analyze the valuable opinions and suggestions from investors on the operation and development of the Company to leverage the positive role of investors in providing feedback information.

Inviting investors for on-site surveys

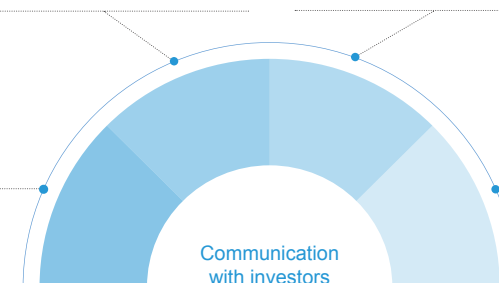
We actively encourage the dominant securities firms in the industry to continuously pay attention to the Company, receive securities analysts to conduct on-site surveys, and promote the Company's value to institutional investors. We invite investors to pay a visit to the Company to fully experience the Company's corporate culture, products, and technologies.

Responding to investor inquiries

While observing the regulations on information disclosure, we carry out daily communication with investors through our investor hotline, investor email, and the SSE e-interactive platform to update investors on the industry environment and the Company's conditions.

Releasing investment-related information

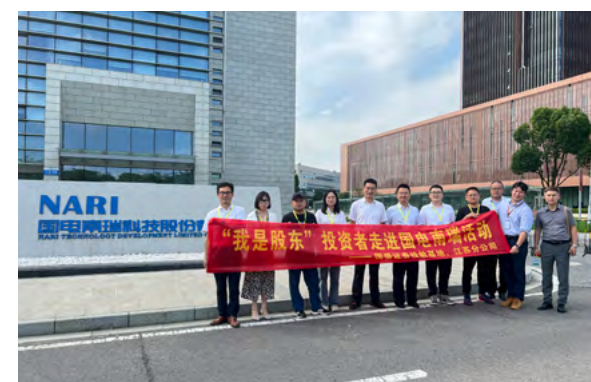
We set up a column called "Investor Relations" on our official website to release the Company's reports, announcements, Q&A, and other information that investors are interested in. We also disclose the Company's recent situation through the articles posted on the official website and official account of social media.



On May 5, 2023, the 2022 and 2023 Q1 Performance Briefing was held by using a combination of "on-site communication + video live streaming + online interaction + synchronous participation at the Company's branch venues" for the first time.



On September 4, 2023, the 2023 Semi-Annual Performance Briefing was held in the form of an online text chat and we communicated with investors through the "Question Pre-Collection" column on the homepage of the Shanghai Stock Exchange Roadshow Center.



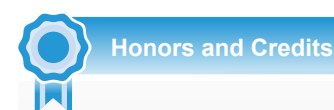
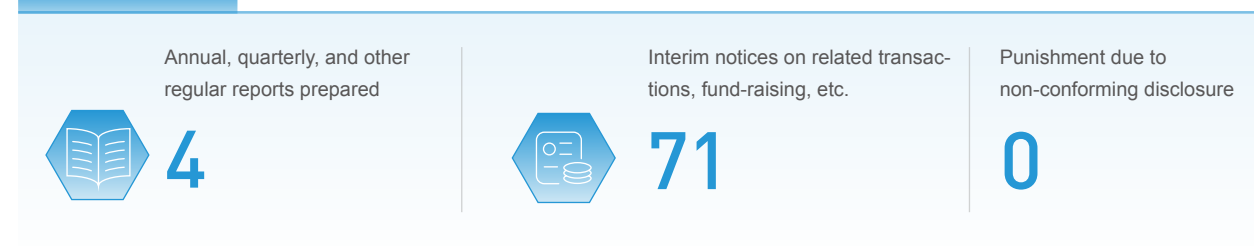
On June 28, 2023, we, together with Guosheng Securities, organized the "Investors Visit NARI" event themed "I'm a Shareholder".



Effective disclosure

NARI acts in full compliance with relevant laws and regulations, the *Articles of Association*, the *Administrative Measures for Information Disclosure Affairs of the Company*, and the *Information Disclosure Suspension and Exemption Regulations*, to fulfill its obligations to disclose true, accurate, and complete information with highest standards. We have fully disclosed the information necessary for investors to make value judgments and investment decisions in simple and concise words, to continuously improve the Company's information disclosure level.

NARI in Figures



Honors and Credits

We were listed as a **"Class A"** company in transparency by the Shanghai Stock Exchange for **9** consecutive years



Information disclosure principles: authenticity, accuracy, completeness, and timeliness

Ensuring the effectiveness of information disclosure through internal management mechanisms

We improve the *NARI Regulations on Information Disclosure* and other rules and regulations and combine the statutory and voluntary information disclosure, to ensure that the Company's regular and interim announcements are standardized, complete, and accurate, and all stakeholders can access the information fairly.

Utilizing external professional institutions to improve disclosure quality

Where permitted by the legal and regulatory rules, the Company adequately communicates and coordinates with the regulatory authorities and external audit institutions to ensure that the disclosed information is professionally supervised, audited, and evaluated, and continuously improve the quality of the Company's information disclosure.

Management over related transactions

In accordance with the *Company Law of the P.R.C.*, the *Securities Law of the P.R.C.*, the *Rules Governing the Listing of Stocks on Shanghai Stock Exchange*, *Guidelines No. 5 of Shanghai Stock Exchange for Self-Regulation of Listed Companies — Trading and Related Transactions* and other laws, regulations, and normative requirements, as well as the *Articles of Association*, we have formulated the *Regulations on Related Transaction Decisions* to provide detailed requirements for the review, disclosure and pricing of related transactions, and ensure the fairness and impartiality of the Company's related transaction decisions to all shareholders. The Company independently conducts accounting in accordance with the *Accounting Standards for Business Enterprises — Disclosure of Related Relations and Transactions* every year and publicly discloses the related transactions in the NARI 2023 Annual Report. During the reporting period, the Company's occasional related transactions were approved, priced, and executed according to the Company's *Regulations on Related Transaction Decisions*, upon fair conditions and prices, and disclosed timely, without any prejudices to the Company or any of its shareholders.

Giving back to shareholders

NARI maintains its strategic focus and continuously creates value for its shareholders with good performance through stable operation, scientific management, and effective R&D investment. In addition, the Company renders back to the capital market by various means, such as profit distribution policies and share repurchase plans, to enhance investors' confidence in the Company's development prospects and recognition of the Company's intrinsic investment value.

NARI in Figures

As of the end of 2023

Since the Company went on the stock market

20 years ago

the cumulative cash dividends had reached RMB

14.245 billion

at a dividend rate of

35.94 %

with the dividend rate in the past 5 years increasing up to

38.87 %

As for the cash dividends in 2023,

The Company executed the equity allocation for the year 2022, by additionally issuing 2 shares per 10 shares at a nominal value of RMB

4.2

and allocated RMB

2.611 billion

in cash, accounting for

40.50 %

of the Company's profit in the year

As of December 31, 2023,

The Company had cumulatively repurchased

5,121,300 shares

through centralized biddings, accounting for

0.064 %

of the Company's current share capital, with a total consideration of RMB

114,359,464.66

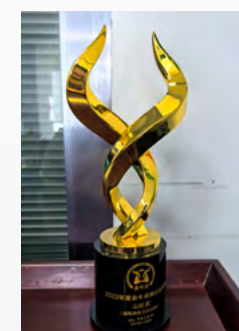
(exclusive of transaction fees)



Honors and Credits



The Company was awarded the "2023 Star Business of Continuous Investment Value" by the Chinese Securities Journal



The Company was granted the "Highest Investment Potential Award" by the China Securities Journal



Our chairman was granted the "Golden Bull Outstanding Entrepreneur Award" by the China Securities Journal



The Company was listed as one of the "China's Top 100 Listed Companies of Investment Value on the Main Board" by the Securities Times

02 Pioneer Take the Lead in Painting a Green Future

NARI consistently adheres to the path of green development guided by its transformation plan focusing on energy optimization and carbon reduction; strictly implements its responsibilities as an actor in energy conservation and ecological environment protection; effectively controls its environment; and is devoted to making investment and innovations in the research and development of energy conservation, carbon reduction, clean energy, and low-carbon technologies, to make remarkable contributions to the green and high-quality development of China by offering products, technologies, and services, and ultimately shape a low-carbon and sustainable green future.

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Tackling Climate Change

Tackling climate change is a common task for all mankind. NARI fully understands the risks and opportunities brought by climate change, actively responds to the State Council's policy of "do a solid job in carbon peaking and carbon neutrality" and the UN Sustainable Development Goals, regards climate change as a major opportunity to achieve the development transformation, promotes the continuous implementation of climate strategies, and comprehensively enhances the Company's capabilities to cope with climate change.

Analysis of risks and opportunities

NARI follows the relevant suggestions of the International Sustainability Standards Board (ISSB) on the new international standards for the disclosure of sustainable information, deeply couples climate risks and opportunities with the Company's risk management system, actively identifies and analyzes climate risks and opportunities in its operations and the upstream and downstream value chains, actively formulates climate change risk response plans and takes actions by focusing on improving the capabilities to respond to climate risk.

Climate risk identification

NARI attaches great importance to climate risk management, continuously improves the climate change risk management framework and risk response mechanism, identifies relevant physical risks and transformation risks, and formulates response plans and measures, to reduce the impact of climate risks from all aspects.

Transformation risks



Policy and regulation risks

Risk description:

- To meet the increasingly stringent national carbon reduction policies and international carbon emission requirements, NARI and its stakeholders will face stricter emission reporting and compliance requirements from regulatory and investment institutions, which may lead to many potential risks, such as project suspension, heavy fines, and high compliance costs.

Policy and legal risks related to climate change bring the following potential financial impacts to the Company:

- **Increased compliance costs:** Since the environmental protection laws and regulations are becoming increasingly stringent, the Company and its stakeholders may be held responsible for or imposed with regulatory enforcement due to non-compliance with climate-related policies or laws.
- **Increased operating costs:** The regulatory and investment institutions apply stricter disclosure requirements for corporate carbon emissions, emission reduction measures, quantitative targets, and performance, resulting in increased operational costs related to information disclosure.

Responses:

- Strictly abide by national policies, follow up and comply with laws and regulations issued by domestic and foreign regulatory agencies, and regularly identify applicable policies related to carbon emission;
- Actively promote corporate climate change planning, explore new low-carbon management models based on the product life-cycle, reinforce internal carbon inventory management, and improve the carbon emission accounting system in the production process.



Technology risks

Risk description:

- In accordance with the standards on industrial pollutant emission and comprehensive air pollutant emission, the Company needs to upgrade technologies in electrical equipment manufacturing and use green ecological technology and equipment, so as to conserve energy and reduce pollutants emission.

Technology risks related to climate change bring the following potential financial impacts to the Company:

- **Increased operating costs:** The Company needs to follow up on the more advanced energy-saving technological processes that adopt new energy, low-carbon materials, and low-energy consumption equipment, which may lead to an increase in overall operating costs.
- **Increased R&D costs:** To meet the market demands, improve the Company's technological service, and expand the supply of green and low-carbon products, a large amount of funding is needed to advance technological R&D.

Responses:

- Introduce efficient and energy-saving technologies, tools, or production equipment;
- Improve the equipment efficiency and productivity;
- Deeply seize the trend of technological transformation in energy and power sectors, fully implement the innovation-driven development strategy, build a more powerful strategic, forward-looking, and fundamental layout in scientific research, and constantly make breakthroughs in the core technology R&D to serve the power grid safety and empower the energy transformation.



Market risks

Risk description:

- The customers in the energy and power industries have increasing demands for products and services to mitigate or adapt to climate change. If the Company fails to provide corresponding products and services, it will face the risk of reduced business demand and customer loss. In addition, the impact of climate change, strict environmental requirements, and technological upgrades will lead to an increase in raw material and production costs of electrical equipment, which in turn affects the product prices and reduces the customers' demands for electrical equipment.

Market risks related to climate change bring the following potential financial impacts to the Company:

- **Increased management costs:** To meet customers' increasing demands for products and services that mitigate and adapt to climate change, the Company should increase investment in product R&D and service management, reserve corresponding production capacity, and make dispatching plans, thereby leading to the increase in management costs.
- **Increased operating costs:** The prices of resources, such as energy, water, and equipment, will increase with the impacts of climate change, which in turn will affect the procurement costs of raw materials and increase the supply chain costs.
- **Decreased operating revenue:** Due to the increased costs in the upstream industrial chain, and the threats from competitors providing low-emission products and services, the Company's market share falls and customers' demands for the Company's electric power products and related services scale down, which reduces the operating revenue.

Responses:

- Closely track and study the changes in customers' demands for green products and services, actively analyze the trends of price fluctuations, and make quick adjustments to the business layout;
- Constantly enhance the top-level design of the industry, boost the high-end upgrade of the lines of business, and spur the business development of emerging industries;
- Develop green procurement schemes, reach consensus with partners on low-carbon supply chain transportation, and reduce procurement costs;
- Continuously optimize resource integration and operation control, adopt a lean production management mode, and guarantee to meet development demand through coordinated efforts.



Reputation risks

Risk description:

- Stakeholders expect that the Company can set quantitative goals as well as systematic management systems and measures concerning climate change, and improve information disclosure transparency. If the Company fails to make corresponding plans to deal with climate change, respond to stakeholders' expectations, or perform as expected in environmental or climate matters, the business reputation will be impaired.

Reputation risks related to climate change bring the following potential financial impacts to the Company:

- Increased management costs:** Reputation risks arising from discussions on environmental protection may increase the public relations and public opinion management costs of the Company.
- Increased financing costs:** Failure to timely respond to environmental information disclosure as expected by stakeholders will cause damage to the corporate image or result in a decrease in ESG-related index ratings on the capital market, thereby adversely affecting our financing capability.

Responses:

- Consolidate the foundation of environmental management, and focus on strengthening climate change monitoring, early warning, and risk management, to effectively manage our climate risks;
- Communicate with stakeholders by conducting surveys, information disclosure via official accounts of public media, ESG report release, and other channels to immediately, accurately, and comprehensively showcase our efforts, judgments and actions against risks related to climate change.



Chronic climate risks

Risk description:

- The extremely high temperature due to global warming will impact the operation of temperature-sensitive production equipment, and may also cause chronic harm to employees' health. The sea level rise caused by climate change may increase the risk of facility damage in coastal areas and increase equipment maintenance costs.

Chronic climate risks related to climate change bring the following potential financial impacts to the Company:

- Increased operation and maintenance costs:** Due to the increasing fluctuations in external energy supply and the increasing safety hazards in the workshops, the Company needs to consume more water and electricity to cool temperature-sensitive equipment and keep the equipment running properly, which causes additional operating expenses.

Responses:

- Establish an equipment impact monitoring system, so that our staff can respond to extremely high temperatures in advance;
- Strengthen the equipment management and eliminate outdated equipment as far as possible to improve our anti-vulnerability capability;
- Optimize energy supply channels, increase the proportion of renewable energy used, and enhance energy efficiency;
- Increase the proportion of water recycling and avoid the impact of extremely high temperatures on water supply and water-consuming equipment;
- Increase investment in employee health and safety, and take various measures to strengthen the protection of the rights and interests of workers in hot weather.

Physical risks



Extreme weather risks

Risk description:

- Extreme weather, such as typhoons, hurricanes, floods, and cold waves, poses a severe threat to the safety and stability of the power grid, power plants, and rail transport, which then leads to higher quality requirements on the Company's products and equipment. At the same time, natural disasters including typhoons, floods, and cold waves may threaten the life and health of staff and thus affect project construction and operation.

Extreme weather risks related to climate change bring the following potential financial impacts to the Company:

- Increased R&D costs:** The Company needs to increase investment to strengthen the product and equipment resilience.
- Increased management costs:** Due to the risks incurred from the provision of a safe working environment for staff and project delays, the management costs of the Company will be increased.

Responses:

- Establish a sound emergency system to tackle extreme weather, improve the emergency response plans, regularly conduct emergency response drills, and strengthen emergency supplies reserves to strengthen defense abilities;
- Provide personal protective equipment (PPE) for staff, conduct special inspections on a regular basis, and provide a safe working environment for staff;
- Conduct studies and judgment on extreme weather impacts at the initial stage of the project and put the increase in project costs arising therefrom into consideration.

Actively seize opportunities

NARI actively identifies various development opportunities, constantly improves our environmental management, and ardently develops green products and technologies that can improve the use of clean energy and integrated energy sources. The Company widely extends the use of electricity as an alternative energy source, promotes large-scale grid connection and accommodation of clean energy, and builds green supply chains. These actions have opened up a new chapter in the green and low-carbon industry.



Efficiency of resource use

- Green production:** Adopt green designs and packages, optimize production processes and technologies, improve production capacity and efficiency, adopt more efficient transportation methods, and reduce costs.
- Water resource management:** Strengthen water-saving management, establish a water-saving enterprise management system with the participation of all employees, and achieve sustainable utilization of water resources.



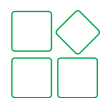
Efficiency of energy use

- Clean energy:** Increase the use of clean energy in the production and operation activities, reduce carbon emissions, and decrease energy procurement costs.
- Adoption of energy-saving technologies and equipment:** Adopt advanced production processes and energy-efficient equipment, to improve energy efficiency and achieve energy conservation and carbon reduction in the production and operation activities.
- Energy management:** Strengthen the construction of an energy management system, build a comprehensive energy efficiency management platform for smart industrial parks, utilize digital and intelligent technologies to control energy consumption and carbon emissions, effectively improve energy efficiency management, and reduce labor costs.



Products and
services

- **Opportunities from the market preference:** In the context of low-carbon economic transition, the Company's abilities in clean energy accommodation, energy-saving, and environmental protection products will be more favored by consumers. The Company's product series based on its core technologies and independent intellectual properties can enjoy the first mover advantages to boost its business.



New market

- **Opportunities from the "dual carbon" goals:** Driven by the "dual carbon" goals, the construction of the New Type of Power System is accelerating, and the demands of cities and enterprises for the "source + grid + load + storage" solution and typical application scenarios are surging. The Company can improve its market competitiveness by extending its business along the industrial chains.
- **Opportunities from the "new-quality productive forces":** Promote industrial innovation through technological innovation, explore intelligent, integrated, efficient, and green development approaches, and expand business scope around the industrial structure system with high technology and energy levels, to build new competitive advantages.



Resilience

- **External:** Deepen school-enterprise cooperation, collaboration among strong enterprises, and government-enterprise cooperation, continuously participate in clean energy projects, such as wind power, photovoltaic power, and hydropower, promote energy technology innovation, and actively develop green and low-carbon products and solutions, to help customers and industries improve their resilience to climate change.
- **Internal:** Integrate the concept of green development into the entire production and operation process, focus on improving resource and energy utilization and clean production, create green factories featuring intensive land use, harmless raw materials, clean production, waste recycling, and low-carbon energy, to enhance the Company's resilience to climate change.

Arrangements for climate actions

Actively responding to national, provincial and municipal policies, including the Action Plan for Carbon Dioxide Peaking before 2030, Implementation Plan for Carbon Dioxide Peaking in Jiangsu Province, and Action Plan for Carbon Dioxide Peaking before 2030 in Nanjing, NARI explores the strategic approaches of carbon reduction and formulates carbon reduction action plans according to our reality, to facilitate the green revolution of society.



Strengthening technological
empowerment

- Tightly grasping the market opportunities brought by the joint effort to achieve the "dual carbon" goals across the nation, NARI supports clean development with advanced technologies, reliable equipment, and high-quality services, accelerates the building of The New Type of Power System, and serves new energy development.



Providing scientific research wisdom

- By constantly deepening research in the framework of Cyber-Physical-Social System in Energy (CPSSE), NARI puts forward research methods for low-carbon transformation and development of energy and strengthens cross-domain and interdisciplinary integrated research. Besides, NARI enables innovation from the source and supports the low-carbon transformation of energy.

Action Plan of Carbon Peaking and Carbon Neutrality of NARI

Support the upgrading from the power grid to the Internet of Energy and improve the clean energy optimization and allocation capability

Support the coordinated development of grid and source, optimize dispatching and trading mechanisms, improve the grid-connected accommodation of clean energy

Drive technological innovation of energy and power, and improve the safety and efficiency of power grid in operation



Support the re-electrification of use-end energy consumption and improve the energy use efficiency of society

Accelerate the energy-saving and emission-reducing efforts, and lower the carbon emissions of the enterprise

Deepen domestic and international exchanges and cooperation and promote green development principles



Case

The supporting stability control system for the Kela Photovoltaic Power Station Transmission Project undertaken by NARI was completed and put into operation

On May 24, 2023, the stability control system for the Kela Hybrid Power Station Transmission Project undertaken by NARI was put into operation successfully. The Kela Photovoltaic Power Station is the world's largest hydro-solar complementary photovoltaic power station and the first one under construction in the Yalong River Basin Clean Energy Base, one of the nine major clean energy bases in China, since the "14th Five-Year Plan". After completion, it can supply over 2.2TWh of clean electric power per year, which is equivalent to reducing about 600,000 tons of coal equivalent or reducing CO₂ emissions by about 1.6 million tons. It has set an example for achieving the "dual carbon" goals and building modern energy systems. The Power System Stability Control Technology Branch Company has supplied a complete set of stability control system and taken the lead in applying the SSP-500R standardized devices that meet the *Standardized Design Specifications for Power Grid Safety Automatic Devices* in the field of water-solar complementary new energy sources. After system operation, it can maximize the accommodation of the clean sources from Murong Hydropower Station and Kela Photovoltaic Power Station. In the event of a trip of the 500kV Litang-Murong Line or Murong-Xinduqiao Double-Circuit Line, the system can quickly cut off the hydropower unit or photovoltaic grid connection line within 100 milliseconds, ensuring the stable operation of the Southwest Power Grid at normal power angle and frequency.



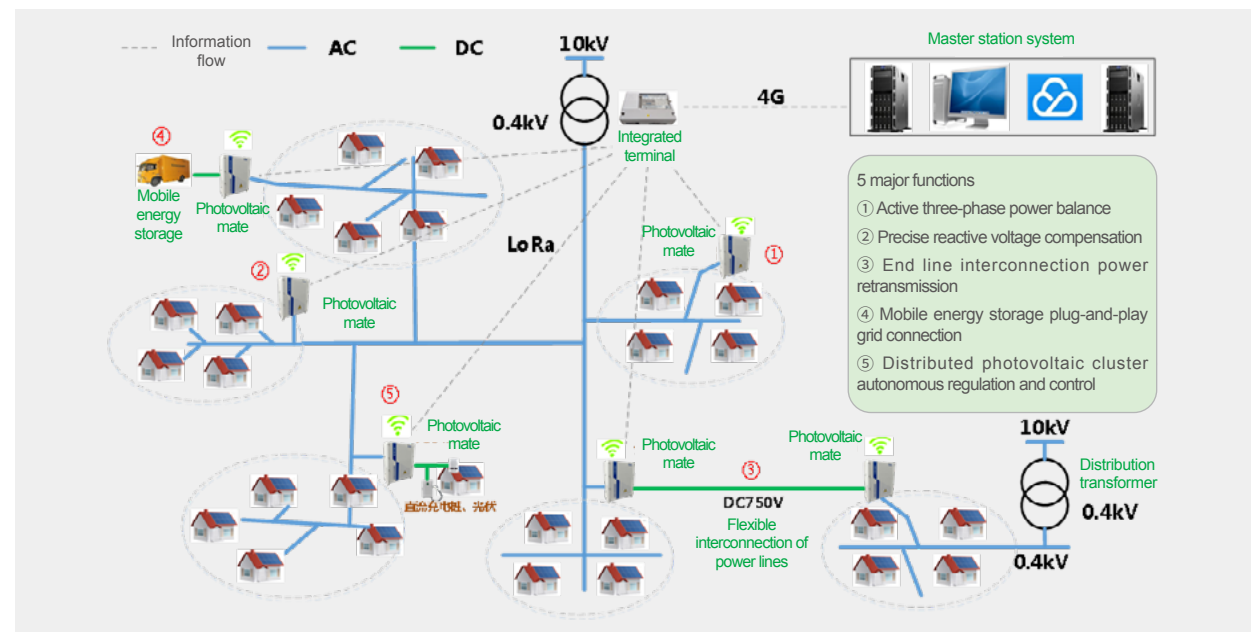
Engineers from the Power System Stability Control Technology Branch Company are carrying out on-site joint debugging tests



Case

Develop a "photovoltaic mate" device to enhance the connection and accommodation of photovoltaic power

In recent years, a large number of photovoltaic power stations have been built according to local conditions throughout China and the capacity of distributed photovoltaic power connected to the distribution network has seen explosive growth. The local access rate of distributed photovoltaic power in several counties has exceeded 100%. The high proportion of distributed photovoltaic power generation has posed a dilemma among the photovoltaic power accommodation, cost reduction, and safe operation of the power grid. To cope with the practical problems, such as three-phase voltage imbalance and terminal voltage exceeding limits that affect power supply quality, the NARI Smart Distribution Technology Co., Ltd. has developed a low-cost, compact, and high-efficiency "photovoltaic mate" device, which adopts advanced algorithms and has five core functions: active three-phase power balance, precise reactive voltage compensation, end line interconnection power retransmission, mobile energy storage plug-and-play grid connection, and distributed photovoltaic cluster autonomous regulation and control. This device can effectively improve the conversion and transmission efficiency of clean energy, enhance the capacity of low-voltage distribution networks for absorbing large-scale distributed photovoltaic power, and promote the local accommodation of photovoltaic power. In 2023, this device won the Gold Award at the 48th International Exhibition of Inventions of Geneva and the 2023 Worker Technological Innovation Achievement Special Award granted by the Chinese Workers' Technical Association. Up to now, the device has been applied in dozens of projects in Guyuan of Ningxia Province and Jiaxing, Wenzhou, Lishui of Zhejiang Province, reducing the cost of low-voltage distribution network management, improving the grid connection and accommodation of the distributed photovoltaic power, improving consumers' satisfaction, comprehensively supporting the power grid renovation and economic revitalization in rural areas, and facilitating the achievement of "dual carbon" goals.



"Photovoltaic mate" has 5 core functions



Support the State Grid Zhejiang Electric Power Company to build the first demonstration project for improving photovoltaic connection capacity in low-voltage transformer service area



The 2023 Worker Technological Innovation Achievement Special Award granted by the Chinese Workers' Technical Association



The Gold Award at the 48th International Exhibition of Inventions of Geneva



Case

The first generator unit of Northeast China's largest pumped storage power station was put into operation

On December 15, 2023, the first generator unit of Liaoning Qingyuan Pumped Storage Power Station, the largest pumped storage hydropower station in Northeast China, successfully passed the 15-day trial operation with excellent indicators and was put into operation. Liaoning Qingyuan Pumped Storage Power Station is a key project for revitalizing Northeast China and a key large-scale energy project in the "13th Five Year Plan" of China. It adopts many products independently manufactured by the NARI Water Resources and Hydropower Technology Co., Ltd., such as the control system, governor system, unit vibration monitoring system, and engineering safety monitoring instruments. During the trial operation of the unit, the systems and products provided by NARI Water Resources and Hydropower Technology showed their stable performance, supporting the successful operation of the first unit. The total installed capacity of the project is 1.8GW, with a designed annual power generation capacity of 3TWh and an annual pumping capacity of 4TWh. Upon the operation of all six units, the power station will save 158,000 TCE per year and reduce 375,000 tons of carbon dioxide emissions. This will effectively improve the accommodation level of renewable energy, such as nuclear power, wind power, and photovoltaic power in Liaoning, Northeast China, and eastern Mongolia. At present, the remaining 5 units of the power station are under installation and debugging, and are planned to be fully put into operation before March 2025.



Case

Automatic optimization intelligent control valve fly ash conveying technology

On December 6, 2023, the intelligent regulating valve was put into operation after the successful commissioning of the pilot conveying system at the Xinjiang Huayuan Power Plant of the CHN Energy Investment Group (CHN Energy). According to the comprehensive statistics, the new pneumatic conveying system can save 18% air compared to the original system. The automatic optimization intelligent control valve fly ash conveying technology developed by the Guodian Futong Science and Technology Development Co., Ltd. utilizes intelligent algorithms to maintain a reasonable ash-air ratio during the conveying process through real-time control of intelligent control components, improve the conveying efficiency, eliminate the inefficient operation and air blowing without ash, and achieve the efficient, energy-saving, and reliable operation of the pneumatic conveying system, making contributions to the "dual carbon" goals of China.





Case

Research and demonstrative application of IIoT-based intelligent energy-saving control technology for ventilation and air conditioning in subway stations

On May 23, 2023, the ventilation, air conditioning, air-water linkage energy-saving control system for subway stations based on the Industrial Internet of Things (IIoT) was officially put into operation at the Olympic Center Station of Xi'an Metro Line 14 after two years of testing and verification, data collection, modeling and simulation, and realized the precise and uninterrupted energy-saving regulation throughout the year. According to the test and verification of its energy-saving effect, the system can save more than 35% of the energy, with average daily energy savings up to 1,468kWh and average annual energy savings up to 199,743kWh. Each station can reduce carbon dioxide emissions by approximately 156 tons per year. The IIoT-based intelligent energy-saving control technology for ventilation and air conditioning in subway stations developed by NARI Rail Transit Technology Co., Ltd. has realized the adaptive dynamic flexible regulation at each load end, dynamic optimization of parameter combinations, and optimal operation control of air-water linkage, to tap into the energy-saving potential of subway technologies, continuously promote the energy-saving upgrade of all equipment, and reduce operational energy consumption from the sources, making contributions to the "dual carbon" goals of China.



Technicians of NARI Rail Transit Technology Co., Ltd. are exchanging technical experience in the factory

Improving Environmental Management

NARI has obtained the certificates of ISO14001 Environmental Management Systems and ISO50001 Energy Management Systems, and formulated several environmental management documents, such as the *Regulations on Environmental Protection* and the *Control Procedures for Environmental Factors*, to clearly define the environmental protection functions and responsibilities. The Company has also carried out environmental hazard investigation, environmental risk identification and evaluation, and environmental performance assessment, and improved environmental protection emergency response and monitoring capabilities, to fulfill its commitments to the continuous improvement of regional environmental quality.



Environmental management objectives

- Prevent the occurrence of any incidents that may lead to any penalties or refusals of approval by the competent ecological, environmental, or water authorities at any level.
- Dispose of hazardous solid waste according to law, and prevent the occurrence of any non-compliant pollutant discharge incidents.

NARI in Figures



Environmental risk identification

NARI has conducted annual centralized identification and assessment of environmental factors to identify, analyze, and assess the environmental impacts throughout the entire processes of production, office work, and services. We have formulated the *Environmental Factor Identification and Evaluation Table* and the *List of Important Environmental Factors* and developed environmental risk prevention and control measures to better guard against environmental risks in production and operation.

Investigation and elimination of hidden environmental hazards

NARI has monitored and measured the energy conservation and emission reduction in the production and office activities, as well as the compliance with environmental requirements, and investigated and eliminated the hidden hazards of environmental protection facilities and systems. We have kept a record of hazardous waste management and environmental protection equipment and facilities, and regularly updated inventory, to strengthen the capability of identifying and handling hidden hazards.

Emergency management for environmental protection

NARI has established an environmental emergency response plan, filed it with the local ecological and environmental authorities, and timely reviewed and revised the plan. We have provided adequate emergency response supplies and equipment and organized special emergency drills against chemical leakage accidents, intending to better respond to and deal with environmental emergencies.

Environmental performance appraisal

NARI has set goals and indicators to regulate environmental protection management, revised from time to time the *List of Environmental Responsibilities*, supervised, inspected, and evaluated the management process for environmental protection, and gave bonus points to the units and individuals who have made significant achievements in the environmental protection work.

The Company has obtained the certification of GB/T 24001-2016/ISO 14001:2015 Environmental Management Systems. The certification system covers the design, development, production, and technical services of our automation systems, equipment, and software, as well as environmental factors that can be controlled or influenced in the design, development, production, and services of high- and low-voltage power transmission and distribution equipment. We have also passed the annual supervision and audit of the third-party institution to maintain the validity of the certificate.



Practicing Green and Low-carbon Operation

In strict accordance with the *Environmental Protection Law of the P.R.C.*, the *Law of the P.R.C on the Prevention and Control of Atmospheric Pollution*, the *Law of the P.R.C on Prevention and Control of Water Pollution*, and the *Law of the P.R.C on the Prevention and Control of Environment Pollution Caused by Solid Wastes*, NARI strengthens the source control, strictly controls the pollution emissions in production, and reasonably utilizes all energy resources, in order to create a green production system, promote green office, initiate low-carbon environmental protection actions, and reduce the impacts of production and operation activities on the environment.

Saving energy and resources

In order to become an environment-friendly and resource-saving enterprise, NARI has established a series of management procedures in the use of energy and resources in accordance with the applicable laws and regulations, revised its management documents, such as the *Energy and Control Procedures*, *Energy Review and Control Procedures*, and *Energy Use Control Procedures for New, Renovation and Expansion Projects*, to reinforce the supervision and management of energy and resources, such as electricity, gas, and water, increase investment in and education on the conservation and technological upgrading of energy and resources, and continuously improve the utilization efficiency of energy and resources.

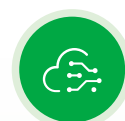
Energy management



We have actively explored the application of new technologies, devices, tools, and materials, adopted energy-saving processes as the first choice, strictly prohibited the use of equipment with low energy efficiency, and regularly inspected the operation and configuration of on-site energy-consuming equipment, to improve the equipment maintenance and energy utilization efficiency.



We have promoted the substitution of clean and renewable energy, built distributed photovoltaic power generation systems on building roofs and in parking lots and other places, and gradually implemented our green power consumption plans. For example, our Jiangning Base has achieved full coverage of office green power.



We have built a comprehensive energy efficiency management platform for smart industrial parks, integrating the functions of automatic collection and statistics of energy consumption data, energy consumption diagnosis, and energy-saving optimization, to achieve the real-time monitoring of the entire energy consumption process, and to compare, track, and analyze monthly energy consumption data.



We have completed the renovation project of the Jiangning Base Smart Energy Management System, realized the collection of data from all outgoing electric meters in the distribution room of the Jiangning Base, and uploaded data from all electric meters on each floor of each building. This enables the panoramic monitoring and statistical analysis of energy consumption in the park, including orderly electricity consumption and load control, all in favor of the energy consumption management in the park.

Water resource management

- 1 We have formulated the rules and policies, e.g. the *Water Quota Management Rules*, the *Water Measurement Management Rules*, the *Water Consumption Statistics Management Rules*, and the *Water Consumption Reward and Punishment Rules*, to strengthen the management of water use and encourage water-saving practices.
- 2 We have upgraded our internal water metering tools, developed a water balance testing plan, replaced measuring instruments, adopted intelligent water meters, and integrated them into the intelligent energy efficiency management platform.
- 3 We have adopted water-saving facilities and devices, organized water balance tests every three years, read meters on a regular basis within the year, and actively checked for and repaired leakages and spillages as early as possible.
- 4 We have implemented the Jiangning Base Greening Improvement Project according to the local conditions, to enhance the comprehensive utilization of rainwater resources in the park's green space. We have added new bypass pipes to the main sewage pipes and new metering devices in the park to recycle the wastewater based on standard treatment to save water resources.
- 5 We have provided training, lectures, and other education on water balance testing, water-saving enterprise building, and water-saving knowledge and skills, to improve the water-saving awareness and abilities of all staff.

Building and packaging materials



All structures in our industrial park have been built by using novel thermal-insulation and energy-saving materials, to fully utilize the natural light and reduce resource consumption.

We have achieved the transformation from wooden packaging to paper packaging and applied the paper packaging for over 11,000 cabinets within the year. This not only improves packaging standardization and automation, but also reduces on-site environmental impacts through the use of environment-friendly and recyclable packaging materials.

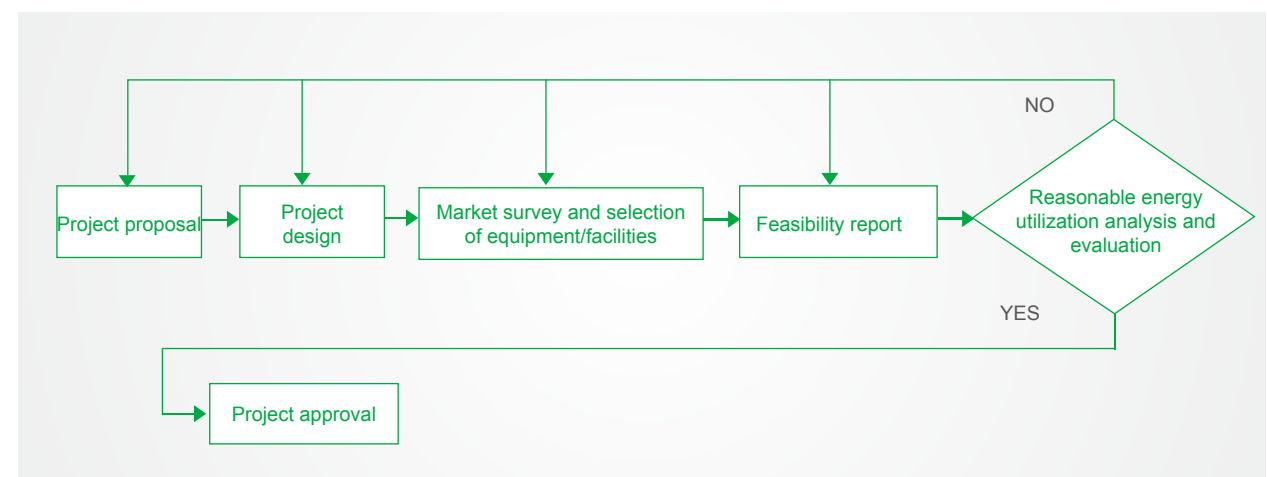


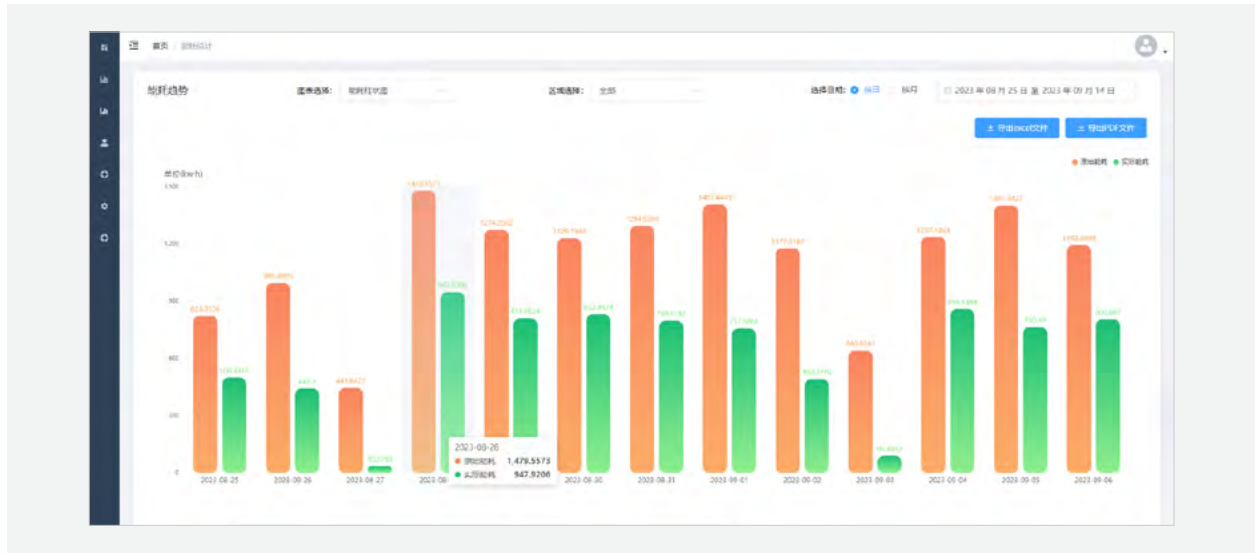
Diagram of energy consumption control workflow for new, renovation, and expansion projects



Case

Promoting lighting renovation to achieve energy conservation and consumption reduction

There are a total of eight complex buildings in the factory area of NR Electric Co., Ltd., consisting of various public spaces, such as office space, workshops, warehouses, corridors, and elevator rooms. They occupy a large area, and the lighting systems are complicated to control or cut off timely, resulting in electric energy waste and going against the green, environment-friendly, and low-carbon principles. To solve this problem, NR Electric has formulated the *NR Electric Lighting Management System Design Proposal*, focusing on promoting intelligent environmental lighting management system applications. The remodeled lighting management systems are provided with energy efficiency monitoring and analysis functions, which can quickly power off the lighting systems under the load shedding mode, saving electricity up to 230-500kWh per day.



Comparison of energy saving and consumption reduction indicators



Case

NARI was successfully recognized as a "Water Conservation Supporting Enterprise in Nanjing"

In order to implement the national water-saving action plans and strengthen the demonstrative and leading role of a water-saving actor, NARI has actively participated in the campaign themed "Recognition of Water Conservation Supporting Enterprises" in Nanjing following the requirements of the Jiangsu Provincial Water Conservation Regulations. The Company has made every effort to build a water-saving enterprise. With the focus on improving water resource utilization rate, it has established rules, regulations, and standards, conducted water balance testing, improved water metering systems, adopted new water-saving equipment and facilities, carried out education on water saving, and taken many measures to promote water resource conservation. Finally, it passed the evaluation and acceptance and was recognized as a "Water Conservation Supporting Enterprise in Nanjing".



Strengthening pollution prevention and control

NARI and its subsidiaries are not listed as "key pollutant discharging enterprises" by the environmental protection authorities. The main types of pollutants generated from the production and operation are wastewater, solid waste, and noise. The responsible departments of the Company have standardized the deployment and daily operation management of environmental protection facilities by formulating and applying the corresponding internal rules and regulations, e.g. the *Waste, Sewage and Noise Management Procedures*, the *Regulations on the Temporary Storage Room for Hazardous Waste*, and the *Requirements of the Comprehensive Service Center on Operation and Management of Temporary Storage for Hazardous Goods*. The Company has upgraded and renovated its environmental protection equipment, such as domestic sewage treatment facilities and exhaust gas treatment facilities, to ensure the compliant discharge of wastewater, emission of noise, and disposal of solid waste.



Sewage treatment

- A separate discharge system for rainwater and sewage is adopted. Domestic sewage is discharged into the municipal sewage pipe network after reaching the standard upon professional disposal;
- Qualified organizations are entrusted to recycle the canteen grease traps regularly, with recycling records kept;
- In response to the requirements of the environmental impact assessment, the Industrial Park of Jiangning Base has installed a real-time online monitoring system for sewage discharge. A service provider is designated by the Jiangning District Environmental Protection Bureau to be responsible for the daily operation and maintenance of the system, as well as the treatment of waste liquid discharged during the operation of the system.



Noise abatement

- We arrange specific areas, and place the computer servers in the enterprise's Information Center in the special soundproof rooms;
- We equip ourselves with professional devices, and install integrated fume purification units (including pressurizers) to reduce noise;
- We regularly monitor noise to ensure compliance with the technical specifications of environmental noise and reduce the risk of environmental disputes.

Recyclable wastes

NARI puts special recycling bins in the production and office areas, cleans up, recycles, and stores the recyclable wastes in a special warehouse by cleaners, and disposed of by specialized departments then.

Non-recyclable wastes

NARI puts special recycling bins in the production and office areas. The non-recyclable wastes are collected and transported to a specific spot every day by cleaners. The wastes produced each day are cleaned up and transported by a professional outsourcing company to a designated waste transfer station to avoid throwing, sprinkling, dripping, or leaking. Then the wastes will be disposed of by the environmental sanitation department.

Hazardous wastes

Hazardous wastes are temporarily stored in the areas designated by responsible departments for this purpose, collected by professional departments of the Company, and handed over to a qualified third-party service provider for disposal, with records kept. NARI carries out regular inspections of the hazardous waste storage rooms, arranges routine drills against accidental hazardous waste leaks and fires, and takes preventive measures against potential hazardous waste fires, leaks, and explosions.



Waste disposal



Case

Deodorization renovation of sewage treatment facilities

In 2023, NARI upgraded and renovated the exhaust gas treatment unit of the sewage treatment facility of Jiangning Base, added a second process for exhaust gas treatment, and organically combined it with existing biological soil filters to complete the deodorization renovation of the sewage treatment facility according to high specifications and standards, effectively eliminating the hidden trouble of odor leakage. Moreover, through different technical measures and means, such as installing silencers, laying silencing cotton, replacing soundproof glass, and optimizing operating strategies, the noise generated during the operation of the sewage treatment facility was significantly reduced, greatly improving the working environment within its vicinity.



Practicing green production

NARI adheres to the concept of green development. In addition to improving product functionality, quality, and occupational health and safety, the Company adopts green design and packaging to reduce the use of hazardous substances from the sources; builds green supply chains; optimizes production processes and logistics transportation links; verifies and improves product carbon footprint, park facilities, and greenhouse gases generated during production; fosters the abilities of environmental management across the entire product life cycle; and continues to build a green production system.



Honors and Credits



NARI was recognized as a "Green Factory in China"



NR Electric was recognized as a "Green Factory in Jiangsu Province"



Nanjing Control System was recognized as a "Green Factory in Jiangsu Province"

Green management throughout the entire product life-cycle



Consider the ecological design of products in accordance with the *General Principle and Requirements of Eco-design for Products*, strictly prohibit the use of outdated processes that have been phased out by China, and give preference to equipment and processes with high energy efficiency, no pollution, and low emissions.

Develop green procurement plans, procure and use non-toxic, harmless, biodegradable, and recyclable raw and auxiliary materials as the first choice, and incorporate environmental requirements for the use of harmful substances, recyclable materials, and energy efficiency into procurement information, to guide suppliers to produce green and environment-friendly products.

Promote the use of lead-free production processes, increase the utilization rate of recyclable materials, establish three-level rules on prohibition, management, and reduction of chemical substances used in production activities, reduce or replace hazardous substances, and minimize the use of chemical substances throughout the entire product life-cycle.

On the premise of ensuring product quality, give preference to the use of environment-friendly packaging materials, improve transport routes and tools, choose reasonable transportation modes, and scientifically reduce carbon emissions.

Adopt applicable standards or norms to verify the carbon footprint of products, and utilize the verification results to improve the carbon footprint of products.



Case

Utilizing green design to promote sustainable development

NARI-TECH Nanjing Control System Co., Ltd. introduces the concept of eco-design into its product design, to minimize resource consumption, reduce or eliminate raw materials containing toxic or hazardous substances, and reduce pollutant generation and emissions, by emphasizing ecological awareness and environmental cognition throughout the entire product life-cycle.



Adhering to green initiatives

Clearly define ecological design requirements in the *Product Design and Development Control Procedures* and the *R&D Workflows for Device Products*. Entrust a third-party evaluation agency to conduct ecological design evaluations on the products in accordance with the *General Principles for Eco-design Product Assessment*, and prepare *Ecologically Designed Product Evaluation and Inspection Reports*.



Reducing use of materials

In the model selection stage of products and components, give preference to the components with rich functions and high versatility. Reduce overall dimensions and weight through structural optimization design. Utilize the System-on-Chip (SoC) development platform to solve the problems of multi-core chipset cooling and electrical interference magnetic radiation easily exceeding standards, and reduce the number of chips and cooling fans.



Product quality assurance

During the model selection of components for the hardware platform development of new products, take into account the RoHS certification as an important criterion, and keep promoting the application of green components in combination with the component reliability requirements and applicable industry-specific requirements for their applications. It is required that the measured power consumption values of products, such as intelligent terminals, substation network switches, and transformer control and protection devices, are significantly lower than the required power consumption values in the applicable standards.

Cultivating green culture

NARI advocates "saving every penny, every piece of paper, and every inch of wire", promotes a paperless green office, encourages employees to travel greenly, carries out green construction in the industrial park, and makes efforts to build a resource-saving and environment-friendly enterprise. At the same time, the Company actively participates in afforestation and other environmental protection campaigns, to enhance employees' and the public's awareness of environmental resource protection, and jointly build a beautiful, healthy, and sustainable planet.

Green office

Encourage a paperless office, minimize the use of paper documents as far as possible, widely use video conferencing systems, and minimize the use of office supplies.

Strictly control the use of water for vehicle cleaning and public area landscaping, strengthen daily inspection and maintenance of water equipment, and immediately repair any leakage and spillage found.

Strengthen daily power-saving management, strictly prohibit the use of appliances with high power consumption, such as electric stoves and heaters, and scientifically optimize the electricity usage scenarios, such as elevators, air conditioning, lighting, and office equipment.

Implement waste sorting, encourage the recycling and reuse of waste materials, and reduce the cost of waste processing by the back-end departments.

To promote green travel, we have built more than 110 charging piles in the industrial park of Jiangning Base (61 new charging piles were put into operation in January 2024) and used electric commuter buses to reduce exhaust emissions.

Environmental action

Strengthen the promotion and education of energy conservation and emission reduction, carry out the education on environmental protection laws and regulations, and provide training on environmental protection knowledge to improve ecological civilization awareness and enrich the environmental protection knowledge of all staff.

Carry out environmental protection actions, such as beautifying the factory area, afforestation, protecting the mother river, and environmental campaigns along the Yangtze River, to guide and motivate employees and the public to participate in the environmental protection actions.



The construction of the Central Park of Jiangning Base and the upgrading of the Youth Forest have formed the core landscape belt with one lake and two waters contrasting finely with each other



Case

NARI Water Resources and Hydropower Technology launched the "Youth Bright Tour" environmental protection activity

On April 20, 2023, in preparation for the World Earth Day, NARI Water Resources and Hydropower Technology Co., Ltd. organized young volunteers to go to Zijin Mountain in Nanjing to carry out the "Youth Bright Tour" environmental protection and public benefit activity, participated by 23 volunteers. The volunteers gathered at the foot of the mountain and then acted in groups along the hiking trail, working together to clean up litter, such as water bottles, milk boxes, and nut shells dropped everywhere in the jungle and on the cliffs. While picking up the litter, the volunteers also spontaneously communicated environmental protection concepts to tourists they met. In response to the call of the volunteers, many citizens also joined the team to clean up litter. Through this environmental protection and public benefit activity, the volunteers not only conveyed the concept of green civilization to protect the ecological environment, but also demonstrated the sense of responsibility of NARI people with practical actions.



NARI

Craftsman Take the Lead in Offering Innovative Products and Superior Services

NARI believes that making industry-leading products is essential to fulfill its corporate social responsibilities and achieve high-quality development. To this end, the Company takes technological innovation as the driver, safety, and quality as the foundation, and customer demands as the guide, to continuously enhance its independent research and innovation capabilities, so as to offer more green and low-carbon products with high quality and create an industry-leading service reputation.

Pursuing Innovative Development	58
Ensuring Safe Production	66
Delivering Quality Products and Services	70



Pursuing Innovative Development

Innovation is the characteristic gene of NARI. The Company commits itself to independent innovation, continuously improves its scientific and technological innovation system, and sets the clear direction of key technological breakthroughs, to promote digital and intelligent transformation and upgrading, make contributions to improve China's strength in strategic technologies, build a global influential source of electric power technology innovation, and accelerate the realization of self-reliance and self-improvement in advanced technologies.





Promoting technological innovation

NARI adheres to the innovation-driven development strategy, increases investment in scientific and technological innovation, strengthens the top-level design of scientific and technological innovation, continuously improves the management of scientific and technological innovation, constructs a stable pipeline of innovative personnel, and builds a complete technology and business system for smart grids, to effectively support the upgrading of the power grid to the Internet of Energy.

NARI in Figures

	R&D investment RMB 3.459 billion	R&D intensity 6.71 %	National key research projects undertaken 4
	Software copyrights registered 303	Papers published in core journals 176	Patents granted 400
	Patented inventions 324	Scientific and technological awards 169	Provincial and ministerial-level awards 123

Pipeline of innovative personnel

	Number of R&D staff 3,687 Proportion of R&D staff 33.47 %		29 National level experts National candidates selected in China's National Hundred, Thousand and Ten-Thousand Talent Program 5 CAC and CAE academicians 2
	Teams engaging in R&D of new power systems 5		Provincial level experts 96 (elected for 276 times) Receivers of Jiangsu "333 Talent Program" special fund 3



The research team specializing in the high-end equipment of UHV DC and flexible transmission won the "National Excellent Engineer Team" award



The research team specializing in decision optimization technologies for enabling power system to actively support energy transition and "dual carbon" transformation



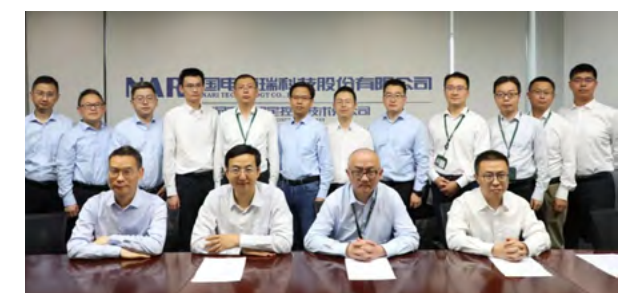
The research team specializing in the intelligent regulation and control technologies for The New Type of Power System



The research team specializing in the multi-state operation control technologies and equipment development for new electric power transmission system

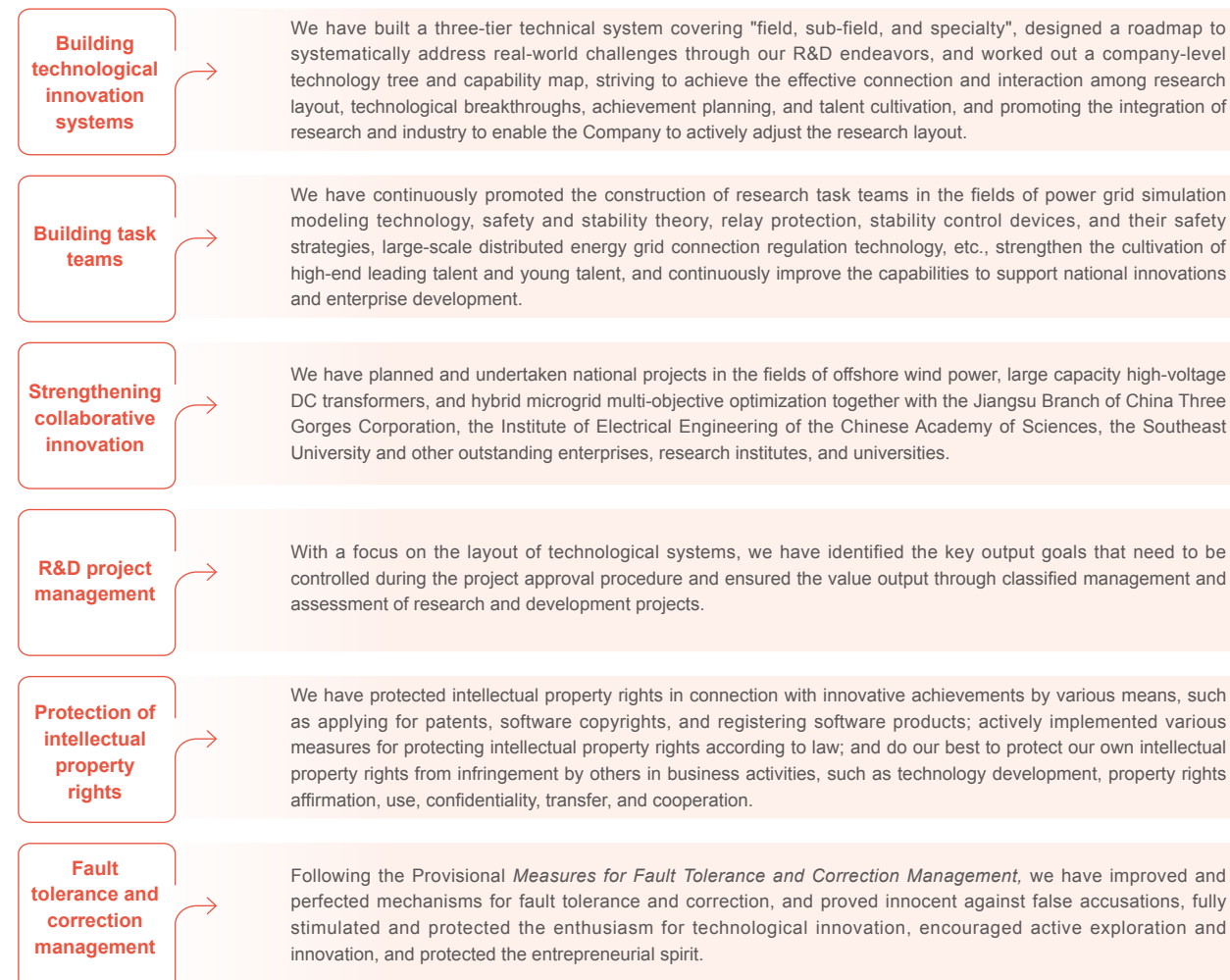


The research team specializing in the relay protection technologies for The New Type of Power System



The research team specializing in the quantitative analysis of security and stability risks and adaptive power outage defense for The New Type of Power System

Technological innovation management



R&D project organization and management process



Commercialization of research achievements

New technological breakthroughs

Our core technologies and products cover many fields, such as power generation, transmission, transformation, distribution, consumption, dispatching, information, and communication, and we have made new achievements in energy conservation and environmental protection, manufacturing industry, rail transit, and other fields.

The world's first set of controllable line-commutated converter (CLCC) has been put into operation in the Gezhouba-Nanqiao DC project.	We have developed the first adaptive emergency control system and realized demonstrative applications in central China and Qinghai.	We have developed the first static frequency changer (SFC) system for the steel industry in China, which has been implemented in China Baowu Steel Group and Yunnan Dianzhong Water Diversion Project.	We have completed the development and type testing of 20 models of new protection devices, and have applied them in 10 demonstration projects.	We have achieved the research and development of lightweight 5G power terminals, wireless private network integration terminals, and other products, which have been applied in Jiangsu, Shandong, and other places.
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New progress in major research projects

We have accelerated the upgrading of key technologies and core products, and deployed and applied new-generation power dispatching, new-generation centralized control, and electricity spot market in batches, leading in the market share.

We have deepened the construction of the business middle platform for power grid resources and real-time measurement center, and widely promoted the PMS3.0 and Ruiteng series products.	We have supported the operation of Gezhouba-Nanqiao DC, Chongqing Yongchuan Transformation, Hangzhou Flexible Low-frequency Transmission, Fengning Pumped-Storage Units 5 and 7, and other major projects with industry-leading converter valves, protection, excitation, governor, control and other systems and devices.	We have realized the grid connection and operation of 4500V/3000A IGBT devices at the Zhangbei Yangqing converter station and independently developed IGBT devices for the full voltage range of 650V-4500V.	We have completed the large-scale application of intelligent maintenance technology for offshore wind farms, delivered the Qingzhou Offshore Wind Power Project of Guangdong Electric Power on schedule, and achieved the batch application of the Company's 12MW offshore wind power converters.
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Case Supporting the construction of emergency dispatching control system for North China Power Grid

In 2023, the trial operation of the core control function switching system for the "North China Power Grid Emergency Dispatching Control System" undertaken by NARI was successfully completed. Thanks to it, the North China Power Grid created an emergency system consistent with the existing main dispatching function and operates synchronously. During the trial operation, the emergency system operated stably and efficiently, and supported the power grid to ensure supply, safety, and new energy accommodation, marking a new stage of "active-active operation in one city" dispatching for the North China Power Grid. This has achieved the full utilization of resources, avoided the idle state of the backup center, and ensured the normal monitoring of the power grid in the event of abnormal operation of the main dispatching duty rooms and systems, greatly improving the power grid's emergency dispatching control abilities and effectively preventing the security risks of the power grid.



Trial operation of the emergency anti-terrorism dispatching control system for North China Power Grid under the mode of "active-active operation in one city"

Case The first "New-Gen Main Network Online Security Analysis Application" for the State Grid was completed

To adapt to the profound changes in the material, technology, and control foundations of the new power systems, we have built an online security analysis technology architecture based on cloud computing and service-oriented concepts, which covers all dimensions, all scenarios, all elements, and the whole process, to improve the simulation accuracy and practicality. The Power System Stability Control Technology Branch Company has taken the initiative to undertake the solution design, specification preparation, and system construction of online security analysis for the main grid, and participated in the organizational management and technical support by taking charge of constructing all functions of Shanghai site and some functions of Wuhan site. It has made breakthroughs in key aspects, such as the overall system architecture, model data foundation, functional system building, business scenario development, and human-machine interaction experience, achieving the global online security analysis and decision featuring global, faster, more accurate, more open and more friendly operation, to efficiently support the real-time dispatching and operation of the power grid.



Case

The world's first set of CLCC converter valve was successfully put into operation in the Gezhouba-Nanqiao renovation project

The Gezhouba-Nanqiao DC Transmission Project is the first 500kV DC transmission line in China, which has been in operation for 34 years. However, there are many problems in this project, such as severe aging and unstable operation of converter valves and other equipment, and failure of multi-DC interlocking commutation. After five years of continuous exploration, we have innovated the controllable line-commutated converter (CLCC) technology, which adopts a combined structure of fully-controlled and semi-controlled devices and dual parallel branch lines to eliminate the technical problem of commutation valve failure. The successful operation of the CLCC converter valve at the Nanqiao Converter Station will effectively reduce the system surge caused by the DC commutation failure in East China and provide a new and reliable technical solution for the connection of large-scale clean energy in East China, South China, and other regions.



The site of the CLCC converter valve at Shanghai Nanqiao Converter Station



Case

The R&D and pilot application of the first 5G lightweight terminal in the power industry were completed

5G can meet the requirements for massive terminal data collection and the efficient and reliable bearing capacity of control services of wide-area distribution stations in the power industry. It is also an important potential communication method to empower the construction of new power systems and has wide application prospects in the power industry. However, economic efficiency is one of the important factors restricting the large-scale application of 5G. In June 2023, the NARI Information & Communication Technology Co., Ltd. supported the State Grid Zhejiang Electric Power and State Grid Shandong Electric Power based on its 5G lightweight technology (5GRedCap) for the first time, completing tests on the wireless bearing capacities of load control, distribution automation and other businesses in Qiantang, Hangzhou, and Laiwu, Jinan. The test results show that this technology can meet the requirements for end-to-end time delay and reliability in the power industry, laying a foundation for large-scale application in the power industry, supporting the construction of 5G+ smart grids, and facilitating the construction of The New Type of Power System.



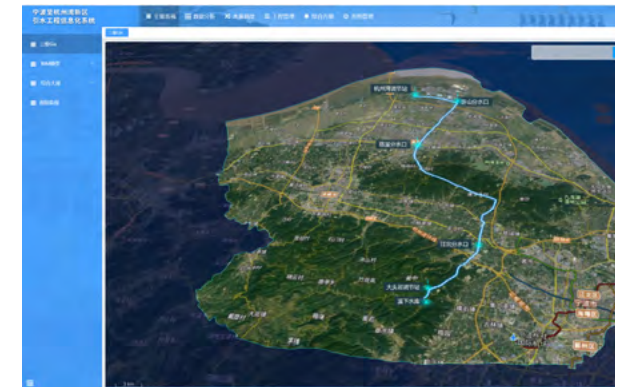
NARI Information & Communication Technology's technicians are conducting on-site 5G lightweight bearing capacity testing for power business



Case

NARI built the information platform for Ningbo-Hangzhou Bay New Area Water Diversion Project to support the security of water resource supply

The Ningbo-Hangzhou Bay New Area Water Diversion Project is an important infrastructure in the Hangzhou Bay New Area of Ningbo City and Cixi City. It is of great significance in ensuring the security of water resource supply, consolidating the foundation of development, and promoting stable and healthy economic development. The NARI Water Resources and Hydropower Technology Co., Ltd., undertook the construction of the information system of this project, has realized the intelligent monitoring and management of the water supply system, and improved the efficiency and stability of the water supply network operation by building an information management and control platform for this project. The platform can timely detect and solve problems in the water supply system through real-time monitoring, data analysis, and early warning functions, ensuring the continuity and stability of the water supply system. A water quantity scheduling model is introduced to enable reasonable scheduling and optimization based on water supply demand, improving the adaptability and reliability of the water supply system.



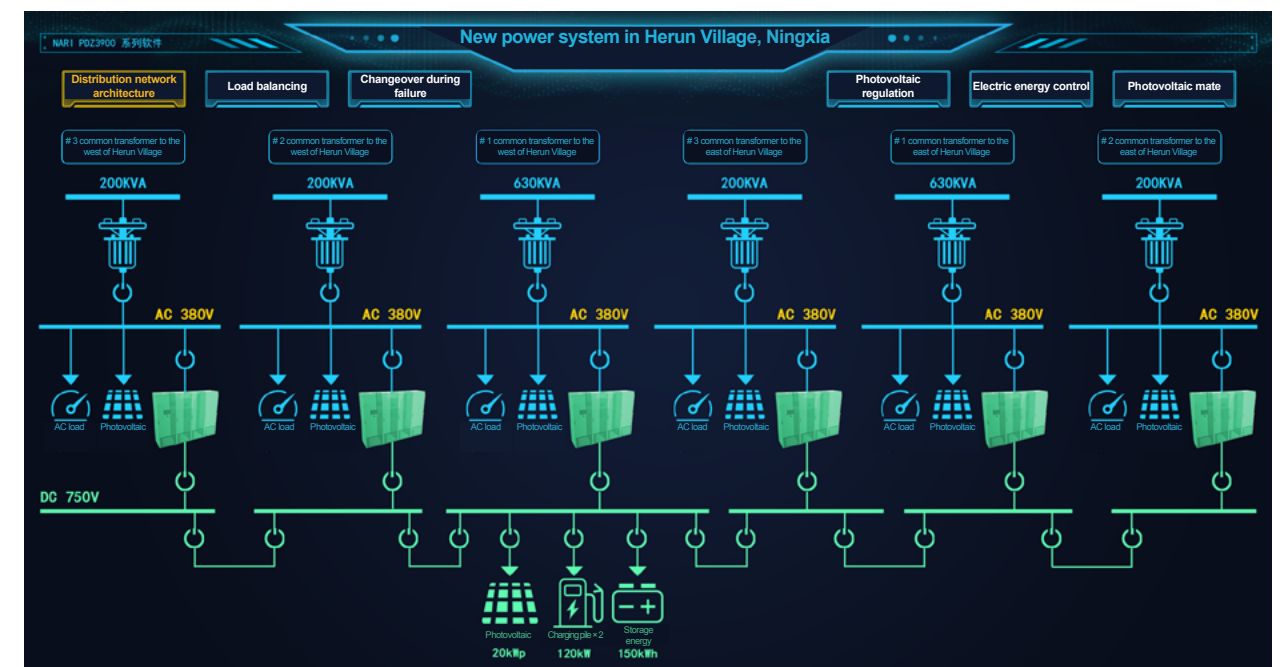
Screenshot of the information management and control platform for the Ningbo-Hangzhou Bay New Area Water Diversion Project



Case

The first low-voltage flexible interconnection device based on independently developed SiC components was applied in Guyuan, Ningxia

In 2023, NARI Semiconductor Co., Ltd. supported the State Grid Ningxia Electric Power in completing the construction of the first low-voltage flexible interconnection demonstration project based on independently developed SiC components in Guyuan, Ningxia. This demonstration project has adopted for the first time a compact and efficient AC/DC low-voltage flexible interconnection device based on homemade SiC-MOSFET components. Compared to products adopting imported IGBT components, the efficiency is increased from 98% to 99% and the size is reduced by 30%. For the first time, the borderless communication power reciprocity algorithm has been applied to simplify the communication configuration of low-voltage flexible interconnection systems. The overall cost of the borderless communication low-voltage flexible interconnection system based on the SiC solution is reduced by about 30% compared to that based on the conventional IGBT solution.



Monitoring interface of Ningxia Guyuan Low-voltage Flexible Interconnection System

Accelerating digital transformation

Honors and Credits

- The Company was recognized as the 2023 Jiangsu Industrial Internet Development Model Enterprise (Benchmark Factory)
- Three innovation research projects, including the "development and application of digital quality management system driven by full-factor integration", won the First Prize for Quality Technology Innovation granted by China Association for Water and Electricity

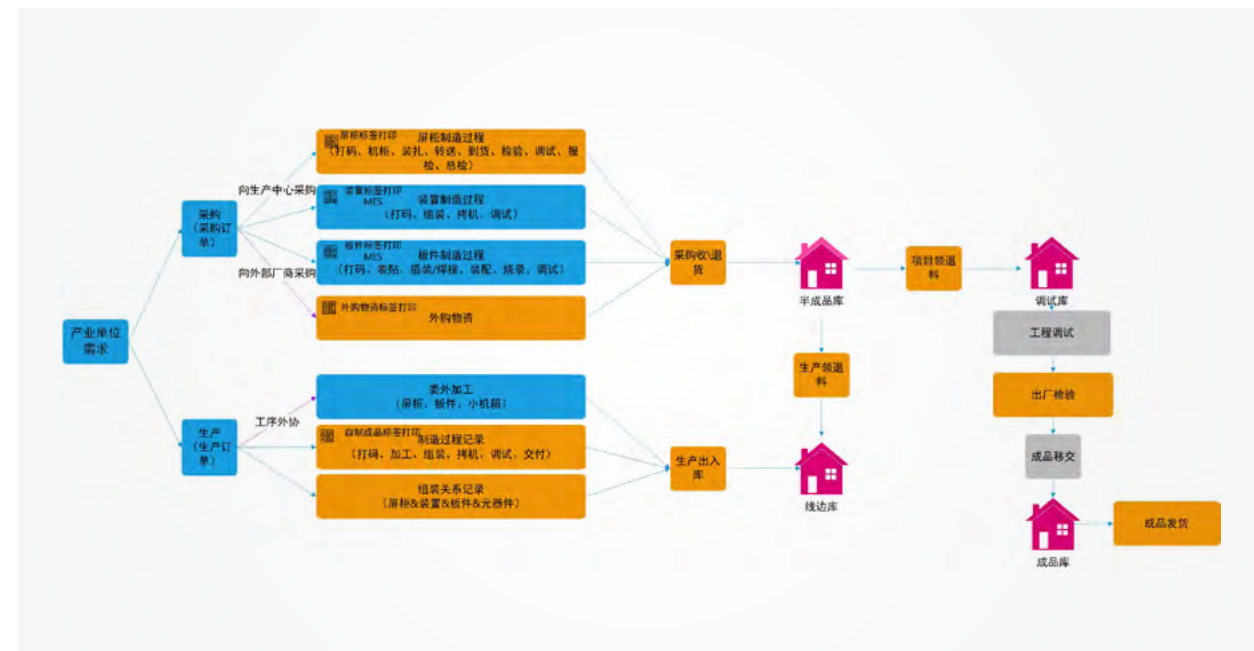
Strengthening the top-level design of digital transformation We have released five sets of regulations, including the *Regulations on Digital Construction Coordination and Management*, to form the Company's digital construction framework and blueprint.

Promoting the construction of data management systems We have formulated data management standards and carried out special governance on 35 typical issues in the fields of human resources, finance, and materials.

Managing cloud platform building and operation We have guided various units to migrate their businesses to the cloud, and added the connection of 2,880 R&D users, to support the cloud-based development of 110 business systems for 17 units.

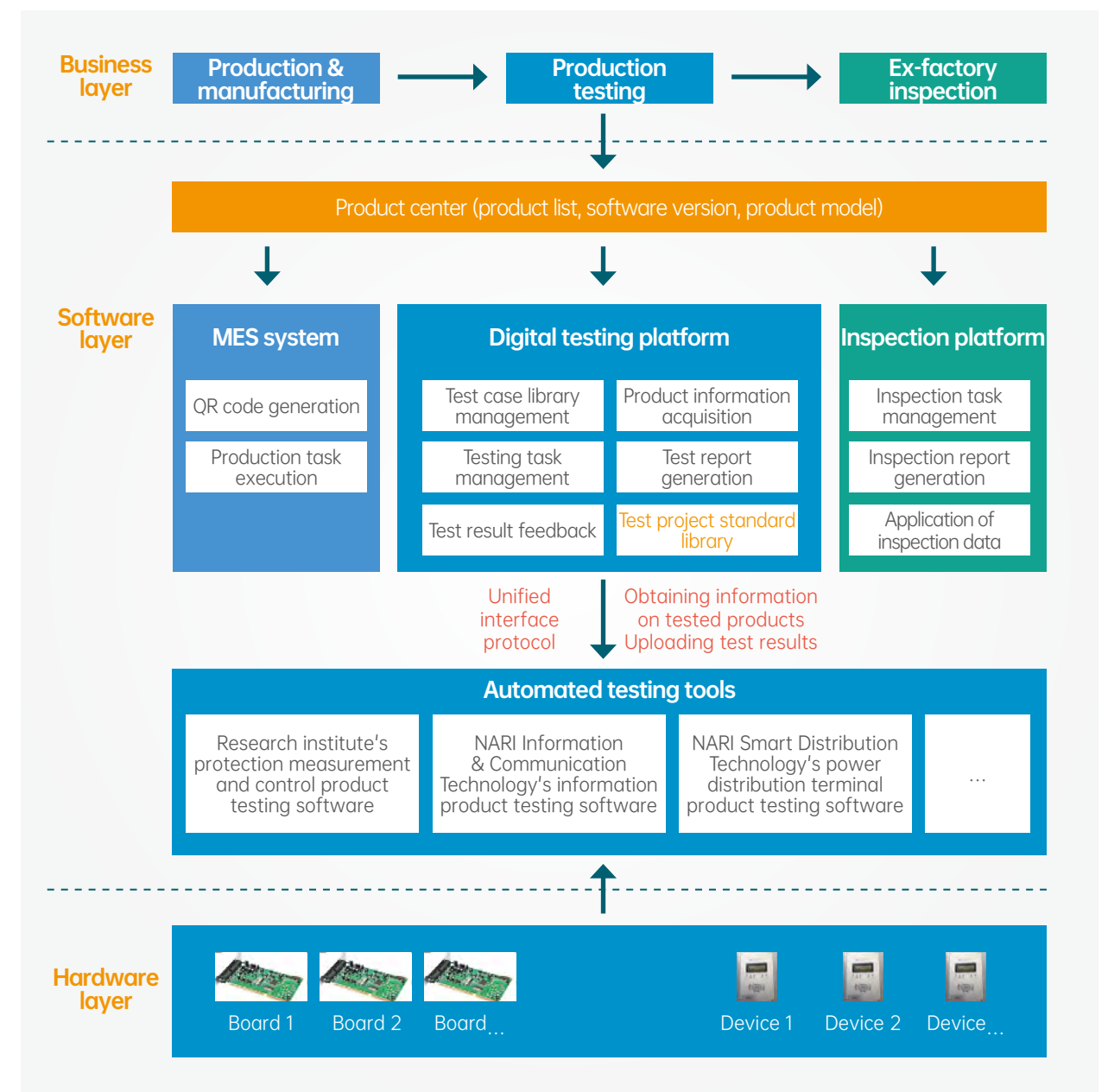
Case Developing physical equipment life-cycle management application to enhance lean production management

We have sorted out the production management processes of physical equipment and developed a digital production application in NARI, realizing the mobilization of production operations. We have designed and developed a full-process management application for physical equipment, achieving the collection of physical item information throughout the entire process covering materials procurement, receipt, and return; production materials requisition and return; project materials requisition and return; equipment production and assembly; production process recording; production testing; factory inspection; finished product warehousing in and out; and finished product shipment. This makes project production progress visible and controllable, achieving full life-cycle management of physical products, enabling the physical-level management at NARI, improving refined management, and reducing project performance risks.



Case Adopting automated production tests to support intelligent manufacturing

Focusing on the production characteristics of multiple varieties and small batch products of secondary devices in the power system, we have developed an automated modular flexible testing system for boards and devices and built a unified product testing data platform to solve various problems, such as high manual testing intensity, low efficiency, and high difficulty in tracing quality problems. This system realizes automated acquisition of test result files through unified testing standards, unified interface specifications, and seamless integration with professional testing software; it automatically parses test files and analyzes test results, generates test reports, and digitizes test results. By deeply integrating the digital testing platform with the MES system, the testing structure can be transmitted back to the MES system in the real time, to control the production pace timely, and solve the problem of disconnection between production and testing in the industry. This system can conduct overall analyses and trend predictions of the test pass rate and reasons thereof, promptly identify anomalies, and track their handling. It can also utilize intelligent analysis of the big data from tests to assist in quickly identifying quality issues in production batches on the site to reduce product maintenance costs.



Ensuring Safe Production

Safety is essential for the survival of an enterprise. NARI strictly abides by the *Work Safety Law of the P.R.C.* and other applicable laws and regulations, establishes and continuously improves a safety management system, emphasizes the importance of safety at all times, breaks down safety responsibilities, strictly supervises and inspects the fulfillment of safety responsibilities, prevents safety risks, and cultivates a safety priority culture, in order to create a safe and sound production environment, and lay a safe foundation for production.

NARI in Figures



Number of safety training
sessions

717



Number of participants

42,638

Strengthening safety management

NARI has constantly perfected its safety production management system, clearly defined the accountability at each level, promoted safety production standardization, and continuously improved the quality and efficiency of the dual prevention mechanisms, to lay a solid foundation for safety production management.

01

We have revised a total of 53 sets of safety production rules and regulations to solidify the foundation of safety management.

02

We have held safety committee meetings, safety and quality meetings, and other meetings to summarize the phrased work and supervise the deployment of safety production.

03

We have combined the standardization of safety production, the 100-day safety campaign, and the annual safety management evaluation to promote all units to fulfill their safety management responsibilities in a standardized manner.

04

We have completed the construction of the safety inspection center, improved the violation inspection mechanism, carried out monthly assessment and notification, and conducted warning interviews, to realize the institutionalization and standardization of supervision and inspection.

05

We have strengthened safety education and organized various special training sessions for our safety production management personnel and safety inspection teams on team leaders' duties, engineering project safety management, special operations, network security, and other topics.

Ensuring safe operation from all aspects

NARI has attached great importance to safety risk prevention and shifted its focus of safety work from "handling after the event" to "prevention before the event" and "supervision during the event", to timely identify and eliminate potential risks, implement safety measures, and prevent potential accidents.



Risk
identification

- We have revised the *Rules for Hazard Identification and Risk Grading Control*, the *Regulations on Hidden Safety Hazard Inspection and Control*, the *Rules for Anti-Violation Work in Safety Production*, and other rules and regulations to enhance our abilities to proactively identify and prevent risks.
- We have established dual prevention mechanisms, identified **15** important risks using the LEC risk assessment method, and implemented preventive measures focusing on control.



Inspection of
hidden hazards

- We have adopted a "remote + spot" inspection mode to complete high-quality inspections on comprehensive electrical fire control, high-voltage electrical testing, and other special work under supervision, to effectively prevent safety risks at the workplace.
- We organized the item-by-item inspections on the secondary risks arising from or in connection with the system and equipment operation hazards and carried out the special investigation and rectification of major accident hazards in 2023. We dynamically updated the list of key hazard elimination tasks with **217** new items, completed **213** elimination tasks, and promoted the rectification of the remaining **4** hazards as planned.
- We conducted **283** safety inspections and investigations and rectified **427** violations.



Emergency
management

- We have implemented the spirit of official documents from national and local safety and emergency authorities and revised our internal rules and regulations, such as the *Rules for Emergency Management* and the *Rules for Emergency Plan Management*.
- We have strengthened our awareness of compliance with emergency plans, revising **1** comprehensive emergency plan, **16** special emergency plans, and **7** on-site response plans.
- We have organized various emergency drills to comprehensively enhance our emergency response capabilities and abilities.

Case | 2023 Fire Safety: Evacuation and Firefighting Drill

On November 17, 2023, NARI organized the "2023 Fire Safety: Evacuation and Firefighting Drill" at the Jiangning Base. The Fire Brigade of Jiangning Development Zone provided on-site guidance, and 50 voluntary firefighters from different units participated in the oil basin fire-fighting and undertook the evacuation assistance task. More than 2,000 employees from the Industrial Building participated in the fire safety evacuation drill. This activity has enhanced the fire safety awareness of employees, improved their fire-fighting and escape abilities, and laid a solid foundation for building a safe NARI.



Protecting information security

NARI strictly abides by the *Cybersecurity Law of the P.R.C.*, the *Data Security Law of the P.R.C.*, and the *Personal Information Protection Law of the P.R.C.* and other applicable laws and regulations. The Company has formulated 24 sets of information security rules and regulations, and designated the network security leaders, functional departments, operation and maintenance supporting departments, and liaisons, to form an information security management system with clearly defined responsibilities and duties based on the combination of technology and management, to prevent disclosure of customer privacy or business information without prior consent or authorization.



Improving technological protection

We have effectively partitioned the network security zones; adopted 58 sets of devices, such as firewalls, IPS, and isolation devices, to protect the network boundaries; adopted 6 sets of devices, for WAF, situation awareness, and unknown threat detection, to protect application layer security; and developed webpage watermarking, data encryption and decryption, data desensitization, IP risk assessment, and other services to improve our business protection capabilities.



Ensuring data security

We store the database in the management information area, adopt industry-specific protective devices and logical isolation devices at the boundaries, and restrict access to the production database through firewalls, bastion hosts and other access control devices. We regularly conduct disaster recovery and backup drills and protect core data through many self-developed security services, such as watermarks, encrypted storage and data masking.



Strengthening privacy protection

For the partners in the power industry, we protect their core data by building a dedicated research and development network and supporting systems. For personal privacy data, we inform the customers of the scope and purpose of their data to be collected or used, and securely store the data through encryption, masking, and other means, and use it as authorized.



Reinforcing employee management

We sign network security commitment letters with our employees based on their jobs every year and clearly inform them of all precautions. Furthermore, we regularly conduct network security education and training for the staff, and from time to time organize network security knowledge competitions, online quizzes, phishing email drills, and other activities to improve employees' awareness of network security.

Case | Organizing network security training for the staff

In 2023, NARI organized basic and advanced training sessions respectively on network security and invited experts from relevant fields both inside and outside the Company as lecturers. The sessions were offered by both offline and online channels, mainly on the interpretation of network security regulations, network asset security management, sharing of daily network security protection experience, social engineering attacks, and NARI's network security requirements, covering the latest key points and hot topics of network security.



Site of basic training on network security



Site of advanced training on network security

Case | Rules on network security vulnerability reporting reward and prevention against phishing

To encourage the members of the Company's network security flexible team and network security enthusiasts to actively report network security vulnerabilities and hidden dangers, and participate in the construction of the secure network environment, NARI launched a vulnerability reporting mission reward activity for the entire system. The mission covered the drone operation and maintenance control platform and the security risk control supervision platform, and the reward was offered for a total of three typical vulnerabilities. Furthermore, NARI was highly vigilant against phishing attacks, and successfully blocked and intercepted two times of phishing attacks involving Trojan virus and CS Trojan malware. We also carried out education on the risk prevention measures against phishing attacks to strengthen the Company's network security.

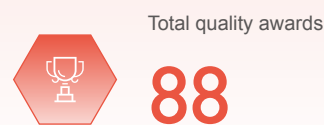
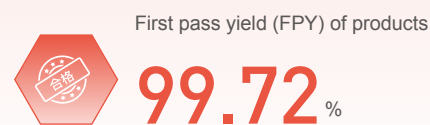
Delivering Quality Products and Services

NARI believes in originality and quality, seeks to integrate the pursuit of high quality into the building of modern business system, makes products in good faith, offers services with sincerity, and acts as a trustworthy integrated Internet of Energy solution provider.

Strengthening quality assurance

Quality is the lifeline of a business. NARI acts in full compliance with all applicable laws and regulations, including the *Product Quality Law of the P.R.C.*, the *Standardization Law of the P.R.C.*, the *Trial Measures for Product Quality Supervision*, and the Interim Measures for the Administration of Random Inspection of Product Quality Supervision, implements the national strategy of building a country strong on quality, innovates quality control mechanisms, strictly implements "internal third-party" quality supervision, carries out quality improvement activities participated by the public, promotes the quality management abilities of all employees across all processes, and ensures the safe and stable operation of the power system with high-quality and reliable products and services.

NARI in Figures



Honors and Credits



Controlling quality of network security-related products

- We have revised the *List of Key Products and Responsible Persons for Power Grid Security* to strengthen risk prevention and control for 231 models of products related to power grid security risk control.
- We have released the *Basic Rules for Security Management of Grid Security Risk Control Related Business*, formulated security control implementation rules for eight professional fields, and conducted in-depth quality supervision in R&D file archiving, version management, defect and error elimination, engineering debugging and other links.

Improving product quality assurance

- We have focused on key projects and key products, completed 323 internal manufacturing inspections, conducted type tests and spot checks on 25 models of grid security risk control-related products, analyzed product advantages and typical problems, and implemented improvement suggestions.
- We have strengthened the promotion and application of the "Cloud Quality Center" to empower comprehensive quality management throughout the entire process with digitization.

Strengthening construction of product quality capabilities

- We organized five special quality training sessions on quality inspection, common quality statistical methods, and other topics, to enhance the quality awareness and quality assurance capabilities of all employees.
- We organized 168 "Quality Month" activities and 98 primary-level quality improvement activities to address the pain points and difficulties of quality control.

Case Carrying out "Quality Month" series activities

September 2023 was the 46th national "Quality Month". NARI focused on the theme of "practicing the strategy of building a country on strong quality to safeguard the safe operation of the power grid", and took into account the actual conditions of products and services to strengthen planning, enrich content, adopt new patterns and seek good effects. The Company organized different units to carry out a series of "Quality Month" activities with quality theme promotion, quality risk prevention and control, supplier quality management, process quality supervision, and quality assurance capacity building as the main content, to enhance quality awareness of all workers, strictly execute accountability rules, strengthen product quality control, safeguard the secure operation of the power grid, and enhance the core competitiveness of NARI.



A technician is debugging on the site



Engineers are conducting an annual inspection at the UHV converter station



Skill competition of inspectors



A technician is optimizing the automatic testing function of board

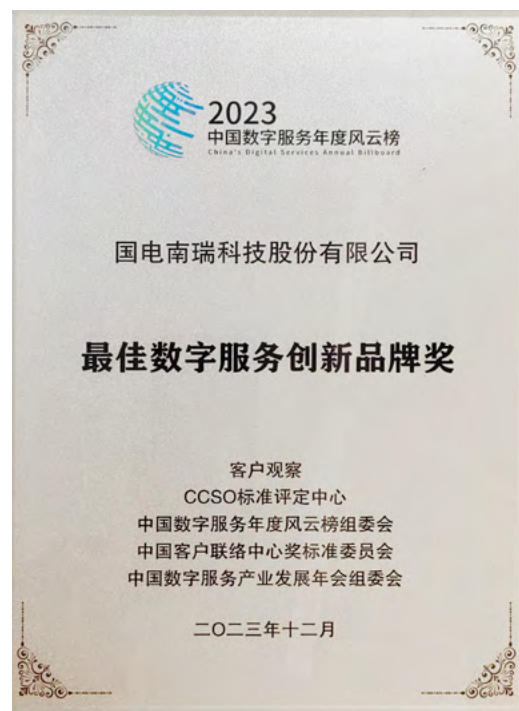
Optimizing customer services

NARI adopts a customer-centric approach and the customer service philosophy of "starting from customer demands, basing on constant improvements, and aiming at customer satisfaction". We have established a complete customer service system, adopted innovative service methods to meet customers' diversified and personalized service needs, and continuously improved service quality to maximize customer value and enhance customer satisfaction.

NARI in Figures



Honors and Credits



We won the Digital Service Innovation Brand of the Year 2023



We were recognized as the Best Learning Organization at the China Customer Service Festival 2023



We won the first prize at the 30th Nanjing Enterprise Management Modernization Innovation Achievement Release Conference

Perfecting customer service management

- We have revised our Standard for Customer Service Hotline Business Process, and Customer Satisfaction Survey and Evaluation Procedures, as well as other internal documents, to strengthen the deep communication with customers and achieve multi-dimensional alignment between the service support response and the customer demand value enhancement.
- We have prepared the *Customer Service Call Platform Construction Plan* and the *Customer Service Information Support Platform System Maintenance Manual*, as well as other internal documents, to enhance the digitalization of customer services.

Establishing a complete customer demand response mechanism

- We have established a mechanism for daily, weekly, monthly, and yearly reports and special analysis reports, to improve customer demand response and handling efficiency, ensure 7 * 24 answering of customer service hotline, and ensure a good customer experience.
- We have deepened the convenient application of customer mobile devices, enriched the functions of customer service applets around diverse customer demand scenarios, created wide customer connection and data interaction, and integrated these functions and applications with industrial company business systems, to improve the customer demand handling efficiency.



- We have promoted the pilot of an on-site service order mobile application, collected point-of-service information based on contract performance management, and provided customers with multi-channel and multi-mode satisfaction evaluation methods, such as SMS, electronic contract signing, and WeChat.
- We have conducted centralized satisfaction follow-up in eligible units through multiple channels, such as phone calls and SMS.
- We have conducted customer satisfaction surveys through the customer service hotline, on-site service orders, and third-party research agencies. We have conducted third-party customer satisfaction surveys for 12 consecutive years and issued special customer satisfaction analysis reports, to continuously improve product and service quality.

- We organized the 2023 business knowledge training, mid-year technical training, bi-weekly cloud classroom training, and other education activities, on diverse topics, to build a talent pool for the execution of projects.
- We have offered centralized onboarding training for new employees, and bi-weekly technical training by our technical center. We planned and organized 16 offline training sessions and more than 20 cloud-based training sessions on new products and technologies, to enhance the abilities and qualities of our marketing personnel.

Conducting customer satisfaction surveys

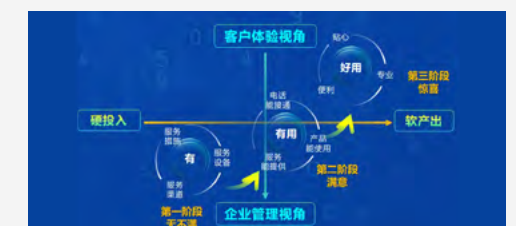
Offering responsible marketing training



Three-tier collaborative customer service system



Customer demand service channels



Customer experience management system

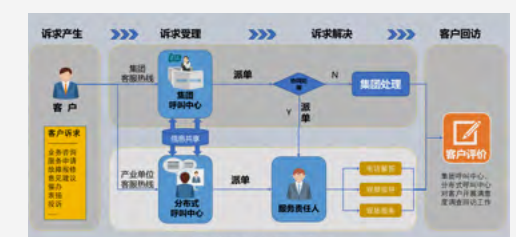


Diagram for customer demand service process

04

Promoter Take the Lead in Creating and Defending a Better Life

NARI adheres to its value orientation of putting people first. The Company takes social prosperity as the ultimate goal, and maintains harmonious and stable labor relations to support individual development; sincerely carries out experience exchanges and strategic cooperation with industrial partners for mutual benefits; gives back to society with actions for the public good, and empowers rural revitalization with technologies, to make contributions to the people's well-being and happiness.

Boosting Employee Growth	76
Co-promoting Industry Development	84
Contributing to Community Development	93



Boosting Employee Growth

NARI believes that "talent is the most core resource for pursuing the common development of the enterprise and employees", and attaches importance to the protection of basic rights and interests of employees. The Company focuses on optimizing the talented person's growth environment, pays more attention to employees' occupational health, enhances humanistic care, and creates a safe, harmonious, and equal corporate atmosphere for employees.

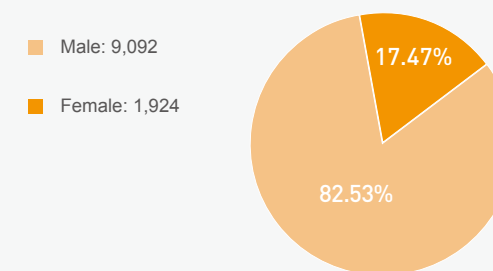
Safeguarding employees' rights and interests

NARI attaches great importance to safeguarding the basic rights and interests of employees, adheres to the principles of diversity, equality, and inclusion, recruits talented persons in a well-organized manner, improves the compensations and benefits, emphasizes democratic management, and creates harmonious and stable labor relations.

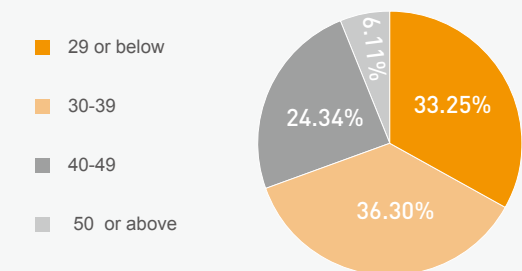
NARI in Figures



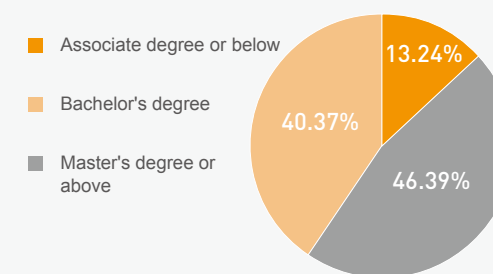
Workforce composition by gender



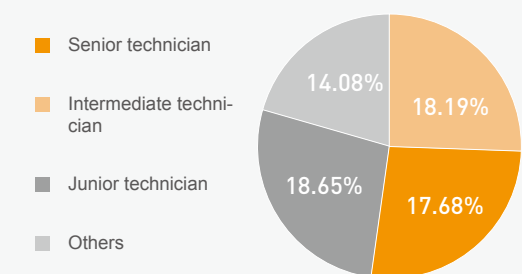
Workforce composition by age



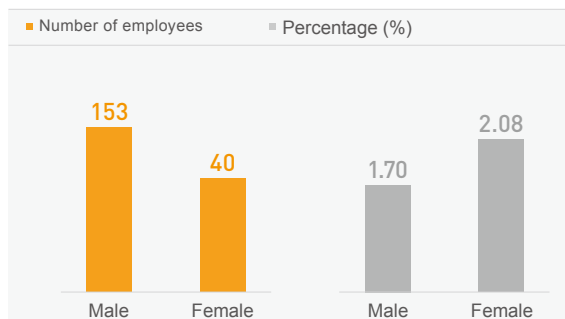
Workforce composition by education



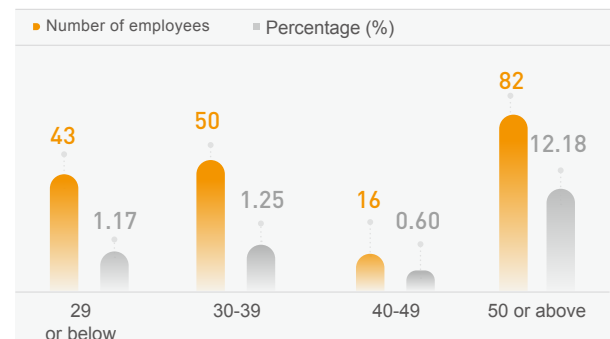
Workforce composition by technical grade



Employee turnover rate by gender



Employee turnover rate by age



Equal employment

- Abiding by all applicable laws and regulations of China, we have formulated various internal rules and regulations, including the *Regulations on Employee Recruitment* and the *Rules for Employee Rewards and Punishments*, to standardize personnel management and employee behaviors.
- We have fully utilized the superior resources of universities, established a comprehensive school-enterprise cooperation mechanism, expanded the modes of school-enterprise joint recruitment, carried out the "Excellence Plan" special recruitment, and conducted "one-stop" special job fairs in more than 50 universities.
- We prohibit employment discrimination, prohibit the employment of child labor, oppose any form of forced labor, and treat employees fairly and impartially regardless of their nationalities, races, genders, religious beliefs, or cultural backgrounds.
- We have established a management mechanism to effectively protect our employees' personal information and privacy. We have established a management mechanism to effectively protect our employees' personal information and privacy.

Compensations and benefits

- We have achieved the full coverage of the new version of performance-based pay policies for all positions, adopted a policy of determining the pay based on qualifications and length of service, and launched a special plan to improve pay competitiveness.
- We have systematically implemented various medium- and long-term incentive plans, including stock ownership incentives in listed companies, stock ownership and dividend incentives in technology-based enterprises, and virtual excess profit sharing for non-grid competitive businesses.
- We have reviewed and revised the management rules for six benefits, including the *Canteen Budget Management Rules*, to consolidate the foundation of benefit management system.
- We have raised the standards for three benefits that employees are concerned about, including canteen budget, employee recuperation allowances, and medical subsidies for employees' immediate family members, to enhance the per capita benefits of in-service employees.
- We have added the *Critical Illness Group Support Plan* for experts, and the *Overseas Family Doctor Support Plan* for the employees going or staying abroad, to continuously improve the multi-level medical support.

Democratic management

- We have organized the re-election of grassroots trade unions according to the *Trade Union Law of the P.R.C.*, the *Constitution of Chinese Trade Unions*, and the *Regulations of the Grassroots Union Members' Congress*.
- We have convened the Workers' Congress, democratic deliberation meetings, and meetings of the trade union committee, and organized specialized working committees to implement the resolutions of the Workers' Congress and make responses to the proposals.
- We have launched the suggestion solicitation activity themed "Contribute Ideas for Your Team" around the core competencies of the team, digital transformation, and other matters.
- We have organized employee representatives and Chairman liaison officers to conduct field surveys and complete the annual employee satisfaction assessment.
- We have established and made full use of the employee demand service center, improved the digital and intelligent service platform for employees, and built a trade union work system that connects and serves a wide range of employees.

Facilitating employee development


NARI adheres to the strategy of strengthening the enterprise with talent, systematically promotes the building of training systems, accurately implements key training projects, expands the training to cover new employees, increases the training contents for different posts, and provides various vocational training for talent at all levels, to help employees improve their abilities and personal value.

NARI in Figures

We organized and offered 11 centralized training sessions for managers at all levels

 **356** participants **1,884** days (cumulative for all participants)

We organized and offered 9 centralized training sessions for new employees

 **821** participants **4,992** days (cumulative for all participants)

We organized and offered 120+ topic-based management training sessions

9,720 + participants

Training management system

We have improved the management of the special plans for education and training, conducted in-depth demand research and project feasibility analysis, strictly implemented the project approval system, and established a closed-loop management mechanism for project execution planning, process supervision, organizational support, and effectiveness evaluation. We adopted many means, such as seminars, questionnaire surveys, and data review, to acquire opinions and suggestions from different departments and units, to continuously improve the training standardization level and cost efficiency.

Training course system

We have optimized the courseware development mode by focusing on the knowledge module of the job learning tree, and added more than 110 new professional courses and more than 1,000 new test questions. We have selected over 120 excellent general knowledge courses from external sources to offer high-quality training resources for employees to learn online.

Improving job training system

Mentorship system

We have offered two mentorship training sessions to improve the working skills and abilities of new employees, established a mentor pool, and guided 36 units to carry out mentorship training, with a coverage rate of 100%. We have supported 15 grassroots units to flexibly carry out over 500 job training sessions totaling 1,000+ hours, to purposely and efficiently improve the job skills of employees.

Pipeline of trainers and lecturers

We have held three "Good Trainers and Lecturers" training camps for internal trainers and lecturers, and organized experts and authorities to summarize their professional experience and systematically improve their training and lecturing skills, aiming at building a learning organization, and cultivating a high-quality and professional training team.

Paying the way for career development

We have revised the *NARI Rules for Managing Career Development Paths*, based on job value and guided by performance contribution, to optimize the matching rate between career paths and employees' personal growth.

We have continuously pushed forward the institutional reforms of work, personnel, and distribution, strictly implemented the capability certification mechanisms, deepened the "six-can" orientation, and emphasized the linkage of positions, salaries, and performance.

We have continuously improved our internal personnel mobility mechanism, and organized three batches of internal recruitment, including the recruitment by the marketing service center, for 17 vacant positions.



Case

NARI Rookies Getting on Board

From August 23 to August 29, 2023, NARI successfully organized the 2023 Concentrated Training Session for New Employees on company profile, corporate culture, career development, and professional abilities in four modules and 17 courses, by means of lecture, co-creation experience, case analysis, visit, sharing and scenario drills, to provide comprehensive learning courses and rich learning experiences for new employees. After a week of training, these rookies gained a comprehensive understanding of the Company and job duties, setting up their personal development directions and laying a solid foundation for their subsequent career development.



Team networking



Draw a blueprint together

Caring about employees' life

NARI is dedicated to providing practical humanistic care for its employees and keeps on optimizing its employees' care management system. By organizing a variety of cultural and sports activities, paying more attention to female employees, and providing assistance to those in need, NARI has put its commitments into practice to balance employees' work and life, and enhance their sense of belonging, happiness, and achievement. The Company has also paid visits to retirees, organized health and recuperation activities, and offered various interest classes, to enrich the spiritual and cultural life of retired employees, and improve their happiness index.

NARI in Figures



Personal visits to those who are in needs

796



Assisted employees in need

158



Expenditure in employees' caring activities
RMB

26,608,700



Employee satisfaction

100%

Diverse cultural and sports activities



Staff basketball game



Staff football game



Work-break exercises



Brisk walking



Female employees' reading party



Women's Day activity



Case

Celebration in the New Year

As a traditional event, NARI's workers and employees in different regions of the industrial park got together and shared the big cakes prepared by the staff canteen on December 28, 2023 to celebrate the New Year and experience the NARI's exclusive sense of ceremony for commemorating the achievements in the old year and looking forward to the development in the new year, which has further enhanced the senses of happiness and gain of all workers and employees.



Case

NARI Rail offered summer care center service for the children of employees

From August 16 to 31, 2023, NARI Rail Transit Technology Co., Ltd. opened a summer care center at its Home of Employees. More than 30 children of employees applied for this service. The care center has bottom classes for children under 7 years old and top classes for children aged 7-12 years old. The teachers include external teachers and employee volunteers. The center hires professional preschool teachers for the bottom classes to teach the children singing, art, and scientific experiments. The teachers for the top classes are volunteer employees from NARI Rail, with 1-2 teachers rotating every day to tutor the children in studies and carry out interest-oriented activities. This service program has effectively solved the problem for employees in caring for their children in the summer holidays, especially the families with both parents at work, and made them feel more at ease in their work, widely praised by employees.



Attaching importance to occupational health

In strict accordance with the relevant laws and regulations such as the *Law of the P.R.C. on Prevention and Control of Occupational Diseases*, NARI has formulated management measures such as the *Regulations on Occupational Health Management* and the *Occupational Health Management Manual*, and passed the certification of GB/T45001-2020/ISO45001:2018 Occupational Health and Safety Management Systems to continuously improve the occupational health management system. The Company has implemented the requirements of the local government, completed annual occupational hazard factor testing on schedule, organized relevant workers to receive occupational disease examinations, offered psychological counseling services, provided sufficient personal protection equipment as required, and extensively carried out occupational health education, to fully ensure the physical and mental health of all employees.

NARI in Figures



Psychological interview



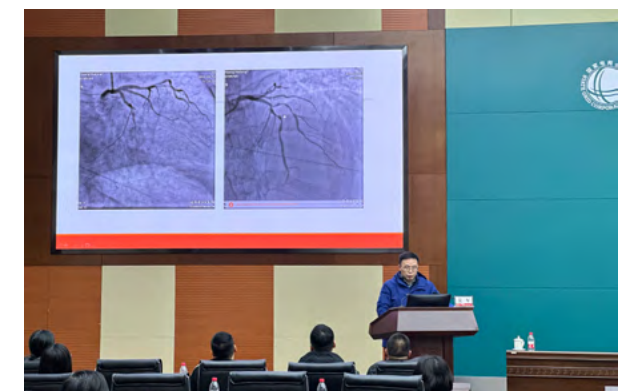
Offline psychological lecture on effectively improving interpersonal communication



Case

NARI's chronic disease prevention and treatment activity

In November 2023, NARI launched a themed activity on chronic disease prevention and treatment. Cardiologists from Jiangsu Province Hospital and endocrinologists from the Zhongda Hospital Southeast University to give lectures on cardiovascular and endocrine diseases and provide free consultations. Through the activity, employees learned that adjusting their daily lifestyle could effectively prevent chronic diseases, and gained a deeper understanding and recognition of common chronic diseases, effectively improving their awareness of chronic disease prevention and health self-management abilities, and ensuring their occupational health and safety.



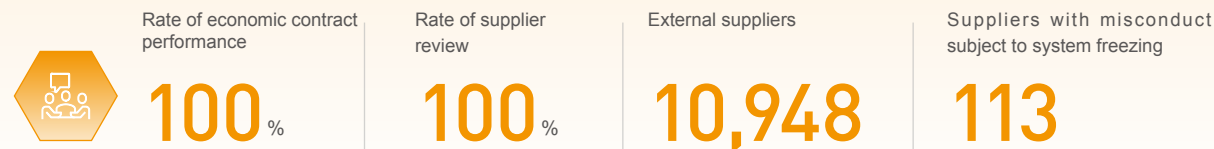
Co-promoting Industry Development

NARI upholds the concept of mutual progress and sharing, and adheres to the principles of mutual progress, mutual development, and mutual value in cooperation with suppliers, partners, and other stakeholders, to co-create mutual benefits, support the development of the industry, and co-build a good business environment of peace, stability, equality, trust, harmony, and win-win situation.

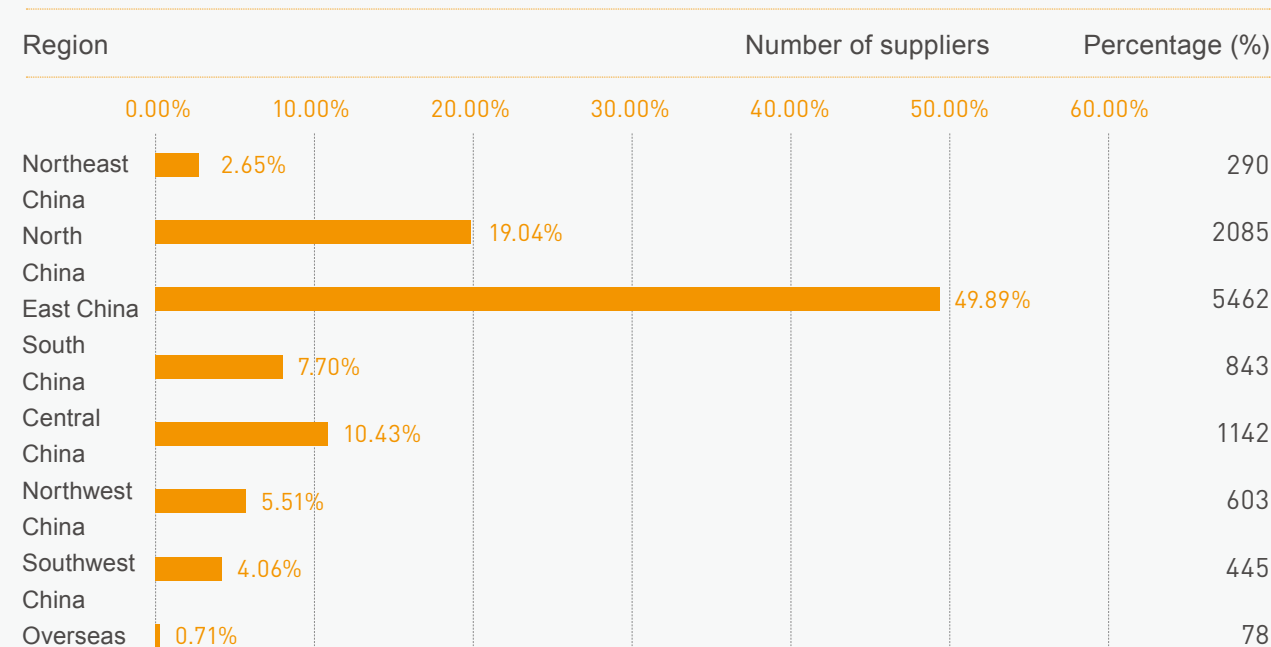
Reinforcing supply management

NARI has set up a well-rounded supplier management system in strict accordance with the *Bidding Law of the P.R.C.* and the *Regulations on the Enforcement of the Bidding Law of the P.R.C.*, to standardize procurement processes, optimize procurement platforms, upgrade the responsibility management of industrial chain and value chain, and proactively identify and mitigate environmental and social risks in the supply chains. We have provided training for suppliers in the introduction of electric power business and supplier platform account security, tightened the selection criteria of suppliers, strengthened the review and evaluation process for suppliers, and achieved the life-cycle management of the suppliers to promote the sustainability of the supply chain.

NARI in Figures



List of suppliers by region



Responsible procurement

We have optimized and improved the procurement processes, kept on strengthening the normative control of key businesses, and reinforced the accountability of the persons and departments responsible for procurement.

We have vigorously promoted the migration of all procurement activities to the platform, to ensure the transparency and standardization of procurement activities.

We have encouraged and promoted bidders to offer energy-saving products with low energy consumption and high energy efficiency, to minimize the impact on the environment.

We have strengthened the control of the procurement management process in overseas projects, promoting the standardization of the procurement process.

Supplier management



We have strengthened the access management, and carried out document verification and on-site eligibility verification of suppliers, to ensure that all suppliers can meet the corresponding eligibility criteria from the very beginning.



We have optimized the supplier performance evaluation, developed differentiated evaluation policies, promoted the implementation of "one order one evaluation", and built a supplier contract performance database.



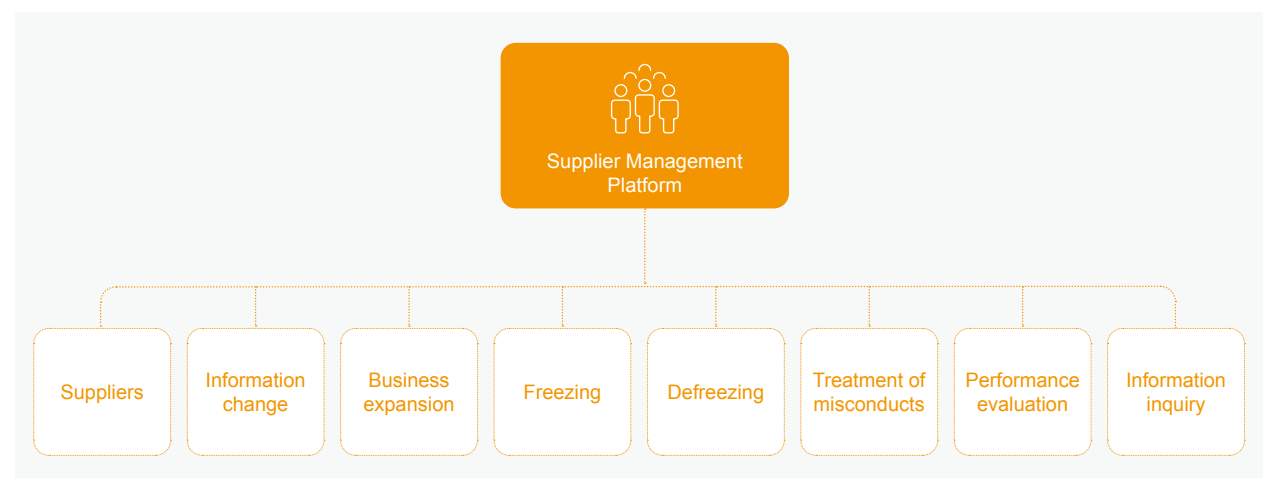
We have widely adopted material supply systems to strengthen supply contract fulfillment control and co-planning capabilities.



We have organized supplier training and urged suppliers to establish and improve the relevant control systems in the safe production, risk prevention and control, environmental protection, labor rights, and other aspects, to accelerate the building of a healthy and harmonious ecosystem.



We have established a unified supplier portal to implement full-process digitalized management of supplier information.





Case

NR Electric's delegation visited AMERTRON's factory in the Philippines

NR Electric has been committed to working with international partners to create a more efficient, green, and sustainable industrial chain ecosystem, and kept on making in-depth investigations on suppliers' scale advantages, pricing, delivery, technical strengths, production management, safety and environmental protection (green development), quality management, etc., to realize a multi-dimensional and comprehensive evaluation of suppliers. From October 10 to 11, 2023, a delegation of NR Electric visited AMERTRON's factory located in the Philippines. The delegation members had an in-depth dialogue with the factory's production technicians face-to-face, visited its processing production line, and conducted a detailed evaluation and summary of the entire process, including the demand analysis, purchase management, supply chain coordination, and production execution, to further improve the communication efficiency and strengthen mutual trust between the two parties.



Holding exchange meeting



Visiting production line

Strengthening cooperation and exchange

NARI and its subsidiaries have kept on increasing and expanding their cooperation with the government, universities, and research institutions, organized special seminars and symposiums, participated in international and domestic industry exchanges, and built strategic sharing and cooperation platforms, to achieve complementary advantages and common growth, and make contributions to the regional socio-economic development and industry development.

Domestic cooperation and exchange

- We received important visitors and delegations from the State Grid Corporation of China, the national ESC (educational, scientific and cultural) organizations, Zhejiang Province, Guangdong Province, and the State Power Investment Corporation.
- We carried out communication and exchange with our strategic clients, such as Fujian Electric Power, China Southern Power Grid, and CHN Energy, promoting breakthroughs in key businesses and the implementation of major projects.

NARI in Figures



Measurement and control devices,
intelligent terminals, and other
products passed

16 international certification tests

International cooperation and exchange

- We received visitors and delegations from foreign governments, such as the Mayor of Yorkshire, Ireland.
- We received visitors and delegations from the PLN of Indonesia, the SEC of Saudi Arabia, the State Grid International Development CO. LTD., SGSPAA, and signed cooperation framework agreements with China Electric Power Equipment and Technology CO. LTD and HK Electric.
- We strengthened discussions and exchanges with EEBUS on the international standards and technical issues in the field of electric vehicle charging and battery swapping, and jointly hosted the special session titled "Green Hydropower and Sustainable Development" with the International Center on Small Hydro Power at the 18th World Water Congress.



On November 1, Chairman Shan Shewu visited the State Grid Jibei Electric Power for in-depth business cooperation and exchange



On December 20, Chairman Shan Shewu visited China Huaneng Jiangsu Energy Development Co., Ltd. for deepened business cooperation in the field of new energy



NARI Water Resources and Hydropower Technology appears at the 2023 Water Expo China



NARI and the International Center on Small Hydro Power jointly host the special session titled "Green Hydropower and Sustainable Development" at the 18th World Water Congress



The Company's new exhibition hall for visitor reception has been completed



The AMI Head-end System Project in Saudi Arabia is delivered on schedule and operates normally



The Photovoltaic Energy Storage Project in Central Africa successfully passes the acceptance inspection



Case

2023 Annual Meeting and Academic Exchange Meeting held by the Dam Safety Monitoring Committee of the Chinese Hydraulic Engineering Society

On March 2, 2023, The 2023 Annual Meeting and Academic Exchange Meeting of the Dam Safety Monitoring Committee of the Chinese Hydraulic Engineering Society sponsored the committee and organized by NARI Water Resources and Hydropower Technology was held. More than 180 experts and representatives from the Chinese Hydraulic Engineering Society, the constructors and operators of water conservancy and hydropower projects, survey and design institutions, universities, research institutes, and equipment manufacturers across China attended the meeting. The participants conducted academic exchanges around the "Innovation and Development in Dam/Reservoir Safety Monitoring of Reservoirs", by taking into account the hot topics and difficult issues in the development of dam safety monitoring technology in the new era and aiming at the overall goal of comprehensively improving the national water safety and security protection capacity. They shared their opinions on the new technologies and applications of dam safety monitoring at home and abroad, for academic discussion, work exchange, and on-site learning. This meeting is of great significance and value in promoting the development of theories and practices to guide the future development of the technologies in this field.



Case

NARI supported the World Bank's Lighting Africa Program

NARI assisted the World Bank in successfully putting into operation the first batch of micro-grid projects, i.e. the Albasa Station and Qorile Station in Ethiopia, under the Lighting Africa Program. The Company provided micro-grid solutions for the projects, including the self-developed micro-grid energy management systems, micro-grid coordination controllers, energy storage inverters, photovoltaic inverters, and other core devices, and integrated the IEC-61850 fast coordination control technology and industry-leading virtual synchronous generator technology for energy storage and conversion, effectively ensuring the continuous, safe and stable operation of off-grid systems. The successful operation of this micro-grid has promoted the implementation of the Ethiopia Electricity Inclusion Plan, launched a good kick-off for the Ethiopian government in implementing its program to build micro-grids in 256 remote villages, and provided a model project for other African countries. It is expected to promote more micro-grid projects to supply cleaner and safer energy for more remote areas.



Case

NARI organized training on HVDC dispatch for the Pakistan National Power Control Center

NARI successfully organized the High Voltage Direct Current Dispatch Training Session for the Pakistan National Power Control Center (NPCC) from November 6 to 8, 2023. This session coincided with the 10th anniversary of the launch of the China-Pakistan Economic Corridor. NARI developed customized training programs for six key engineers from NPCC, and conducted in-depth exchanges around power grid security and stability proposed by Pakistani engineers based on the current situation of Pakistan's power grid, to solve technical difficulties and broaden development perspectives. This session is a vivid reflection of the high-quality co-construction of the Belt and Road Initiative, as well as a strong demonstration of the deep friendship between China and Pakistan. It has further improved the understanding and management of Pakistan National Transmission and Dispatch Company (NTDC) on the safety and stability of the power grid.



Leading the industry's development

NARI and its subsidiaries have led or participated in the formulation of international and domestic industry standards, to make the utmost of the supporting and guiding effects of standards and technical specifications in industry development, and drive the industry to move towards a new stage of high-end, intelligent, and green development. In 2023, NARI initiated the IEC SC 8C "Network Management in Interconnected Electric Power Systems", introducing the leading power grid operation control technologies, advanced experience, and standard systems to the international stage. NARI also participated in the establishment of the IEC SyC SET "Sustainable Electrified Transportation", assisting China in assuming the role of the IEC System Committee Secretariat for the first time.

NARI in Figures



International, national and industry standards led and participated in by NARI

3

National standards

24

Industry standards

53

Experts winning the IEC 1906 awards

4

Standard formulation

NARI has led or participated in the development of standards in many fields, such as relay protection, intelligent substations, port shore power, electricity meteorology, and hydropower automation, to support the construction of a standardized ecosystem in the industry. NARI has also promoted and organized education and training on international standards in many fields, such as power electronics, micro-grids, interconnectivity, and low-carbon technologies, to utilize the standards to drive technological breakthroughs, achievement translation, and talent cultivation.

Standard Name	Standard Level	Standard Number
Power system stability control - Part 1: Guideline for framework design of power system stability control	International stan- dard	IEC TS 63384-1:2023
Technical Guide for Smart Hydroelectric Power Plant	International stan- dard	IEC/IEEE 63198-2775:2023
Electric vehicle conductive charging system - Part 1-1: Specific requirements for electric vehicle conductive charging system using type 4 vehicle coupler	International stan- dard	IEC PAS 61851-1-1:2023
Technical code for relaying protection and security automatic equipment	National standard	GB/T 14285-2023
Specification for commissioning and acceptance of stand-alone micro-grid	National standard	GB/T 43333-2023
Power systems management and associated information exchange - Data and communication security - Part 100-3: Conformance test cases for IEC 62351-3, the secure communication ex- tension for profiles including TCP/IP	National standard	GB/Z 25320.1003-2023
Real-time dynamic monitoring system of power system - Part 2: Protocols for data transferring	National standard	GB/T 26865.2-2023
Technical specification for centralized monitoring and control system of distributed energy stor- age	National standard	GB/T 42316-2023
Communication technical requirements for electrochemical energy storage battery management	National standard	GB/T 43528-2023
Instrument transformers - Part 100: Guidance for application of current transformers in power system protection	National standard	GB/Z 20840.100-2023
Communication networks and systems for power utility automation - Part 8-1: Specific com- munication service mapping (SCSM) - Mappings to MMS (ISO 9506-1 and ISO 9506-2) and to ISO/IEC 8802-3	National standard	GB/T 42151.81-2023
Design and testing methods for AC side impedance of voltage source converter based high voltage direct current (VSC-HVDC) transmission	National standard	GB/T 43534-2023
Mechanical structures for electrical and electronic equipment - Dimensions of mechanical structures of the 482.6 mm (19 in) series - Part 3-110: Residential racks and cabinets for smart houses	National standard	GB/T 19520.22-2023
Mechanical structures for electrical and electronic equipment - Dimensions of mechanical struc- tures of the 482.6 mm (19 in) series - Part 3-109: Dimensions of chassis for embedded comput- ing devices	National standard	GB/T 19520.21-2023
Mechanical structures for electrical and electronic equipment - Dimensions of mechanical struc- tures of the 482.6 mm (19 in) series - Part 3-108: Dimensions of R-type subracks and plug-in units	National standard	GB/T 19520.20-2023
Capacitors for snubber circuits of HVDC transmission system converter valves	National standard	GB/T 26215-2023
Honeycomb fiberboard boxes	National standard	GB/T 31269-2023
Evaluation index system and calculation method of intelligent manufacturing level	National standard	GB/T 42757-2023
Power systems management and associated information exchange - Data and communications security - Part 6: Security for IEC 61850	National standard	GB/T 25320.6-2023
Power systems management and associated information exchange - Data and communications security - Part 11: Security for XML documents	National standard	GB/T 25320.11-2023
Power systems management and associated information exchange - Data and communication security - Part 100-1: Conformance test cases for IEC 62351-5 and IEC TS 60870-5-7	National standard	GB/Z 25320.1001-2023
Requirements for 1000kV reactor protection equipment	National standard	GB/T 29327-2023
Energy management system application program interface (EMS-API) - Part 302: Common in- formation model (CIM) dynamics	National standard	GB/T 43259.302-2023
Technical requirements for power conversion system of electrochemical energy storage system	National standard	GB/T 34120-2023
High-voltage direct current (HVDC) power transmission using voltage sourced converters (VSC)	National standard	GB/T 30553-2023
Technical guide for the treatment and reuse of coal chemical wastewater	National standard	GB/T 42866-2023
Code of maintenance for electrochemical energy storage station	National standard	GB/T 42315-2023
The series and type spectrum of monitoring instrument for earth-rockfill dams	Industry standard	DL/T 947-2023

Standard Name	Standard Level	Standard Number
Horizontal displacement gauge of tensional wire	Industry standard	DL/T 1046-2023
Hydraulic overflow settlement gauge	Industry standard	DL/T 1047-2023
Vibrating wire sensor readout box	Industry standard	DL/T 1133-2023
General conditions of security and stability control system for power system	Industry standard	DL/T 1092-2023
Technical guidelines for series transformer relay protection	Industry standard	DL/T 2649-2023
High temperature single roller slag crusher	Industry standard	DL/T 1005-2023
Discharge and feeding valve of blow tank	Industry standard	DL/T 906-2023
Technical specification for intelligent charging and swapping operation service system of electric vehicles	Industry standard	NB/T 33017-2023
Specification of on-line condition monitoring system for hydro-generator set	Industry standard	DL/T 1197-2023
Technical guidelines for on-line monitoring and intelligent diagnosis of relaying protection in smart substation	Industry standard	DL/T 1663-2023
Specifications for monitoring function of flexible DC transmission operator control system	Industry standard	DL/T 2636-2023
Specifications for on-site protection device detection - Part 3: Transformer protection	Industry standard	DL/T 2379.3-2023
Specifications for on-site protection device detection - Part 4: Bus protection	Industry standard	DL/T 2379.4-2023
Technical guidelines for plug and play of distribution automation terminals	Industry standard	DL/T 2607-2023
Technical specifications for operation and maintenance of distribution automation terminals	Industry standard	DL/T 2608-2023
Shore power supply system - Part 7: Technical specifications for inspection of shore power sources	Industry standard	DL/T 2151.7-2023
Technical specifications for anti-islanding protection devices	Industry standard	NB/T 11054-2023
Technical guidelines for control and protection of high voltage DC circuit breakers	Industry standard	NB/T 11052-2023
Technical specifications for high-voltage DC protection testing equipment	Industry standard	NB/T 11051-2023
Code for on-site handover testing of flexible DC transmission converter valves	Industry standard	DL/T 5864-2023
General technical specifications for high-voltage direct current protection testing devices	Industry standard	DL/T 2663-2023
Technical specifications for fast dynamic response synchronous phase-shifting cameras	Industry standard	DL/T 2658-2023
Technical specification for precise load shedding safety and stability control system	Industry standard	DL/T 2648-2023
Technical specifications for intelligent substation configuration file operation control system	Industry standard	DL/T 2647-2023
Technical specification for digital-analog integrated relay protection test device	Industry standard	DL/T 2646-2023
Technical specifications for distributed protection of distribution networks	Industry standard	DL/T 2645-2023
Guidelines for selection of broadband voltage measurement devices	Industry standard	DL/T 2641-2023
Specifications for on-site testing of hybrid high-voltage DC circuit breakers	Industry standard	DL/T 2637-2023
Technical specifications for testing voltage sag and short-term interruption tolerance of electrical equipment - Part 2: Low voltage switchgear and control equipment	Industry standard	DL/T 277-2023
Technical specifications for control and protection setting of high-voltage direct current transmis- sion systems	Industry standard	DL/T 2623-2023

Standard Name	Standard Level	Standard Number
Technical specifications for switch type controllable metal oxide surge arresters for 1000kV ultra-high voltage AC systems	Industry standard	DL/T 2438.2-2023
Static synchronous series compensators - Part 2: System design guidelines	Industry standard	DL/T 624-2023
Technical specifications for relay protection microcomputer testing equipment	Industry standard	NB/T 11163-2023
Code for engineering design of unified power flow controller (UPFC)	Industry standard	DL/T 5430-2023
Code for design of unattended substation remote monitoring center	Industry standard	NB/T 11304-2023
Design specifications for top contact charging stations for electric vehicles	Industry standard	NB/T 11303-2023
Technical specifications for top contact charging equipment for electric vehicles	Industry standard	DL/T 2597-2023
Technical specifications for automatic calibration system of electric energy meters	Industry standard	DL/T 2699-2023
Code for inspection of dam safety monitoring instruments	Industry standard	NB/T 11302-2023
Technical specifications for information security of electric vehicle charging facilities and operation platforms	Industry standard	DL/T 2614-2023
Basic requirements for network security level protection in the electric power industry	Industry standard	DL/T 2613-2023
Guide for evaluating network security level protection in the electric power industry	Industry standard	DL/T 578-2023
Basic technical conditions for Computerized Control System in hydropower plants	Industry standard	DL/T 1215.3-2023
Chain type static synchronous compensator - Part 3: Control protection monitoring system	Industry standard	DL/T 2438.4-2023
Static synchronous series compensators - Part 4: Technical specifications for control and protection systems	Industry standard	DL/T 2586-2023
Technical specifications for port shore power system connection to power grid	Industry standard	NB/T 11221-2023
Technical specifications for frequency monitoring and control devices in photovoltaic power stations	Industry standard	NB/T 11205-2023
Testing specifications for comprehensive recording and intelligent operation and maintenance devices of substation relay protection	Industry standard	NB/T 11216-2023
Calibration specifications for digital signal testing equipment in intelligent substations	Industry standard	NB/T 11204-2023
Technical specifications for information security protection devices for secondary equipment debugging in substations	Industry standard	NB/T 11055-2023
Technical requirements for relay protection in AC/DC hybrid distribution networks	Industry standard	NB/T 11057-2023
Technical requirements for transformer cooling control and protection devices	Industry standard	DL/T 947-2023



On August 4, the Standard Formulation Group for Electric Vehicle Charging Robots held a kickoff meeting for IEEE P3345 and IEEE P3346 international standards, with strong support from NARI

Contributing to Community Development

For many years, NARI has kept on investing in social public welfare, assuming social responsibilities actively, proactively, and enthusiastically, engaging in public services, supporting rural revitalization, carrying out public benefit activities, sharing development achievements with society, and working together with the public to create a harmonious society and build a better life.

Ensuring power supply

NARI has sincerely fulfilled its power supply assurance responsibilities, established a power supply assurance work mechanism led by safety and quality departments at all levels and coordinated by multiple specialties, formed a core expert team, actively applied for power supply assurance tasks, and provided high-quality support for major activities to ensure power supply in peak seasons (summer and winter). At the same time, the Company has participated with all its strength in power supply assurance during earthquake and weather disasters to ensure the stable and reliable power supply in extreme situations.

Case

Nanjing Control System successfully supported the power supply for the 31st FISU Summer World University Games

On August 8, the 31st FISU Summer World University Games was successfully concluded in Chengdu, Sichuan. Drawing on the successful experience of ensuring electricity supply in major sports events such as the Olympic Winter Games Beijing, the NARI-TECH Nanjing Control System Company strengthened organizational leadership, made a clear division of responsibilities, and actively undertook 38 tasks related to electricity dispatching, substation monitoring and protection, intelligent distribution, electricity collection, data center, water and electricity monitoring and dispatching. To shoulder the primary responsibility of ensuring the power supply, Nanjing Control System assigned elite forces to Sichuan to provide support to the counterparts there. More than 230 power supply support personnel were organized to fulfill their duties and completed various power supply support tasks.



The panoramic power supply system developed for the FISU Summer World University Games held in Sichuan is put into operation



Network security experts are conducting system security inspections at the power supply assurance site

Case

NR Electric provided power supply assurance for the 19th Asian Games Hangzhou

The 19th Asian Games Hangzhou was successfully held from September 28 to October 8. As the core supplier of power and protection equipment in the event hosting area, NR Electric Company established a strong power supply assurance team consisting of more than 40 persons. Adhering to the principles of "creating value and serving society", the team acted according to "the highest standards, the strongest organization, the strictest requirements, the most practical measures, and the best state", stood their ground, kept on duty 24 hours a day, responded to and handled problems with zero delay. Finally, the tasks for assuring the power supply during the Asian Games were completed, with the goal of "zero equipment failures, zero unstable voltage, zero work errors, and zero service complaints", demonstrating the sense of responsibility and strengths of NARI, as well as the perseverance and excellence of the NARI people.



Emergency command and power supply assurance platform

Case | Supporting peak winter power supply with Panoramic Intelligent Power Transmission Control Platform

After the winter season began, due to the impact of cold waves, the average temperature in Anhui Province dropped sharply. The transmission lines in the southern Anhui and Dabieshan mountainous areas were adversely affected by freezing rain and snow. The operation and maintenance personnel of the NARI Jiyuan Panoramic Intelligent Power Transmission Control Platform got ready in an "alert state" in advance, carried out 24-hour day and night technical operation and maintenance support, and assisted the monitoring personnel in timely obtaining freezing weather warning information, to make every effort to support Anhui Province to predict and analyze the freezing weather. The online operation and maintenance monitoring devices for the Anhui Panoramic Intelligent Power Transmission Control Platform, undertaken by NARI Jiyuan, have been connected to more than 400 sets of icing monitoring devices in Anhui Province, to deliver real-time and accurate freezing weather warnings and countermeasures to the transmission operation and maintenance teams at primary levels, providing strong technical support for responses to extreme weather disasters. During the power supply assurance period, more than 600 drone patrols were carried out, with an average of over 110,000 visual alarms of freezing and galloping generated daily, and more than 300 risks and hidden hazards were identified to ensure the successful completion of power supply assurance tasks during the extreme weather.



Application of Panoramic Intelligent Power Transmission Control Platform in State Grid Anhui Electric Power Research Institute

Promoting rural revitalization

To address the overlapping needs of the rural energy revolution and rural revitalization, NARI has made full use of its technological, industrial, and talent advantages to carry out consumer assistance activities, support the complementary agricultural production and photovoltaic power generation projects, serve the construction of agricultural and rural infrastructure, and finally contribute to accelerating the construction of a strong country on agriculture and comprehensively implementing rural revitalization.

Case | Co-building upon one-to-one assistance to write a new chapter of development

NARI actively participated in the "Five-Party Collaboration" targeted assistance and development promotion work in Jiangsu Province, and carried out the "City-County Pairing for Co-building" campaign with the one-to-one assistance recipient, Zhanghoutun Village, Shouxian Town, Fengxian County. NARI donated RMB 1.01 million to carry out industrial, ecological, and well-being programs to support rural revitalization in Fengxian County. According to the unified arrangement of the assistance and development promotion work team, the funds shall be used to renovate abandoned school land and build a steel drying plant of about 1,000 square meters, equipped with multi-layer mesh continuous drying equipment, for drying agricultural products, such as orange peel and red chili peppers. These investments have not only filled the industrial gap in Zhanghoutun Village and increased collective income, but also created employment opportunities in the neighborhood by providing about 35 jobs and solved the difficulties of more than 400 farmers in drying and selling chili peppers in the surrounding area, significantly improving the happiness of the villagers.



The Zhanghoutun Village Drying Plant Project donated by NARI passes the acceptance inspection



We purchase RMB 163,9341 of agricultural products, such as grain, oil, and dried products, from the assisted areas through the "Benefit Farmers" online platform

Case | Technologies empower spring irrigation

Along with the temperature rise, farmland irrigation entered its peak period. The irrigation areas, as basic components of agricultural production and rural economic development, play an important role in developing modern and efficient agriculture, ensuring food security, and building new villages. To address the difficulties of wide coverage area, too many devices and facilities, and heavy management workload in the irrigation areas, NARI Water Resources and Hydropower Technology Company deployed irrigation area information systems in many regions, to integrate computers, communication network, sensor control, automatic irrigation, artificial intelligence, and other technologies, for real-time collection of hydrological and meteorological information, soil moisture, equipment conditions, and other information, and realizing integrated management and control of irrigation areas through measurement, monitoring, management, and control, which has effectively improved the rapid response and scientific decision-making abilities of irrigation area management, provided great support in scientific water supply, optimized water distribution, and reasonable water use in irrigation areas, making contributions to rural revitalization.



Anhui Cihuai Xinhe Irrigation Area Comprehensive Information Management Platform



Interface of water regulation for large-scale irrigation areas in Danzhou City, Hainan Province

Case | Huayang 200MW "Photovoltaic + Energy Storage + Hydrogen Production" Complementary Fishery Production and Photovoltaic Power Poverty Alleviation Project in Qian'an County was connected to the power grid

In February 2023, the Phase I 50MW Project of the Huayang 200MW "Photovoltaic + Energy Storage + Hydrogen Production" Complementary Fishery Production and Photovoltaic Power Poverty Alleviation Project in Qian'an County, Jilin Province, undertaken by the NARI Electrical Control Branch Company, was successfully put into operation and connected to the power grid. This project covers the production and daily electricity consumption of local residents in Qian'an County. In the subsequent phases of the project, it is planned to build a fishery and aquaculture base to promote complementary fishery and photovoltaic development and increase local employment and income. NARI Electrical Control designed an integrated solution and provided distribution devices, SVG, primary and secondary prefabricated cabins, comprehensive self-protection measurement and control system, booster station monitoring system, etc. It also cooperated in completing the joint debugging and completed the debugging of the 220kV booster station monitoring system. According to calculations, after the completion of the Phase I Project, the average annual power generation can reach 82.56GWh, with a total power generation of about 2,064.18GWh in 25 years, saving 820,000 tons of coal equivalents, reducing 2.06 million tons of carbon dioxide, 60,000 tons of sulfur dioxide, and 30,000 tons of nitrogen oxides, equivalent to planting 112.49 million trees, in addition to the clean electricity supplied to 30,000 households in 25 years.



Newly built 220kV booster station



Integrated electrical equipment in the booster station

Public benefit activities

NARI has vigorously carried forward the spirit of serving the public interest, carried out public benefit activities in helping disadvantaged groups, comforting the elderly, supporting cultural and sports undertakings, and improving cybersecurity awareness, to give back to society through practical actions and create a good social atmosphere characterized in civilization, integrity, and goodness.

NARI in Figures

Number of employees participating in volunteer activities



927

Duration of employee volunteer activities



7,986



Case

"Anti-Food Waste" themed activities

From September 11 to October 15, 2023, NARI launched a series of themed activities on "Anti-Food Waste • NARI in Action". The catering staff were organized to study the laws and regulations related to food waste. At the same time, the Company utilized its "My NARI" App to provide online education on the *Anti-food Waste Law of the P.R.C.* for all employees, organized two online fun quizzes, and an online everyday task named "Clean Your Plate Campaign". Nearly 1,000 employees participated in the quizzes, the task was done more than 3,000 times, and more than 100 useful suggestions on anti-food waste were collected, creating a good atmosphere of saving food in the Company.



We organize the catering staff to learn the laws and regulations on anti-food waste



We launch the "Anti-food Waste" themed activities to create a good atmosphere of saving food



Case

We carried out the volunteer service activity themed "Learning from Lei Feng Spirit and Doing Good in the New Era"

On March 2, 2023, the NARI Information & Communication's CCYL Committee, the Comprehensive Service Center's CCYL Committee, and the Zhongyangmen Sub-district Office jointly launched the "Learning from Lei Feng Spirit and Doing Good in the New Era" volunteer service activity. Young volunteers came to the Zhongyangmen Sub-district Party Service Center to promote cybersecurity and anti-fraud knowledge to the residents, help them enhance personal privacy protection, and improve their awareness of cybersecurity protection, receiving warm welcome and recognition from the residents, fully demonstrating the vitality and social responsibility of NARI's youth practicing Lei Feng spirit with practical actions.



Case

We organized "Dream Power Supply" themed micro-donation activity

On December 1, 2023, NARI Jiyuan provided support to the second phase of the "Dream Power Supply" themed one-to-one micro-donation activity, jointly launched by the second Party branch of the Technical Service Center, the sixth Party branch of the Marketing Service Center, the second Party branch of the Strategic Customer Service Center, and the Susong County's Chinese Communist Youth League, at the Aikou Central Primary School in the Susong County. This activity supplied "micro-power" and realized "micro-dream" through the "micro-platform", providing the "one-on-one" paired assistance to 51 rural left-behind children in realizing their small wishes. It continued the 3-5-year paired donation program for the Hope Primary School in Susong County. The volunteers brought warmth and care to the local students and contributed their modest efforts to support the development of education.

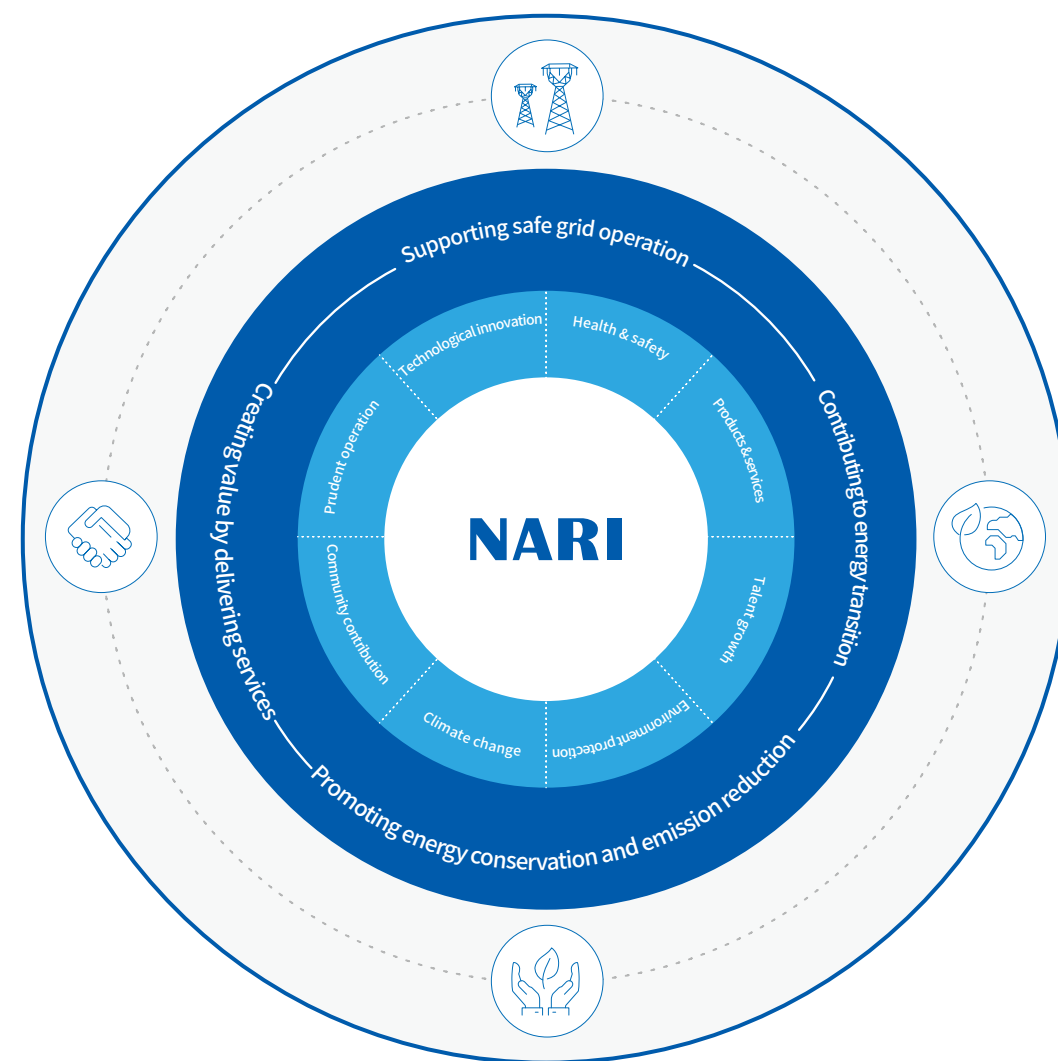


ESG Management

ESG philosophy

As a high-tech enterprise in electric power and related industries, NARI is committed to providing strong support for the innovative development of the electric power industry, safe and stable grid operation, as well as advanced technologies for the rapid development of China's power grids, information communication, power generation, energy conservation, environmental protection, industrial control, and related industries.

We integrate the ESG management practices into the corporate development goals and every business activity, create a win-win ecological value system with the government, shareholders, employees, customers, partners, and other stakeholders, actively build a responsible and reliable world-class Internet of Energy-based, leading high-tech enterprise, and aim to create multiple values for the economy, society and environment.



NARI's ESG philosophy model

ESG governance Structure

To better implement its ESG concepts and strategies, and enhance its competitiveness in sustainability, NARI is accelerating the building of a robust and effective governance structure for ESG. The Company has established an ESG Committee and ESG Working Group, and clearly defined the roles, duties, and responsibilities for all departments and at all levels, from the Board of Directors to the responsible persons of each department, to ensure that all decisions made by the Board of Directors in connection with all ESG issues are integrated into the Company's strategic layout and effectively executed.

According to the latest Rules of Procedure for the Environmental, Social and Governance (ESG) Committee of the Board of Directors of NARI Technology Co., Ltd., the ESG Committee is established under the Board of Directors, mainly responsible for providing suggestions for researches and decisions on the Company's environmental, social and governance matters, supervising and guiding the Company's activities in environmental protection, climate change, social responsibilities, and standardized governance. The ESG Committee is composed of at least three directors and shall hold at least one meeting per year. Temporary meetings may be convened if necessary. At present, the members of the ESG Committee include Mr. Shan Shewu, Mr. Chen Gang, and Mr. Pang Lacheng, with Mr. Shan Shewu serving as the convener of the committee and responsible for affairs related to sustainable development (including ESG).

The ESG Working Group is established under the ESG Committee, mainly responsible for researching, formulating, and updating the Company's ESG work goals and plans; organizing and promoting the strict implementation of the Company's ESG work goals and plans, as well as the establishment of relevant systems and mechanisms; coordinating, supervising, and promoting all departments and units to carry out ESG work; and regularly reporting the progress of ESG work to the ESG Committee. The Office of ESG Working Group, which is the specific executing agency for the Company's ESG work, is composed of 16 departments and units, including the Department of Corporate Culture, Department of Securities Management, Administration Office, Department of Strategic Development, Department of Human Resources, Department of Finance and Assets, and Department of Science and Information Technology, to jointly promote the achievement of the Company's ESG goals and various indicators, and continuously improve the Company's performance in ESG.



NARI's ESG governance structure

Stakeholder communication

NARI attaches great importance to the creation of social value and is committed to building a harmonious and mutually beneficial development model. To this end, NARI keeps on establishing and improving the mechanisms for communication and exchange with all stakeholders. NARI learns about and responds to the demands and expectations of all stakeholders timely through various communication methods, such as the General Meeting of Shareholders, regular exchange meetings with employees and management, questionnaires from investment institutions, official websites, and WeChat official account, to ensure that shareholders and investors can fully exercise their rights, employees' legitimate rights and interests are protected according to law, customers and suppliers are treated fairly and honestly, and government supervision and social comments can fully play their roles.



Stakeholders	 Government and regulatory authorities	 Shareholders and investors	 Employees	 Customers	 Suppliers and partners	 Industry and associations	 The public, media, and NGOs
Demands and expectations	<ul style="list-style-type: none"> Legitimate and compliant operation Promoting economic development Supporting local development Ensuring power supply Optimizing energy mix 	<ul style="list-style-type: none"> Corporate governance Financial performance Safe and sound operation Transparent information disclosure ESG performance Guaranteeing shareholders' interests 	<ul style="list-style-type: none"> Protecting employees' rights and interests Employee growth and development Occupational health and safety Good working environment 	<ul style="list-style-type: none"> Product quality assurance Optimizing service quality Protecting customers' rights and interests 	<ul style="list-style-type: none"> Fairness and transparency Win-win cooperation 	<ul style="list-style-type: none"> Promoting industry development Participating in formulation of industry standards 	<ul style="list-style-type: none"> Information disclosure and operation Maintaining public relations Supporting public benefits Promoting community and city development Climate change Protecting ecological environment
Communication and response	<ul style="list-style-type: none"> Complying with laws and regulations Implementing national policies Building mechanisms for government cooperation Receiving supervision and appraisal Implementing national strategies 	<ul style="list-style-type: none"> Improving governance structure Enhancing profitability Comprehensive risk management General Meetings of Shareholders/Extraordinary General Meeting of Shareholders CSR performance and ESG reports Maintaining stable dividends 	<ul style="list-style-type: none"> Compensation and benefit system; performance evaluation management Improving training and promotion mechanisms Caring for employees' physical and mental health Employee care and communication activities 	<ul style="list-style-type: none"> Product quality control and product innovation Customer communication and customer relationship maintenance Strictly observing laws and contracts 	<ul style="list-style-type: none"> Sticking to transparent purchase Creating responsible supply chain Carrying out strategic cooperation 	<ul style="list-style-type: none"> Industry exchanges and meetings Industry exhibitions and R&D cooperation 	<ul style="list-style-type: none"> Receiving media interviews and investigations Contributing to rural revitalization Carrying out public benefit activities Actively investing in community development Mitigating and adapting to climate change Energy conservation, emission reduction, and biodiversity protection

Outlook

The year 2024 is a pivotal juncture in global economic recovery and growth, and a turning point for industrial transformation and the accelerated supersession of the old by the new. With profound appreciation, NARI is committed to steadfastly following the right developmental trajectory, stride forward with determination, embark on a new journey toward high-quality development in this new era, and spare no effort in building itself as a world-class, Internet of Energy-based, leading high-tech enterprise.

To uphold corporate social responsibilities and instill a steadfast commitment to sustainable development, NARI remains dedicated to strengthening level design, refining modern management systems, and integrating ESG management into corporate governance. Through maximizing every moment and working with unwavering diligence, the Company will also advance scientific and technological innovation, enhance business development, and improve quality and efficiency, all while building a business framework characterized by clear positioning, strategic focus, effective collaboration, and well-organized operation, thereby furthering the implementation of the Technological Reform Action and perpetuate NARI's ethos.

To actively assume corporate social responsibilities and lay a solid foundation for sustainable development, NARI will persist in embodying its green development ethos to foster an endogenous driving force. It will align with the national dual carbon goals, actively responding to various climate change challenges, and timely formulating risk response strategies. Furthermore, the Company will incorporate environmental benefits and management into all aspects of enterprise operations and management. NARI will undertake practical initiatives to harmonize development and security, scale and efficiency, and quality and efficacy, with an aspiration to set a benchmark and assume leadership in supporting energy security and power grid development.

To fulfill corporate social responsibilities through tangible actions and share the achievements of sustainable development, NARI remains steadfast in practicing the people-first principle, with a focus on fostering team development and enhancing coordination between technological innovation and industrial advancement. Through a collaborative management approach and collective strategizing, NARI will also broaden its internal and external market reach, particularly in emerging sectors, and continue to implement lean management principles across all employees, all elements, and the value chain. By leveraging its collective strength, NARI endeavors to contribute to community construction and bridge the gap between enterprises and society through philanthropic initiatives and engagement activities.

To sail with the wind and burn up the road, NARI will intensify its endeavors to delineate a more defined strategic trajectory, enhance its capacity for value creation, fulfilling its responsibilities and missions. By seizing every opportunity and diligently pioneering innovation, it will also transform its grand blueprint of becoming a "World-Class, Internet of Energy-Based, Leading High-Tech Enterprise" into tangible reality, and, as it navigates through the obstacles and hurdles throughout the journey toward this ambition, demonstrate NARI's resilience and strengths.



Appendix

Key Performance

Issues		Indicator	Unit	2021	2022	2023
Economic performance	Total assets		RMB 100 million	727.33	766.66	860.87
	Operating revenue		RMB 100 million	424.11	468.29	515.73
	Total profits		RMB 100 million	68.66	78.85	86.00
	Net profit attributable to shareholders of listed companies		RMB 100 million	56.42	64.46	71.84
	Total tax payment		RMB 100 million	23.03	32.51	36.60
	R&D investment		RMB 100 million	32.51	32.01	34.59
	National key scientific research projects undertaken by NARI		Pcs	12	8	4
	Papers published in core journals		Pcs	218	247	176
	Authorized patents obtained		Pcs	456	434	400
	Invention patents obtained		Pcs	385	403	324
	Software copyrights registered		Pcs	312	242	303
	Contract review rate		%	100	100	100
Environmental performance	Total investment in environmental protection		RMB 10,000	1358.76 ¹	319.85	717.17
	Electricity consumption (thermal power)		10MWh	7425.21	7167.28	7157.76
	Electricity consumption (PV power)		10MWh	500.47	503.08	447.35
	Gasoline consumption		Ton	126.04	89.77	122.98
	Natural gas consumption		10,000 cubic meters	48.19	57.44	58.35
	Materials used in product packaging (wooden cases)		Ton	1439.6	1356.75	1695
	Water consumption		10,000 tons	66.83	71.23	72.95
	Water consumption per capita		Ton/person	69.97	67.94	66.22
	Office electricity consumption		10MWh	6570.52	6615.53	5979.73
	Office water consumption		10,000 tons	41.72	55.32	41.63
	Office paper consumption (cleaning paper)		Ton	77.9	83.00	76.15
	Effluent volume discharged		10,000 tons	62.19	56.71	56.26
	Discharge of hazardous waste		Ton	19.95	16.31	29.26 ²
	Discharge of non-hazardous waste (waste cartons, kitchen waste)		Ton	1518.71	2005.68	1831.11 ³
	Carbon dioxide emissions (natural gas, gasoline and electricity) ⁴		Ton	61237.31	68280.26	73055.10
	Scope I emissions (natural gas and gasoline)		Ton	1475.56	1343.80	1692.27
	Scope II emissions (electricity)		Ton	59761.76	66936.46	71362.83

Issues		Indicator	Unit	2021	2022	2023
Social performance	Safety training		time	292	983	717
	Participants in safety training		Person-time	26272	70600	42638
	Personal injury and death accidents		Case	0	0	0
	Occupational health and safety training		Session	11	15	36
	Participants in occupational health and safety training		Person-time	690	880	1614
	New occupational cases		Person	0	0	0
	Employee physical examination coverage		%	100	100	100
	Total number of employees		Person	9551	10483	11016
	Total new recruits		Person	978	1173	726
	Number of employees from minority ethnic groups		Person	250	283	314
	Proportion of female managers ⁵		%	1.28	1.21	1.13
	Labor contract signing rate		%	100	100	100
	Coverage of social insurance		%	100	100	100
	Employee satisfaction		%	100	100	100
	Employee turnover rate		%	2.44	2.30	1.75
	Number of suppliers reviewed during the reporting period		-	2851	2378	1659
	Number of suppliers whose cooperation has been suspended due to non-compliance		-	6	1	5
	Customer satisfaction		%	98.96	99.33	99.47
	Complaint resolution rate		%	100	100	100
	Total charitable donations		RMB 10,000	100	100	101
	Duration of employee volunteer activities		Hour	2482	7652	7986
	Number of employees participating in volunteer activities		Person-time	697	879	927

¹In 2021, the Company started the sewage treatment equipment renovation project, with an investment of RMB 12.1277 million.

²In 2023, there was a significant increase in the hazardous waste data. On the one hand, there was a significant increase in the Manufacturing Center and NR Electric's waste activated carbon, NARI Water Resources and Hydropower Technology's waste mineral oil and waste hydraulic oil. On the other hand, there was a change in the statistical standards of the data, resulting in the addition of two industrial parks' data (0.125 tons from NARI Zenith Electricity & Electronic and 0.041 tons from Guodian Futong Science and Technology).

³In 2023, NARI only counted kitchen waste, and the waste cardboard boxes were recycled and processed, except that NR Electric conducted statistics on both kitchen waste and waste cardboard boxes.

⁴The indicator excludes other greenhouse gas emissions in Scope III. We focus on the field of secondary power and information communication and serve the security and stability of the national power system, with a large customer base, so it is hard for us to calculate the Scope III emissions. However, the Company takes the initiative to seize development opportunities, fully supports the construction of a new electric power system, and promotes low-carbon energy transformation.

⁵Proportion of female managers = Number of female managers / total number of employees × 100%

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About Us		P4.1/P4.2/P4.3/G3.11	GRI 2-1/2-2/2-6/2-28/201-1
Special Topic: Empower New Power System with Digital and Intelligent Technologies, and Take the Lead in Implementing the "Dual Carbon" Goals		P3.1/V1.2/V4.2	GRI 302-5
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	Adhering to Business Ethics	G1.5/G1.6/G1.7/G1.8/G1.9/S4.3	GRI 2-27/205-2/205-3/207-1
	Safeguarding Shareholders' Rights and Interests	G1.10/G1.11/G3.6/G3.7	GRI 2-15/201-1
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Rating Report

Rating Report on 2023 Environmental, Social and Governance (ESG) Report of NARI Technology Co., Ltd.

Upon the request of NARI Technology Co., Ltd., the Chinese Expert Committee on CSR Report Rating invited experts to form a Rating Team and rated the *2023 Environmental, Social and Governance (ESG) Report of NARI Technology Co., Ltd.* (hereafter referred to as "the Report").

I. Rating Basis
Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises (CASS-ESG 5.0) of the Chinese Academy of Social Sciences and Rating Standards for the ESG Report of Chinese Enterprises (2023) of the Chinese Expert Committee on CSR Report Rating.

II. Rating Process
1. The Rating Team reviewed and confirmed the *Confirmation Letter on Materials for Process and Accessibility Evaluation of the ESG Report of Enterprises* and related supporting materials submitted by the Preparation Team of the Report;
2. The Rating Team evaluated the compilation process and the disclosed information of the Report and drafted the Rating Report;
3. The Vice Chairman of the Chinese Expert Committee on CSR Report Rating and the leader and the expert of the Rating Team cosigned the Rating Report.

III. Rating Results Process (★★★★★)
The Company established the Environmental, Social and Governance (ESG) Committee under the Board of Directors and the ESG Working Group. The Office of ESG Working Group was responsible for preparing the annual ESG report, and the ESG Committee was responsible for the final review. The Report was positioned as an important tool for satisfying the regulatory requirements, disclosing compliance management information, and strengthening communication with stakeholders, with clear functional value positioning. Material issues were identified according to the national macro policies, domestic and foreign index systems, benchmarking analysis in the industry, development plans of the Company, and the expectations of stakeholders. An ESG index system was built and the management process was optimized. The Report will be presented variously in electronic and printed forms and long pictures. Therefore, the Report has remarkable process performance.

Materiality (★★★★★)
The Report disclosed industrial key issues, including improving ESG governance, serving the national strategy, technical innovation of products, saving energies and resources, pollutant discharge control, tackling climate change, product and service quality management, employee health and safety, and sustainable supply chain in full and in detail. Therefore, the Report has remarkable materiality performance.

Completeness (★★★★☆)
The main part of the Report revealed 81.70% of the core indicators in the industry from many aspects, including the sections "Practitioner | Take the Lead in Promoting Scientific Operation", "Pioneer| Take the Lead in Painting a Green Future", "Craftsman | Take the Lead in Offering Innovative Products and Superior Services" and "Promoter | Take the Lead in Creating and Defending a Better Life". Therefore, the Report has leading completeness performance.

Balance (★★★★☆)
The Report disclosed negative data, such as the "employee turnover rate", "number of major corruption incidents", "number of personal injury and death accidents", "employment violations and labor disputes", and "illegal or non-compliant environmental incidents or penalties", and introduced the problems and handling results in potential risks identification and rectification briefly. Therefore, the Report has leading balance performance.

Comparability (★★★★★)
The Report disclosed and compared data on 51 KPIs over the past three

years, including "total tax payment", "R&D investment", "total investment in environmental protection", "carbon dioxide emissions", "participants in safety training", "employee satisfaction", and "total charitable donations", and horizontally compared the ranks in the "Central-SOEs ESG Pioneer 100 Index", "China's Top 100 ESG Listed Companies", and "China's Top 30 Technological Innovation Pioneers Among ESG Listed Companies". Therefore, the Report has remarkable comparability performance.

Readability (★★★★☆)
The Report adopted an issue-based framework structure and systematically elaborated on the performance and effectiveness of the Company in corporate governance, business ethics, shareholders' rights and interests, tackling climate change, environmental management, innovative development, safe production, quality services, employee growth, industry progress, and community care; provided a special responsibility topic "Empower New Power System with Digital and Intelligent Technologies, and Take the Lead in Implementing the 'Dual Carbon' Goals", listing the annual responsibility performance priorities and highlights of the Company, reflecting the sense of responsibility of the Company; set columns of "NARI in Figures" and "Honors and Credits" to showcase performance and honors in fulfilling responsibilities. The cover and page design are simple and elegant. Therefore, the Report has leading readability performance.

Accessibility (★★★★☆)
The Report will be issued together with the Company's Annual Report. The Report has clear release channels and will be released on the Company's official website, the WeChat official account, and the website of the Shanghai Stock Exchange to enhance the timeliness of the Report. The contents of the Report were reorganized into derivative long pictures to facilitate forwarding and dissemination to enhance the communicability of the Report. The Report will be available by Internet search and mail, which is simple and convenient. Therefore, the Report has leading accessibility performance.

Overall Rating (★★★★★)
Upon evaluation by the Rating Team, the *2023 Environmental, Social and Governance (ESG) Report of NARI Technology Co., Ltd.* is rated as a five-star and outstanding ESG report.

IV. Suggestions for Improvement
1. More industrial core indicators should be disclosed for better completeness of the Report.
2. More analyses of deficiencies in corporate responsibility performance should be disclosed to further improve the balance of the Report.
3. Internal and external stakeholders should be further involved to further improve the process management of the Report.



**中国企业社会责任报告
评级专家委员会**
Chinese Expert Committee on CSR Report Rating

The ESG report of NARI Technology Co., Ltd. received a five-star rating for the first time



Vice Chairman of the Chinese Expert Committee on CSR Report Rating



Expert of the Rating Team



Scan the QR code to view the enterprise's rating file

Issued on: April 24, 2024

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Feedback

Dear readers,

Thank you for taking the time to read this report. To improve the preparation of the report and NARI's ESG management and practice ability, we are looking forward to your valuable comments and suggestions. Thank you for your ardent support!



1. Which of the following stakeholders do you belong to?

- ☐Government
- ☐Regulator
- ☐Shareholder and investor
- ☐Employee
- ☐Customer
- ☐Supplier and partner
- ☐Community resident
- ☐Others

2. What is your overall impression of this report?

- ☐Very good
- ☐Good
- ☐Average
- ☐Poor
- ☐Very poor

3. What do you think of the quality of the ESG information disclosed in this report?

- ☐Very good
- ☐Good
- ☐Average
- ☐Poor
- ☐Very poor

4. What do you think of the structure of this report?

- ☐Very good
- ☐Good
- ☐Average
- ☐Poor
- ☐Very poor

5. What do you think of the layout of this report?

- ☐Very good
- ☐Good
- ☐Average
- ☐Poor
- ☐Very poor

6. What do you think of the readability of this report?

7. What about your comments and suggestions on NARI's ESG work and this report? Please specify here:

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NARI TECHNOLOGY CO.,LTD.



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