

CHANGAN



CHANGAN Automobile | Environmental, Social and Governance Report | 2023

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Message from the Chairman



"This is the first ESG report published by Changan Automobile, aiming to share with all our stakeholders our proactive initiatives in environmental, social, and corporate governance, as well as our innovative practices in the digital and intelligent era. In today's rapidly changing world, Changan upholds an attitude of open cooperation, mutual benefit, and joint development. In partnership with global collaborators, we persist in technological innovation to provide consumers worldwide with stylish, intelligent, eco-friendly and quality products and services. We are dedicated to contributing Changan's wisdom, solutions, and responsibility towards building a shared future for humanity."



Zhu Huarong
Chairman of CHANGAN

Seize Strategic Opportunities: Showcase Changan to the World

Currently the industrial technology revolution represented by new materials, new energy and other technologies is at a historic crossroads. In the automotive industry, the adoption of new energy has emerged as the key driving force propelling Chinese automotive brands onto the global stage. Technological innovation is now a critical element in creating differentiated competitive advantages, and overseas markets represent a certain future growth. Changan's Third Business Venture—Innovation & Entrepreneurship Program has encountered a historic opportunity. It is the right time for Changan to go global.

The year 2023 signifies the commencement of Changan's global strategic deployment. We have steadfastly embraced new development philosophy, placed primary emphasis on technological innovation, nurtured new quality productive forces, and vigorously developed an optimized global operating system, continuously creating new momentum for the high-quality development of Changan.

High-tech defines the essence of Changan. We are unwavering in our commitment to strengthen technological innovation, achieving a new leap in technology-led transitions.

By maintaining control over key core technologies and enhancing the resilience and security of our supply chains, we adhere strictly to the principle of dedicating not less than 5% of our annual sales revenue to research and development. Leveraging our "Six Countries, Ten Locations" global collaborative R&D network, our focus has remained on core areas such as intelligence and new energy. With a robust infrastructure comprising 17 tech companies and 16 advanced research institutes and product development centers, including the Advanced Battery Research Institute, we have formed a global R&D team of over 18,000 members from 30 countries and regions. Holding more than 1,500 core technologies, we have continued to break new ground in power, intelligence, and design, filing 5,739 new patents in the past year alone, and leading the industry in the number of open patents in the field of intelligence.

Intelligence is key to Changan's success. We are steadfast in propelling digital transformation, aiming to achieve a new leap in intelligent experiences.

By scanning the entire value chain of "research, production, supply, sales and transport", we identify weaknesses and accelerate the technical iteration of "Chips-Devices-Maps-Core Parts-Cloud Network-Satellite" through inhouse research and collaborative development. With over 30 key technologies like APA7.0, leading and participating in the development of 63 external standards, and initiating three international standards, we have become the first Chinese automaker to lead the development of ITU international standards. Focusing on high-value, high-user-sense areas, we have created the premium brand AVATR, an Emotional Intelligent Companion, DEEPAL, a young, high-tech and digital brand, and NEVO, a digital intelligent vehicle brand, continuously building differentiated intelligent labels. We have also strengthened cross-industry collaborations, and partnered with over 30 leading global companies like Tencent, and Baidu to focus on high-value technology breakthroughs, and building core competencies in intelligent driving, connectivity, and interaction.

Going global is the unwavering path for Changan. We are steadfast in the "Vast Ocean" Plan to achieve a new leap in brand globalization.

Via launching the "Vast Ocean" Plan for going global, we have set clear the "Four Ones" overseas development goals, vigorously promoting the "1+5+2" global layout. By implementing a strategy that supports "global product development with regional differentiation", we have introduced five major business brands—AVATR, DEEPAL, NEVO, CHANGAN AUTO, and KAICHENG—to form a new development pattern that meets the diverse needs of global markets. Upholding the philosophy of "service-oriented business globalization", we have rapidly expanded our customer care program "withU" overseas, delivering unparalleled service standards to customers worldwide. Committed to local operation and win-win development, we have vigorously built an optimized global operational system, launching our first overseas base, the "Thailand New Energy Base", to offer local users with digital intelligent vehicles featuring intelligence, low carbon and high technology. We have also strengthened our ESG construction, and promoted local economic and social development while actively fulfilling our responsibilities and obligations as a global enterprise in resource conservation, environmental protection, and philanthropy.

As changes in the world, times and history unfold in an unprecedented way, the age of "digital intelligent vehicles" has arrived, and the new auto species is within reach. Changan will continue to uphold its mission of "Leading auto culture and benefiting human life". With a more open attitude of cooperation, we will join hands with our global partners to strive tirelessly to build Changan into an intelligent low-carbon mobility technology company and a world-class auto brand!

Changan, smart your future.



About CHANGAN Automobile

Company Profile

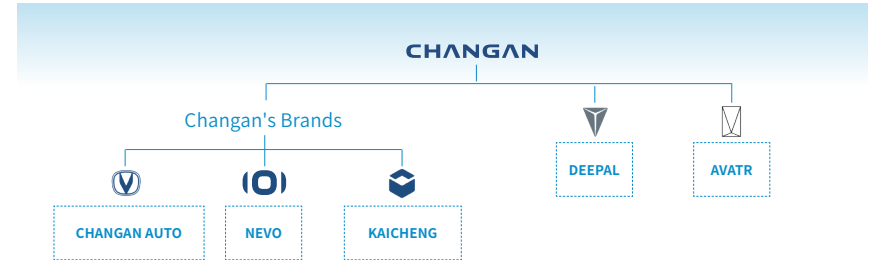
Headquartered in Chongqing, Chongqing Changan Automobile Co., Ltd. (hereinafter referred to as "Changan", stock code: 000625) is one of the top four automotive groups in China, boasting a rich history of 162 years and 40 years of car manufacturing experience. With 73 subsidiaries and 22 factories globally, its products are sold in 63 countries and regions. Changan has established partnerships with over 1,100 global suppliers and more than 9,300 dealers worldwide. As one of the representatives of Chinese auto brands, Changan has five major Chinese brands: AVATR, DEEPAL, NEVO, CHANGAN AUTO, and KAICHENG, with a product lineup covering passenger cars, pickups, and light commercial vehicles.

In 2023:

Total assets: **190.171** billion RMB
Net profit attributable to shareholders of the listed company was **11.327** billion RMB

Total vehicle sales reached **2.553** million units, with **2.098** million units from Changan's Chinese brands. NEV sales from Changan's Chinese brands and overseas sales reached **474,000** units and **358,000** units respectively.

Changan's cumulative sales of its Chinese brand vehicles exceeded **25.486** million units, making it the first Chinese brand to break through the **20** million production and sales mark.



Global Footprint

Changan has an engineering and technical team of over 18,000 people from 30 countries. It has established a "Six Countries, Ten Locations" global collaborative R&D network, with each location offering distinct expertise, including Chongqing, Beijing, Shanghai, Dingzhou in Hebei, Hefei in Anhui, Turin in Italy, Yokohama in Japan, Birmingham in the UK, Detroit in the USA, and Munich in Germany.





Sustainable Development Management

ESG Strategy

Changan has steadfastly adhered to its mission of "Leading auto culture and benefiting human life", actively transforming towards an intelligent low-carbon mobility technology company. It is committed to providing long-term continuous innovation to the industry and making ongoing contributions to society, constantly meeting the needs for a better life of customers, employees, partners, shareholders, and society.

ESG System

Changan has conducted specialized research on environmental, social responsibility, and corporate governance (ESG), established a dedicated ESG project team to explore and build a comprehensive ESG system. It has formulated annual ESG work plans, carried out risk management, set annual goals, and continuously followed up on the requirements of regulatory bodies, investors, and stakeholders regarding ESG, achieving standardization and systematization of ESG work.



Changan ESG Business Structure

Focus on Foster Shared Development with Four Decades of Ingenuity



Since its founding, Changan has championed independent research and development. A commitment to continuous innovation, a bolder vision, and a solidified strategic approach propel the company towards a new era of growth.

Forge Ahead Fully Charged with Technical Innovation

Changan maintains unwavering strategic focus, accelerating its efforts towards becoming a world-class auto brand with a renewed "fully charged stance".

Strategy Planning

We have adhered to a business strategy that simultaneously advances ICE and new energy vehicles development. It offers competitive products for different market segments to meet the needs of users for diverse scenarios.

Ecological Layout

We have integrated global resources to form a new energy ecosystem, engaging in deep innovative cooperation across multiple fields through joint ventures, collaborative development, and industry chain partnerships.

Technological Innovation

We have persisted in an innovation-driven development strategy, adopting the management principle of "R&D investment not less than 5% of sales revenue".





Create a Bright Future with Intelligence and Technological Leap

Based on the new stage of development, Changan is striving to be a leader in the era of "Digital Intelligent Vehicles" by deeply analyzing the global automotive market and steadfastly advancing the strategy of "New Auto Species, New Ecosystem", to fulfill the ever-growing aspirations of people for a better life.

Maintain Strategic Focus

We have implemented the "Mission of Shangri-La" for NEV development, "Dubhe Plan" for intelligence advancement and "Vast Ocean Plan" for going global, laying out three major smart electric brands: NEVO, DEEPAL, and AVATR.

Strengthen Independent Innovation

We are committed to the development of the core "E-powertrain" technologies, enhancing research on EV safety technology. By developing and innovating the SDA platform architecture, we are the first in the industry to develop and mass-produce a "Central+Regional" Ethernet Ring Network Architecture and have completed its application on vehicle models. We have built "Lighthouse Factories", and established digital twins across all scenarios, realizing the digitization of the entire manufacturing process.



2023 CHANGANAUTO TECH Ecosystem Summit

Drive Product Upgrades

In collaboration with CATL, we have co-created the premium brand AVATR with emotional intelligence. We have also created the young high-tech digital brand DEEPAL, launching SL03 and S7 to the market, which set a new time record for hitting the 10,000-unit mark from launch to delivery.

Enhance User Experience

We have established the "Quark Intelligent Computing Center", supporting the access and control of over 10 million smart vehicles. By constructing a digitalized marketing operation system, we have ensured direct and comprehensive connectivity between customers, consultants, and merchants.

Focus on

Witness Transformation along the Belt and Road



We believe we can never achieve long-term success without overseas business and solid footprints. Through long-termism, local operation, green low-carbon development and win-win cooperation, we have set up a "1+5+2" global strategic layout.

In 2023:

Products were exported to **63** countries and regions

598 overseas sales and service outlets



Launch Changan Global Strategy-"Vast Ocean" Plan

1 mature stable market

5 growing markets to make strategic breakthroughs

2 potential markets for strategic tracking

"1+5+2" Global Footprint

Strategic Implementation

Changan explores overseas markets with a global perspective, and promotes overseas business development through the dual-wheel drive of "doing trade and building bases", realizing the leap into the "4.0 Era of Chinese Automobile Going Overseas", from product export to technology, industry, and brand globalization.

Product Globalization

Focusing on overseas customer needs, Changan has enhanced management from the customer end to the product end. We have continuously completed product layout and introduced three digital intelligent brands—DEEPAL, AVATR, and NEVO, covering a wider range of products for exports.

Overseas Operation

Changan is dedicated to building an optimized global operating system, constructing high-quality marketing capabilities with outstanding global dealership partners. We have established over 400 sales and service outlets in more than 60 countries along the Belt and Road, including Saudi Arabia and Chile, with nearly 900,000 loyal customers. We have initiated our first overseas base, the "Thailand New Energy Base", and established three local companies and operational teams in Thailand, perfecting our production capacity layout on a constant basis.

Overseas Services

Upholding the philosophy of "service-oriented business globalization", we have rapidly expanded our customer care program "withU" overseas, and continuously strengthened our overseas network operation, delivering unparalleled service standards to customers worldwide.

Overseas Responsibilities

Changan has actively fulfilled its social responsibilities in countries along the Belt and Road. In line with local public needs, we have carried out activities such as skill talent training, product sign language introductions, women's health prevention public welfare activities, and partnered with UNICEF for vaccine transportation, promoting local socio-economic development and continuously demonstrating Changan's sense of commitment and responsibility.

Brand Communication

Changan built a convoy of 14 vehicles, including DEEPAL S7, NEVO A07, and AVATR 11, participating in the "Belt and Road Global Tour" event organized by Xinhua News Agency. Starting from Chongqing, driving through 15 countries over more than 90 days, and covering over 26,000 kilometers, we have made ceaseless efforts to enhance Changan's international presence and influence.



Corporate Governance 01

Our Goals



Our Response

Changan aims to effectively control compliance risks and elevate the level of lawful and compliant business management. For the business operation and employee behavior of the company, Changan continues to establish and improve its compliance management system, strengthen the effective identification and control of compliance risks, promote lawful and compliant operations, and effectively safeguard the deepening of reforms and high-quality development.



Our Performance

The Shenzhen Stock Exchange recognized Changan with the highest A rating (Excellent) for 2022-2023 information disclosure.



Improve corporate governance

We are dedicated to fostering a robust, transparent, and compliant corporate governance system that prioritizes sustainability. This commitment includes continuous improvement of internal controls and optimization of shareholder meetings, board of directors, and supervisory board operations to ensure standardized operations and drive Changan's long-term sustainable growth.

Changan's board of directors consists of 13 directors	including 6 independent directors	Throughout the year, the board convened 25 meetings without any absences
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We have continuously strengthened investor relations management, and promptly responded to investor demands, with a response rate of over 95% on the Shenzhen Stock Exchange Interaction Easy platform. Leveraging digital tools, we foster open communication with investors through live streams and video conferences. Throughout the year, we have completed four regular reports and 93 temporary announcements, effectively safeguarding shareholders' right to know.

Legal Compliance Operation

Changan benchmarks against leading international companies to comprehensively optimize the corporate compliance management committee system and mechanisms. We have established a dedicated compliance committee that meets regularly to address critical corporate governance challenges. We have continuously conducted compliance training for employees, particularly management personnel, key position personnel, and new employees, with over 893 participants attending 6 training sessions throughout the year.

Changan has also focused on an all-new legal compliance management system in three key compliance areas, i.e. export control and sanctions compliance, data compliance, and anti-monopoly compliance, achieving innovative breakthroughs in the building of Changan's global legal compliance management system under new circumstances. Additionally, we have established an overseas data compliance project team to carry out special governance on overseas data compliance around three major scenarios including product, operation, and cross-border data transmission, thereby promoting the integration of compliance management with business operation.

Risk Prevention and Resolution

Changan, guided by strategies and driven by risks, has constructed a centralized, unified, comprehensive, efficient and authoritative internal audit and control system. We have systematically reviewed the positioning and development planning of each business segment, consulted professional institutions, and formed Changan's top-level capital operation plan. In 2023, no major risk events occurred, including significant overseas risks.

Following a comprehensive analysis and assessment by China Lianhe Credit Rating Co., Ltd., Chongqing Changan Automobile Co., Ltd. successfully maintained its AAA long-term credit rating and the "22 Changan K1" bond also received an AAA credit rating. Both ratings come with a stable outlook.

Focusing on strategic transformation, we have thoroughly explored global development opportunities, and successfully executed both the Innovation & Entrepreneurship Program 7.0 and the global layout strategy. Starting with the Southeast Asia Business Unit, we have propelled the establishment of an investment management system for our overseas regional divisions. This involved conducting legal environment scans and identifying legal risks in countries and regions such as Thailand, Germany, and the Netherlands, so as to ensure that legal risks associated with investment projects remain manageable. We have also deepened our collaboration with globally renowned law firms, continuously expanding and enhancing our access to a diverse range of legal resources.





Innovation as the Drive 02

Our Goals



Our Response

Changan has resolutely advanced the Third Business Venture—Innovation & Entrepreneurship Program, and has successfully hosted the third Changan Tech Ecosystem Summit. Our business boundaries keep to expand into fields such as 5G, artificial intelligence, AI large models, semiconductors, etc., further enhancing our innovation drive and significantly improving our industrial chain synergy capabilities.



Our Performance

Master more than **1,500** core technologies

Hold **9,322** patents globally

Hold **2,704** effective invention patents



Lead the Energy Transformation with Intelligent Technology

Leveraging years of technological expertise, Changan has developed three NEV power technologies: "Force EV Technology", "Changan iDD", and "Changan Hydrogen Fuel Cell System". These innovative power solutions continuously offer intelligent, low-carbon, and efficient mobility options for our users.

Force EV Technology

This includes the Force Super REEV and Force Super E-Drive technologies, with a total of 181 patents, enabling an impressive range of 1,200 km.

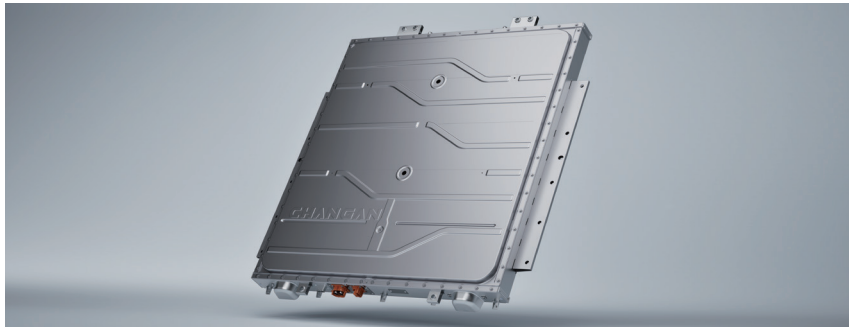
Changan iDD

Supported by high-energy batteries, efficient power, and intelligent electronic control, we've innovatively developed an AI energy-saving system and a constant-temperature intelligent safety system, safeguarding quality mobility life of NEV users.

Changan Hydrogen Fuel Cell System

Featuring a pioneering water-gas separation stack design, this system ingeniously resolves the dilemma of balancing "compact size" with "high power", paving the way for limitless possibilities in green and safe mobility.

Our in-house battery brand, Changan "Golden Shield", aims to alleviate user concerns regarding energy density, charging and discharging efficiency, cycle life, and low-temperature performance, providing a more enduring and stable power output and driving experience.



At the 21st Guangzhou Auto Show, Changan unveiled its in-house battery brand, Changan "Golden Shield".

The "Golden Shield" Battery

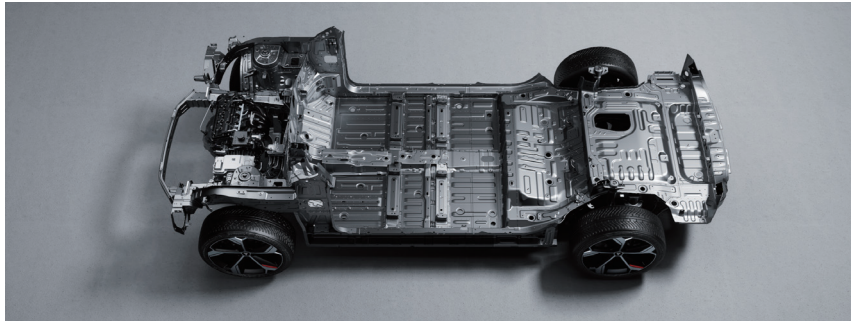
Quality Control	Charging	Cycle Life
With over 6,800 quality control points and more than 10,000 data traceability items, we ensure the full lifecycle quality reliability and consistency, achieving a cell unit failure rate at the DPPB (one in a billion) level.	Delving into the microscopic mechanisms of materials, we've achieved innovative upgrades for cell materials. By integrating 4C super-fast charging, it takes only 10 minutes to replenish the battery from 20% to 80%.	The cell cycle life exceeds 2,000 cycles, meeting the demand for a vehicle lifespan of 10 years or 300,000 km.

Focusing on raw materials and technological R&D for power batteries, we have established comprehensive cooperation with leading enterprises such as CATL and Ganfeng Lithium. Through joint ventures, equity participation, and collaborative development, we've engaged in deep innovation cooperation with strategic partners like Bosch Group and NIO in areas including battery research and intelligent connected new energy vehicle development.

Make Breakthroughs in Key and Core Technologies

Changan accelerates R&D breakthroughs in intelligent automotive technology around the products and services throughout the entire life cycle of vehicles. We focus on fashion, intelligence, low carbon, vehicle integration, and intelligent manufacturing, striving to break through in critical core technologies such as satellite narrowband communication, standardized cells, visual perception, and multimodal integration.

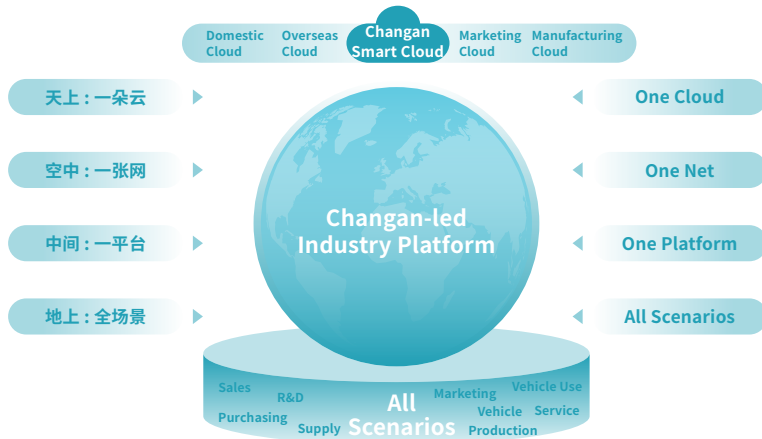
In the NEV field, we have mastered over 400 core technologies, including all-in-one high-voltage power systems and sodium-ion battery packs. In the field of intelligence, we hold more than 200 key core technologies, such as intelligent vehicle-end cloud-integrated communication technology and advanced intelligent driving systems. The first digital intelligent vehicle developed under the SDA platform architecture, labeled with the capabilities of "Smart Brain", "Smart Body", and "Smart Service", made its debut, marking a new breakthrough in our "New Auto Species, New Ecosystem" strategy. In the 2023 evaluation results of the National Enterprise Technology Center, Changan has maintained its position as the industry leader for 7 consecutive terms spanning 14 years.



The Industry-First EPA1 All Electric Digital Platform

Drive Digital Intelligence Development

Changan's Digital Transformation 3.0, driven by technological innovation, constructs a digital industrial model that is "on the ground and in the cloud for all use case", achieving 24/7 uninterrupted global collaborative R&D across ten locations in six countries.



The "Cloud-Net-Platform-Scenario" Industrial Framework in Digital Transformation

We've established digital factories based on digital twin technology, reducing the manufacturing and design cycle by over 30% and improving efficiency by more than 20%. By providing comprehensive, real-time online transparency throughout the order-to-delivery (OTD) process, we've empowered over two million users with a transparent delivery experience.

Upgrade Brand Image

Rooted in the global market, we've established a user co-creation mechanism, regularly setting product themes and inviting users to participate in co-creation, integrating real user needs and expectations throughout the product design process.



The DEEPAL SL03 won the 2023 German Red Dot Award for Product Design.



The NEVO CD701 was honored with the 2024 German "iF Design Award".



We have conducted in-depth research into the needs and habits of overseas consumers, as well as local regulations and standards, thus rapidly developing domain controller products that meet the demands of overseas markets, and continuously optimizing and upgrading them. We have closely monitored overseas cutting-edge technology trends, and strictly adhered to international standards such as ASPICE and ISO26262, to meet the diverse needs of overseas markets with high standards.

Guided by our brand strategy and international brand planning, we have clarified the global applicability paths for our five major brands: CHANGAN AUTO, NEVO, KAICHENG, DEEPAL, and AVATR. We have held or participated in major events such as the Auto Shanghai 2023, 2023 Changan Tech Ecosystem Summit, and Changan Southeast Asia Press Conference, conveying the voice of Changan to society on a constant basis.

CHANGAN					
	CHANGAN AUTO	NEVO	DEEPAL	AVATR	KAICHENG
User Group	Mainstream Users	New Mainstream Users	Youthful Users	Premium EV Brand	"C+B" User Expansion
Brand Positioning	Mainstream ICE Vehicle Series	Digital Intelligent Transformable Vehicle	All-Scenario Smart Mobility	Premium EV, An Emotional Intelligent Companion	Commercial Vehicle Series

The Five Major Business Brands Structure of Changan



On November 27th, Changan held a press conference in Bangkok, Thailand. The event effectively conveyed Changan's open and inclusive development concept and brand warmth, realizing Changan's leap into the 4.0 era of its going global strategy.



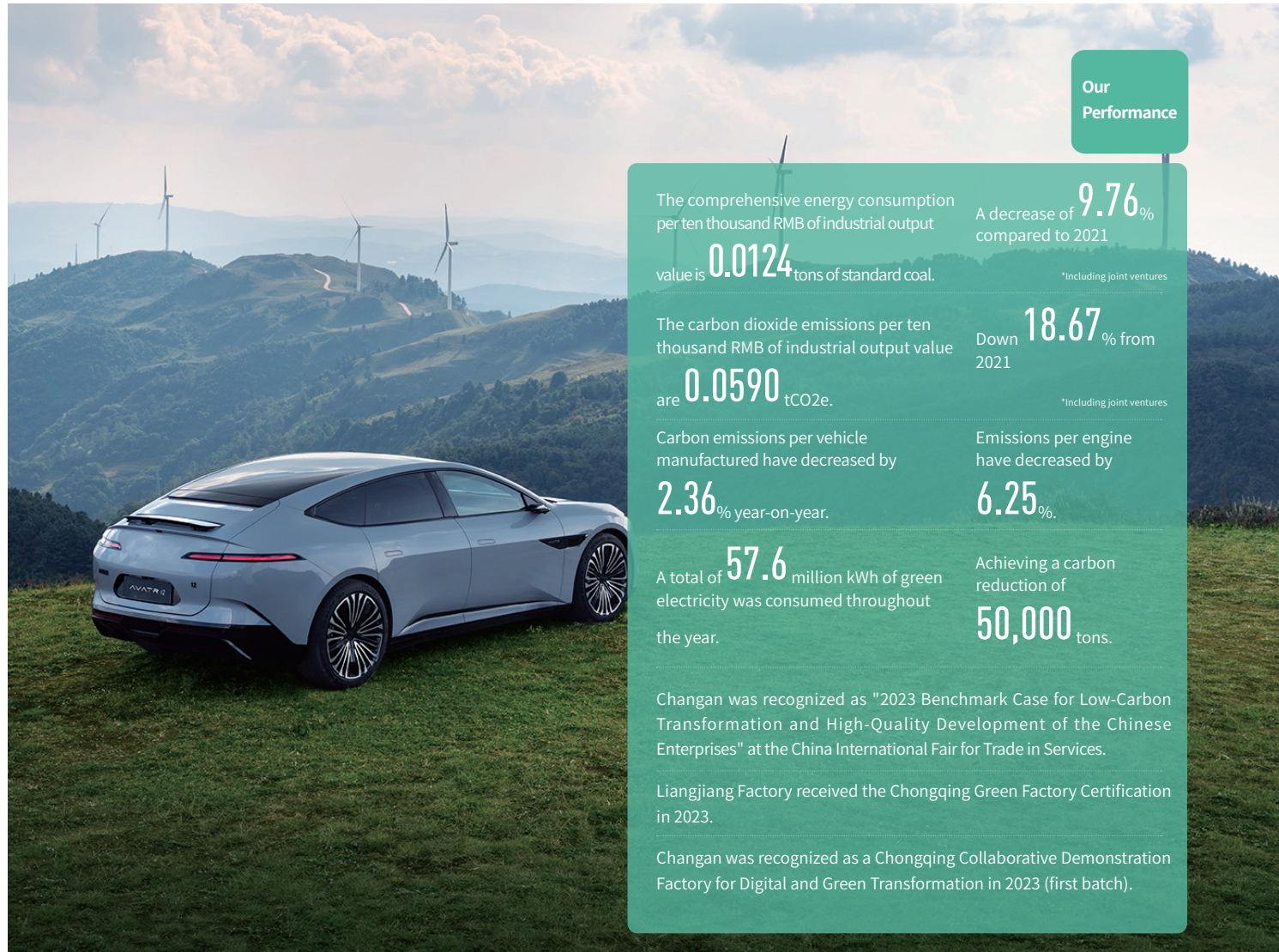
Environmental Protection 03

Our Goals



Our Response

Changan is committed to prioritizing eco-friendliness and pursuing green development, accelerating its transformation towards an intelligent low-carbon mobility technology company in the development of low-carbon industries and changes in production and lifestyle.



Our Performance

The comprehensive energy consumption per ten thousand RMB of industrial output value is **0.0124** tons of standard coal. A decrease of **9.76%** compared to 2021. *Including joint ventures

The carbon dioxide emissions per ten thousand RMB of industrial output value are **0.0590** tCO₂e. Down **18.67%** from 2021. *Including joint ventures

Carbon emissions per vehicle manufactured have decreased by **2.36%** year-on-year. Emissions per engine have decreased by **6.25%**.

A total of **57.6** million kWh of green electricity was consumed throughout the year. Achieving a carbon reduction of **50,000** tons.

Changan was recognized as "2023 Benchmark Case for Low-Carbon Transformation and High-Quality Development of the Chinese Enterprises" at the China International Fair for Trade in Services.

Liangjiang Factory received the Chongqing Green Factory Certification in 2023.

Changan was recognized as a Chongqing Collaborative Demonstration Factory for Digital and Green Transformation in 2023 (first batch).

Target the "Carbon Peaking and Carbon Neutrality" Goals

Changan is committed to high-quality development that is eco-friendly, green and low carbon. We have integrated carbon peaking and carbon neutrality into our overarching reform and development strategy, with a focus on constructing a clean, low-carbon, safe, and efficient energy consumption system, accelerating to build an industry structure and production mode that conserves resources and safeguards the environment.

We have established an automotive full lifecycle carbon accounting system aligned with industry standards, enabling us to independently report the carbon footprint of our models. This has supported the BEV version of DEEPAL SL03 in being rated the "2023 Low-Carbon Leader Model" and helped AVATR 11 score 100 points out of 100 for Carbon Emissions in the 2024 "China Green Car Appraisal" (C-GCAP).

Advance Green Manufacturing

Changan has integrated the concept of green and low-carbon development into all areas and aspects of production and operation, promoting the digital and green construction of factories, advocating clean production, and using clean energy extensively to realize intelligent manufacturing and smart operation.

In product manufacturing, we participated in the drafting and release of industry standards such as QC/T 1159-2022: Guidelines on Evaluation of Automobile Industry Green Supply Chain Management, filling a gap in domestic green evaluation standards. The Liangjiang Factory has established an industrial solid waste digital management platform and received the Chongqing Green Factory Certification; the Yubei Factory initiated an environmental digital construction project for replacement and upgrade, introducing 25 functional requirements such as automatic pollution monitoring. Changan's UNI-V was shortlisted in the Ministry of Industry and Information Technology's 2022 Green Design Product. As of December 2023, Changan owned 18 green design products.

During production, we have been dedicated to reducing the use of toxic and harmful materials, established sanitary standards and quality management systems, and achieved clean and efficient production. In 2023, we implemented 15 environmental protection technical improvement projects with a total investment of over RMB35 million, ensuring all business units met emission standards.

Lean Start-Stop

We have meticulously optimized the start-stop schedules of energy-consuming equipment, including air compressors, fans, ovens, water pumps, and lighting fixtures, resulting in savings of 342 tons of standard coal and a reduction of 3,135 tons of carbon emissions.

Energy Efficiency Optimization

For critical energy-consuming equipment, we've implemented operational control optimization, electrical upgrades for refrigeration units, and improved the supply-demand matching of energy supply equipment systems, resulting in savings of 775 tons of standard coal and a reduction of 7,103 tons of carbon emissions.



Process Optimization

Through measures such as shortening process duration, optimizing process temperatures, direct supply of molten aluminum, and reducing the number of engines that need running-in, we have achieved a transformation and upgrade to low-carbon processes, saving 339 tons of standard coal and reducing 3,109 tons of carbon emissions.

Production Scheduling Optimization

We have further improved the production line efficiency by setting reasonable production scheduling methods, saving 179 tons of standard coal and reducing 1,638 tons of carbon emissions.



In our commitment to green energy, we have incorporated the installed capacity and generation ratio of renewable energy into the criteria for selecting new sites and expanding production capacity investments. Furthermore, we have proactively advanced energy structure reform. Specifically, our Yuzui (Chongqing), Hefei, and Hebei bases have collectively established photovoltaic power stations with a total capacity of approximately 79MW. These stations have generated a combined 57.6 million kWh of green electricity throughout the year, resulting in a carbon reduction of 50,000 tons. Additionally, we have actively engaged in market-based green electricity trading, responding to the call of local policies, and procured 3 million kWh of green electricity, resulting in a carbon reduction of 200 tons.

We have focused on constructing a recycling system, optimizing resource utilization comprehensively, and exploring the establishment of an easily scalable EPR model for automotive products. Additionally, we have advanced the adoption of low-carbon materials and technologies, completed research on 15 types of low-carbon and lightweight technologies, including recycled aluminum, bio-based nylon, and variable stiffness thermoforming. Furthermore, we have been developing low-carbon process technologies to improve resource utilization, such as using the industrial chain of coating cleaning solvents for recycling, water reuse and sludge drying.

Practice Green Operation

Changan is dedicated to creating a low-carbon office environment, advocating its employees to practice environmentally-friendly and low-carbon green office concepts. By establishing the Changan Automobile Energy Saving and Consumption Reduction Regulations and promoting the use of electronic office systems, video conferencing, and recycling of items, we have guided employees to establish energy-saving and emission-reduction awareness, and reducing office resource consumption.

Changan has advanced the construction of "7 Bases + 8 Transfer Stations" and a multimodal logistics network across China. Through integrated, information-oriented, and platform-based management methods, we have coordinated all bases and transfer stations nationwide to efficiently combine road, rail, and water transport capabilities. In 2023, the highway transportation full load rate reached 83.5%, with approximately 700,000 vehicles transported on domestic trunk lines, an increase of about 5% year-on-year. Over the past three years, the proportion of recyclable packaging for newly launched vehicle models has been 98% or more, and the recycling ratio of transport packaging has been over 80%. We have comprehensively audited suppliers' environmental management system certification, with 98.4% of suppliers passing IATF16949, 95.1% passing ISO14001, and 20% passing green factory and green supply chain management enterprise certification. Changan was included in the Ministry of Industry and Information Technology's "Green Supply Chain Management Enterprise Public List" and the "Green Supply Chain Management Enterprise List".





Products and Services 04

Our Goals



Our Response

Changan has consistently placed user interests and needs at the forefront of all its efforts, viewing them as the cornerstone of its operations. With a steadfast commitment to product quality, the company strives to provide exceptionally superior products to its users. Furthermore, Changan actively nurtures a symbiotic relationship of co-creation and mutual success with its users, offering "new services, new experiences, and new relationships" across product and emotional dimensions.



Our Performance

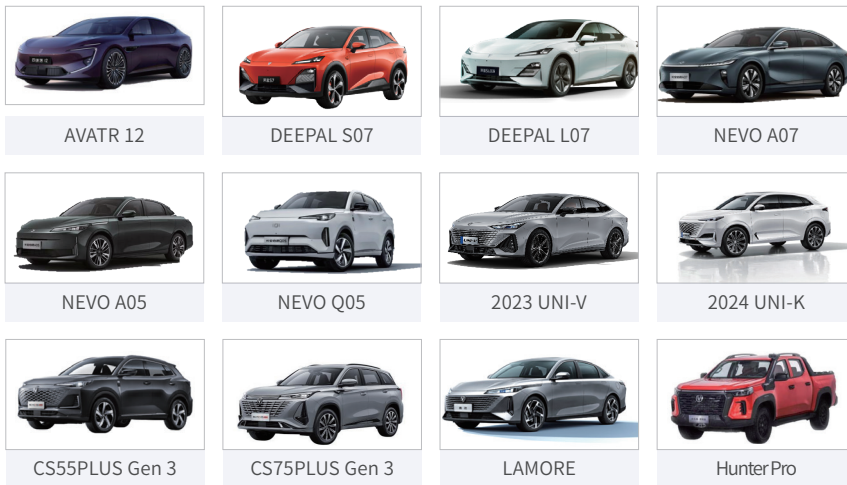
Changan was awarded first place in J.D. Power's 2023 Sales Satisfaction Index (SSI) Study among Chinese brands.
Changan was honored with China Quality Association's Four-Star Service for User Satisfaction in 2023, the only company in the automotive industry to receive this award.



Create Quality Products

Grounded in global user needs, Changan consistently creates industry-leading blockbuster products that enables delightful mobility scenarios for users. Supported by a professional automotive R&D process system, over 9,000 global sales and service outlets, and nearly 120,000 skilled service personnel, the company ensures that each product exceeds user expectations to last for 10 years or 260,000 kilometers.

2023 Changan Product Portfolio



Safeguard Product Quality

Changan adheres to the principle of creating exceptional quality, practicing the quality philosophy of "unceasing improvement, customer satisfaction, and pursuit of excellence". In 2023, Changan received four prestigious national awards, namely National Product and Service Quality Integrity Demonstration Enterprise, National Automotive Industry Quality Leading Brand, National Quality and Reputation Guaranteed Product, and National Automotive Industry Quality Leading Enterprise. For two consecutive years, it has maintained its top position in J.D. Power's China New Vehicle Initial Quality Study (IQS) among Chinese brands, successfully defending its dual championship.

We design our products with the aim of achieving a lifespan of 10 years or 260,000 kilometers of usage. Each model undergoes rigorous testing, including reliability road test at the comprehensive test site, evaluations for adaptability to high-altitude, high-temperature, and extreme-cold environments, as well as national road tests. With over 12,400 verification tests and more than 60 collision performance validations, we ensure the delivery of high-quality products. No product recalls occurred in 2023.

Customer Care Program- "withU"

Changan fully executes its customer care program "withU", delivering proactive services 598,000 times throughout the year, with a 5-minute response rate of 83.39%, and a customer satisfaction rate (SSI/CSI) of 99.7%. Additionally, we have organized 336 online and offline customer experience events, with a cumulative total of 322,413 participants. In partnership with charitable organizations, Changan has established a public welfare platform, collaborating with users to support education, show respect to the elderly, assist the disabled, and promote charitable values.



Changan was awarded first place in J.D. Power's 2023 Sales Satisfaction Index (SSI) Study among Chinese brands



Changan was honored with China Quality Association's Four-Star Service for User Satisfaction in 2023, the only company in the automotive industry to receive this award



Changan users visited Jinzhong Elementary School to spend quality time with left-behind children



Put people first

05

Our Goals



Our Response

Changan strengthens humanistic care, improves working environment, standardizes employment management, and focuses on protecting, mobilizing and giving full play to the enthusiasm of both the company and its employees. The company safeguards the legitimate rights and interests of employees, such as the right to knowledge, participation, expression, and supervision, facilitating mutual benefit and fostering win-win outcomes. This commitment aligns with Changan's goal of "building a harmonious enterprise, seeking enterprise development, and sharing development achievements with joint efforts".



Our Performance

Total employees on the payroll

49,117

Number of newly employed personnel

17,769

The rates of labor contract signing, social security coverage, union membership and participation, and employee health examination coverage are all

100%

Professional employee satisfaction rate is

80%

Skilled employee satisfaction rate is

74.6%



Protect Rights and Interests of Employees

Changan adheres to equal and diversified employment. We keep enhancing the compensation and benefits system, foster democratic management, and effectively safeguards the fundamental rights and interests of our employees. We have established a comprehensive incentive framework and explored innovative incentive mechanisms, to actively cultivate the vitality of both talent and the organization. In 2023, the rates of labor contract signing, social security coverage, and union membership and participation were all 100%.

Value Employee Growth

Changan has engaged with more than 50 universities, including prestigious institutions like Tsinghua University and Tongji University, to organize product technology exhibitions, master lectures, and PhD Mini talks. We have extended invitations to teachers and students from over 100 universities to visit our company, facilitating an understanding of emerging industry trends and fostering awareness of evolving industrial dynamics among students. Meanwhile, we have pooled global talent and invited over 50 world-class experts such as Mr. Klaus, a leading figure in global styling, to join our team, building an international product design team comprising 835 individuals from 25 countries. This diverse and talented team is instrumental in bringing fresh perspectives and innovative ideas to Changan's styling design, intelligence, electrification, and globalization efforts.



Changan's first foreign vice president
—Klaus Zyciora (in charge of global design)

Changan has established smooth channels for the development of high-skilled talent, aligning skill personnel development with the national "New Eight-Level Vocational Skills Classification System". We have completed professional skill level certification for 5,847 employees annually. We have established a dual-instructor high-skilled talent team to further expand the development channels for skilled talent. Throughout the year, 135 individuals obtained the assistant engineer title, 39 individuals obtained the engineer title, 5 individuals obtained the senior engineer title, and 1 individual obtained the title of professor-level senior engineer. Furthermore, we have maintained a commitment to fair, open, and transparent cadre selection and appointment processes, with 88% of cadre positions being openly recruited.

Changan has implemented comprehensive plans for employee career development, created training brands such as the "Sailing, Voyage, Pilot" program and "Changan Lecture Hall". To bolster these efforts, we have constructed a pyramid course system centered on the automotive full value chain and established an "Ivy League" faculty system composed of experts from the company. Leveraging a robust learning platform, Changan has also introduced international course learning columns and conducted overseas special training programs.

In 2023:

Average training time

66 hours

Online and offline training sessions attracted a total of

588,780 participants

The cumulative training duration amounted to

1,674,869 hours

100% employee training coverage



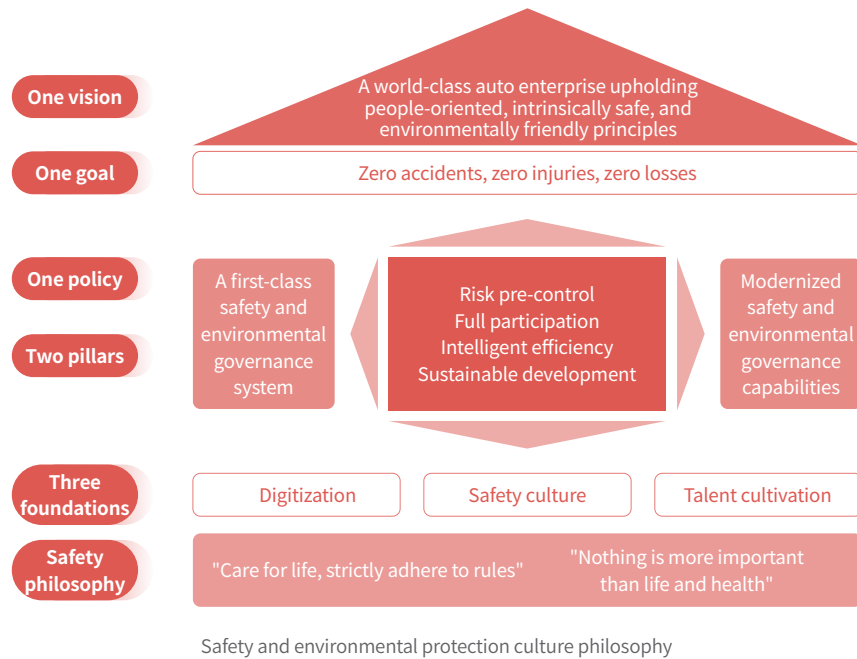
Safeguard Employee Safety

Aligned with the national safety and environmental protection strategy and deployment, Changan has implemented a robust "dual prevention and control" mechanism. Drawing upon international standards like ISO45001, we consistently enhance our safety management capabilities. We have promoted safety awareness campaigns and invited experts from the Chongqing Center for Disease Control to conduct training sessions for 209 full-time and part-time managers. Moreover, we have organized themed events such as "National Security Education Day", "Safety Production Month", and "Fire Prevention Publicity Month" to foster a cultural atmosphere of work safety.

In 2023, we surpassed expectations by completing the national occupational disease hazard special management tasks ahead of schedule, with an overall compliance rate of 98%, exceeding the national standard requirement of 85%. Furthermore, we executed special management projects for occupational disease hazard detection, reducing the number of sites with excessive noise pollution by 44.7%. As a result, we successfully reduced the number of individuals affected by severe noise hazards by more than 300. We organized on-the-job occupational health examinations for 5,952 people throughout the year, with no suspected occupational diseases found.

Care for Employees' Lives

Changan has updated its Employee Health Care Plan 2.0, driving the construction of three major systems, namely the employee management system, protection system and business system. Focusing on employee mental health, we conducted a "Vitality Assessment" for all staff and established a psychological risk map for employees. Throughout the year, 57 mental health training sessions were held, covering over 3,000 people; seven lectures on health and common disease prevention were organized; and in collaboration with the Health Psychology Assistance Center, 42 employee care activities were conducted, covering 1,830 employees, with 417 completing mental health counseling training and obtaining certification as psychological counseling volunteers. In 2023, Changan was honored by the Chongqing Federation of Trade Unions as a "Chongqing Model Unit for Employee Mental Health Services" and a "Chongqing Pilot Enterprise for Enhancing Employee Quality of Life and Happiness".





Community Construction

Our Goals



Our Response

Changan remains committed to the philosophy of open and inclusive collaboration, consistently empowering a better life through charitable initiatives. With a deep-rooted dedication to public welfare, we actively support rural revitalization efforts and vigorously advocate for the sustainable development of philanthropic endeavors, so as to enhance the well-being of people across the society.



Our Performance

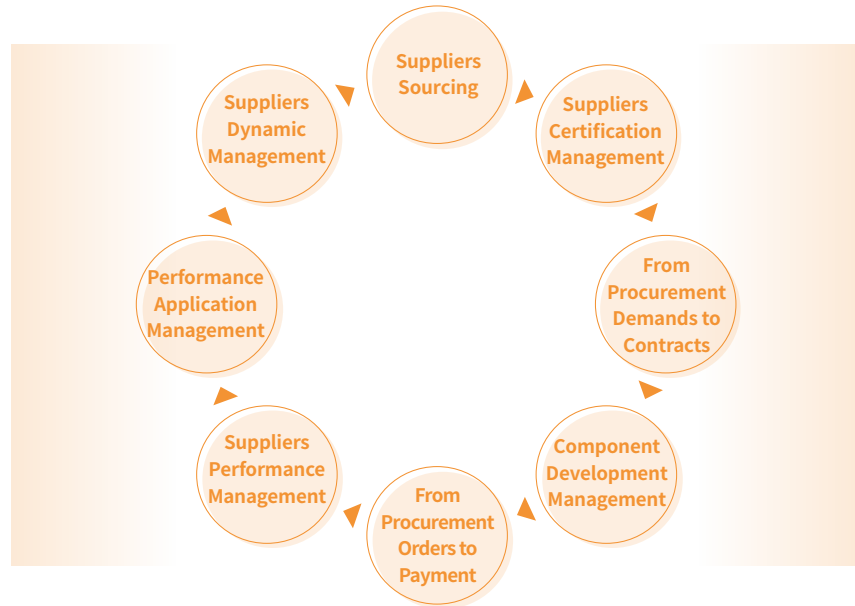
A total of RMB **10.6** million in assistance funds was coordinated and allocated, benefiting **200,000** farmers.

RMB **42.16** million was donated to public welfare funds.



Create a Responsible Supply Chain

Changan actively builds cooperative relationships of mutual trust, shared responsibility, and reciprocal benefits. We have established a robust supply chain system to gather development synergy and cultivate a new ecosystem of open cooperation, mutual benefit, and sustainable development. We have also taken various measures to promote transparent procurement practices, standardize purchasing behavior, and establish a supply chain featuring compliance, transparency, mutual trust and empowerment.



We strictly adhere to management procedures such as Supplier Certification Management and Pricing and Sourcing Management of Production-Related Components and Parts Procurement, establishing a full-process regular review and dynamic management of cooperative suppliers. In 2023, dealer training was conducted 861 times, totaling 20,664 hours and covering 20,550 participants.

Global Cooperation

Changan integrates global resources on a constant basis, expands cooperation with top enterprises and universities worldwide in new products, technologies, and business areas, and actively participates in global market competition.



From March to August, Changan European Design Center collaborated with Pforzheim University on a five-month forward-looking exploration project.

Changan held Changan Automobile Overseas Partner Conference

Case

On April 20, 2023, Changan Automobile Overseas Partner Conference was successfully held at Changan Global R&D Center in Chongqing. More than 150 overseas partners from 48 countries and regions gathered in the mountain city to jointly outline Changan's overseas development blueprint, boosting the strong international presence of the Chinese brand.



2023 Changan Automobile Overseas Partner Conference



Devotion to Public Welfare and Charity

Adhering to the public welfare philosophy of "Love Travels the World", Changan has formed a joint responsibility mechanism involving employees, the company, and the public. Centered around the "withU" public welfare IP, the company continuously carries out public welfare activities and fulfills its social responsibilities in multiple fields such as education, child care, environment, safety, culture, employment, and people's livelihood, driving the sustainable development of social welfare undertakings.

Contribution to Rural Vitalisation

Focused on Luxi County/Yanshan County in Yunnan Province and Youyang County in Chongqing, Changan vigorously carries out assistance in capital, industry, education and skills.

Care for Special Groups

Targeting groups such as Hope Primary Schools, nursing homes, and welfare foundations for the disabled, Changan has conducted material donations, volunteer services, and public welfare concerts from time to time.

Environmental Protection

In collaboration with dealers, suppliers, customers, users, and volunteers, Changan has organized public welfare tree-planting activities, continuously improving the ecological environment.

1. Protect Children

We are highly concerned about the autistic group, sick orphans and other vulnerable groups. Focusing on public welfare activities related to children's education, we continuously monitor the needs of children's growth and safeguard their physical and mental health. For 13 consecutive years, we have visited Hope Schools and donated materials worth RMB7.3 million in total.

2. Green Public Welfare

In partnership with environmental departments, third-party social institutions, users, and employees, we have carried out a series of green public welfare activities, ranging from ecological protection donations, forest ecological restoration, forest fire prevention, to the construction of a green, low-carbon mobility ecosystem, protecting our green homeland in multiple fields and on all fronts.

3. Safeguard Safety

We have kept engaging in traffic safety public welfare projects closely linked to the automotive industry, dedicated to bolstering societal awareness and protective measures for road safety. In the face of disasters, we have also shouldered our responsibilities and taken the initiative to act by donating materials, providing emergency aid and extending heartfelt solidarity to overcome challenges together.

4. Support Sports

We are actively involved in national sports and established the "Changan Progress Team" and "Changan Cheer Team" composed of our employees, users, and partners. Through deep participation in events like the Chongqing Marathon, we aim to convey to the society and the public the concept of a positive, uplifting, sunny, and healthy lifestyle and the spirit of sports.



Prospect

In 2024, Changan will steadfastly practice the ESG development concept, deeply grasp the technology-driven characteristics of new quality productivity. We will prioritize the three major strategies, namely the Mission of "Shangri-La" for NEV development, the "Dubhe Plan" for intelligent advancement, and the "Vast Ocean" plan for going global. By seizing new opportunities in the development of emerging technologies and industries, we will work diligently and pragmatically. Together with our global partners, we will adopt a more open approach to cooperation, deepen collaborative innovation and make unremitting efforts to build Changan into an intelligent low-carbon mobility technology company and a world-class auto brand!





Corporate Honors



No.	Award Name	Awarded by
1	DEEPAL SL03 was awarded the "Grand Jury Prize". Force EV Technology was awarded the "Special Jury Prize".	China Media Group
2	The 24th China Patent Excellence Award— "A Method and Device for Determining the Clutch Surface Temperature of a Wet DCT" (Patent No. ZL201810150319.0)	National Intellectual Property Administration
3	The 24th China Patent Excellence Award— "A Method, System, Vehicle and Storage Medium for Real-Time Online Estimation of Motor Rotor Temperature" (Patent No. ZL201910673143.1)	National Intellectual Property Administration
4	UNI-V was recognized as a "Green Design Product".	Ministry of Industry and Information Technology
5	Chongqing Changan Automobile Co., Ltd. was recognized as a "Green Supply Chain Management Enterprise".	Ministry of Industry and Information Technology
6	Changan was awarded the "2022 VOC+ After-Sales Service Benchmark Award".	Voice of China's Automobile Customers (VOC+)
7	UNI-V won the "Smart Star" title at the International Automotive Assessment Summit.	2023 International Automotive Assessment Summit
8	DEEPAL SL03 won the 2023 German "Red Dot Award for Product Design".	2023 German Red Dot Award
9	The Force Super E-Drive of DEEPAL SL03 won the second "World's Top Ten Electric Drives".	Jury of the World's Top Ten Electric Drives
10	Changan was granted the UN-R155 Vehicle Cybersecurity Management System Certification.	Luxembourg Ministry of Transport
11	Changan was recognized as the "2022 Outstanding Supplier for Government Official Vehicle Procurement".	China Finance & Economy Media Group, Ministry of Finance China Government Procurement Magazine

No.	Award Name	Awarded by
12	UNI-K iDD was recognized as "2022 Most Influential Vehicle in Government Official Vehicle Procurement".	China Finance & Economy Media Group, Ministry of Finance China Government Procurement Magazine
13	Changan won the gold award of "CICV 2023 Innovative Applications and Frontier Technologies of International Intelligent Connected Vehicles".	Expert Committee of the CICV 2023
14	DEEPAL SL03 won the gold award in the midsize sedan category at the 2023 World Intelligent Driving Challenge(WIDC).	WIDC 2023
15	Changan ranked No. 1 in J.D. Power's 2023 China Sales Satisfaction Index (SSI) Study among Chinese brands.	China SSI Study of J.D.Power
16	DEEPAL SL03 was awarded the "2023 China Low-Carbon Pacesetter Model. Champion of Class B Pure Electric Sedans	Automotive Industry Energy Conservation and Green Development Evaluation Center
17	Changan was recognized as a Chongqing Collaborative Demonstration Factory for Digital and Green Transformation in 2023 (first batch).	Chongqing Economic and Information Commission
18	Changan became the Vice Director Member of ASAM and was honored with the C-ASAM Annual Special Contribution Award.	ASAM (Association for Standardization of Automation and Measuring Systems) China Region
19	Changan was recognized as an "Advanced Unit of the China Green Supply Chain Alliance".	China Green Supply Chain Alliance
20	Changan's customer care program "withU" was awarded Four-Star Service for Customer Satisfaction by China Association for Quality in 2023.	China Association for Quality
21	The DEEPAL "Super REEV" system was included in the "China Heart" 2023 Top Ten New Energy Vehicle Powertrain Systems.	The Evaluation Committee of the "China Heart" Top Ten New Energy Vehicle Powertrain Systems



Key Performance

No.	Award Name	Awarded by
22	Changan won the Industry Innovation Practice Award by ICCE Intelligent Connected Vehicle Industry Ecosystem Alliance at the 2023 China Automotive Software Conference.	China Association of Automotive Manufacturers
23	Nanjing Changan New Energy 5G Fully Connected Smart Factory was recognized as a National 5G Factory.	2023 China 5G+ Industrial Internet Conference
24	The Third National New Energy Vehicle Key Technology Competition: Cai Yudong and Zou Wenjun from Intelligent Vehicle R&D Institute won the first prize in the V2X project. Yan Tingke and Jiang Wei from DEEPAL won the second prize in the powertrain system energy saving and emission reduction control project. Liangpingping and Cao Tongai from Liangjiang Factory won the third prize in the NEV electronic control system technology project.	Ministry of Human Resources and Social Security China Machinery Industry Federation
25	The "Horizon Cup" World Intelligent Vehicle Model of the Year Evaluation AVATR 11 won "Intelligent Vehicle of the Year" and DEEPAL SL03i won "Intelligent Sedan of the Year".	CarBingo Academy
26	NEVO A07 set a Guinness World Record for crossing the largest altitude difference with 5,720.019 meters (electric vehicle).	Guinness World Record
27	NEVO A07 was awarded the "Most Popular NEV Model of the Year" NEVO official media accounts won the "Innovative Live Streaming Marketing New Media of the Year".	ifeng.com
28	Changan was awarded "Enterprise of the Year". NEVO A07 won "Digital Mid-to-Large Sedan of the Year". DEEPAL S7 won "Intelligent Midsize SUV of the Year". AVATR 12 won "Vehicle of the Year".	2023 Global Automotive Annual Gala

Key Dimensions	Indicator Name	Unit	Year 2023
E Environmental Performance	Number of environmental protection training sessions	Times	107
	Total duration of environmental protection training	Hour	176
	Number of employees participating in environmental protection training	Person-time	2032
	Existing national-level green factories	/	1
	General and above safety and environmental accidents	/	0
	Energy structure and proportion	%	
	Natural gas	%	37.35
	Gasoline	%	6.19
	Kerosene	%	0
	Diesel	%	1.24
	Thermal energy	%	0
	Electric power	%	52.18
	Other energy sources	%	3.04
	Pollutant emission volume	t/a	
	COD emissions	t/a	180.69
Ammonia nitrogen	t/a	9.53	
Total nickel	t/a	0.05	
Total zinc	t/a	0.11	
Phosphates	t/a	1.16	
Sulphur dioxide	t/a	18.3	
Nitrogen oxide	t/a	88.53	
Particulate matter	t/a	87.38	
Volatile organic compounds ¹	t/a	146.04	



Key Performance

Key Dimensions	Indicator Name	Unit	Year 2023
Social Performance	Total number of employees	Person	49,117
	Number of newly employed personnel	Person	17,769
	Rate of labor contract signing	%	100
	Social insurance coverage rate	%	100
	Average paid leave days per employee ²	Day	7
	Safe production expenses ³	RMB 1,000	57,662.1
	Investment in labor protection funds	RMB 1,000	16,515
	Number of safety training participants	Person-time	217,587
	Detection rate of occupational disease hazards in the workplace	%	100
	Coverage rate of employee health checkups	%	100
	Donations for public welfare	RMB 1,000	42,160
	Number of supplier training sessions	Times	13
	Number of participants in supplier training	Person-times	4,200
	Proportion of low-risk suppliers	%	97
	Proportion of suppliers certified by IATF16949	%	98.4
Proportion of suppliers certified by ISO 14001	%	95.1	
G Governance Performance	Operating income	RMB billion	151.298
	Net profit attributable to shareholders of the listed company	RMB billion	11.327
	Total assets	RMB billion	190.171
	Vehicle sales	1,000 units	2,553
	Vehicle export sales outside China	1,000 units	358
	Number of new patent applications	/	5,739
	Number of valid invention patents	/	2,704

¹Organized emissions

²Actual paid leave days for employees

³Chongqing headquarters