



**2023
Corporate Social Responsibility
Report for Angel Yeast**

Angel is a global yeast and biotech company that develops natural ingredient solutions for the food & beverage, nutritional, and biotechnology industries.

Angel Yeast was founded in 1986. Angel Yeast Co., Ltd was listed on the Shanghai Stock Exchange in 2000.

“Developing yeast biotechnology, innovate for a healthy life” is our mission. We study how biotechnology can change our lifestyles for the better and help us live in harmony with nature.

12,000+
EMPLOYEES

160+
COUNTRIES

16
PRODUCTION BASES

About Angel

Dedicated to an array of business segments ranging from Yeast & Baking, Yeast Extract-Savory, Nutrition & Health, and Biotechnologies, we have established a global presence based on a solid foothold in China. Armed with a full-fledged network of production bases of yeast and deep-processing products across 13 cities around the world, we output 370,000 tons of yeast products annually, accounting for more than 18% of global capacity as the second largest supplier of yeast products.



Driven by technical progress and self-innovation, we strive to upgrade our core competitiveness and sustainability. While providing quality and reliable products for more than 160 nations and areas around the globe, we work in trust with all stakeholders such as our shareholders, partners, and investors. We seek harmonious development for Angle, our employees, society, and nature by rewarding the community with actions as a responsible supplier and employer.



Our mission

Developing yeast biotechnology and innovating for a healthy life.



R&D philosophy

Natural, nutritional
healthy and delicious



Spirit of enterprise

We strive for excellence,
innovation, and progress.

About Development

**Focused on our brand
As a quality supplier.**

We are committed to building a yeast brand featuring a global presence with premium products and exceptional services for consumers.

Products and quality



- Angel keeps enhancing product quality and supplying a steady flow of products above the average industry standards to provide products and services based on quality yeast and food ingredients.
- We work for concentric diversification of yeast products. In other words, we are dedicated to five business segments—yeast, healthy food ingredients, healthcare nutrients, new bio-technologies, and innovative baking ingredients—with upgrading R&D caliber and accelerating the development of global marketing systems to provide consumers with premium yeast, yeast extract, yeast source biological feed, healthcare nutrients, raw food materials, and derivatives.
- In 2023, we impressed the high-end Western market with stable growth in the subsidiary business. The international market saw our main business rocket to RMB 4.786 billion with a whopping year-on-year growth of 21.99%.
- In 2023, our annual fermentation capacity climbed to 376,900 tons, up by 15.09% year on year, including 138,600 tons of extract with a year-on-year growth of 19.15%.

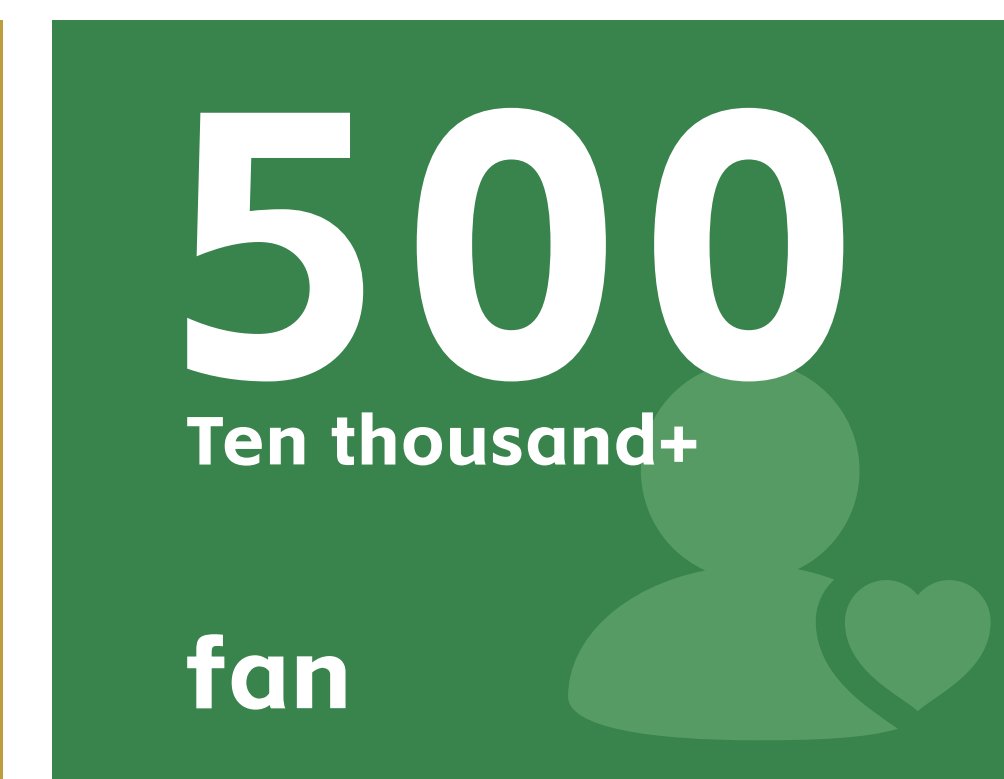
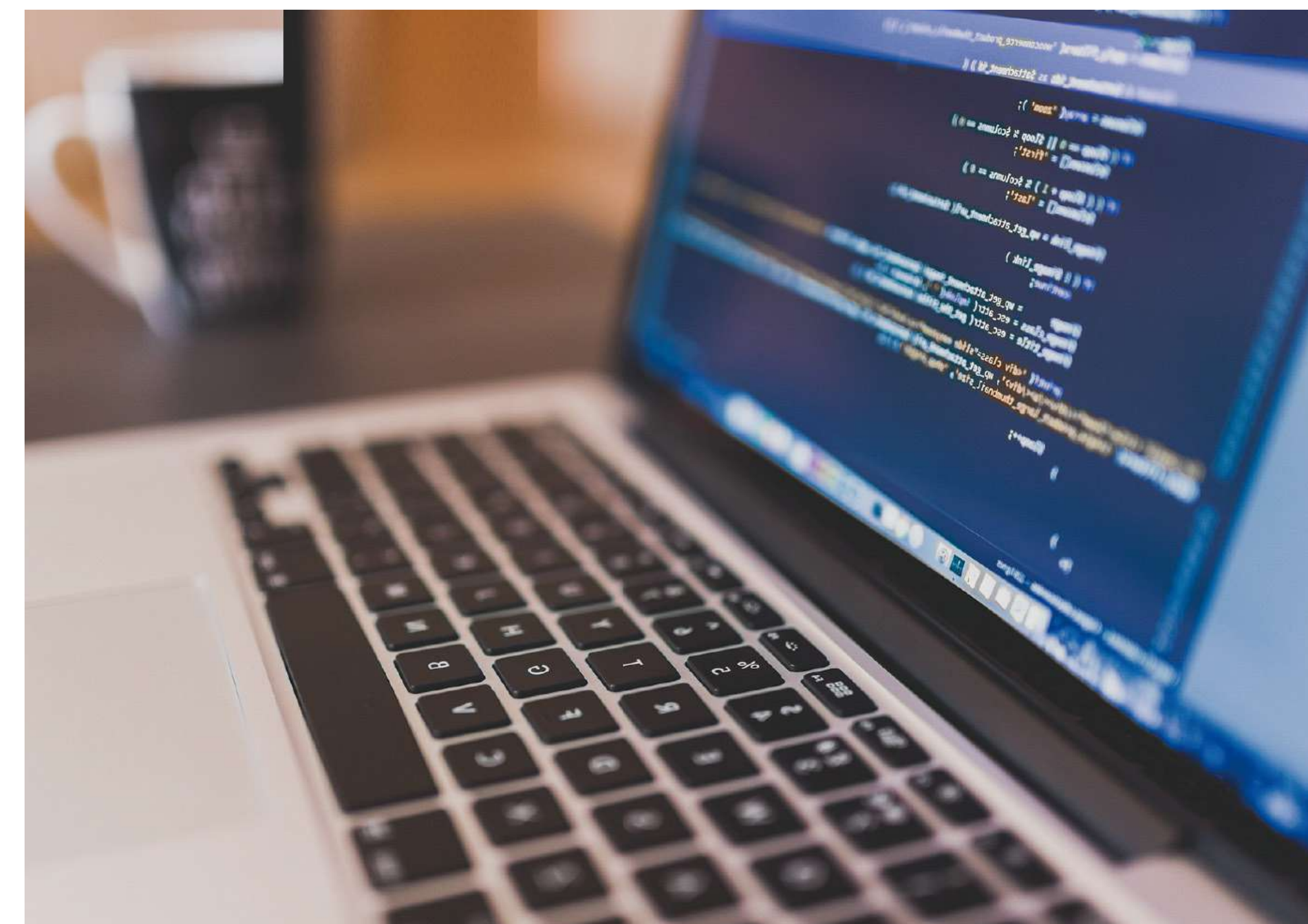
Branding and global vision



- Based on our strategic goals and the overseas differentiation advantages of our competitive products of dry yeast, we target such areas as the Middle East, Africa, and Asia-Pacific as our key markets to build Angle into an international brand step by step.
- We aim for an international presence by establishing overseas sales branches and hiring local marketing people to make the best of resilient overseas market recovery to secure existing clientele and expand a new pool of distributors and big accounts.
- As a top-ten player in the Madrid system for the international registration of marks, we have two famous brands in China: Angle and FUBON. Boasting Angle as our flagship brand supported by multiple sub-brands, we strive to build a brand matrix dominated by Angle. Such efforts have been paid off by the honor reaped by ANGEL NUTRITECH, one of our sub-brands—the winner of two top prizes for mom & baby products.
- Angle, committed to developing yeast biotechnology and innovating for a healthy life, strives to make its way to the top league of international big names through global exhibitions, digital media networks, industrial marketing events, and localized promotion to highlight our powerful brand clout and professional image among overseas food distribution channels and food industry players.
- We have established Application Technical Service Centers in Beijing, Wuhan, Cairo, and Lipetsk. Commanding edge-cutting baking techniques and best practices around the world, we work hand in hand with a host of prestigious brands including MIWE and DIOSNA. At Angle, we have more than 100 professional bakers and pastry cooks to provide more tailored services for clients at home and abroad.
- In 2023, Angle claimed a brand value of RMB 19.609 billion, the Top 2 in food processing & provision business in China Brand Value Ranking, and Top 1 in brand strength.

Marketing and Communication

- We keep up with new marketing trends by ramping up our presence in such emerging media as TikTok, Kuaishou, Little Red Book, Facebook, and LinkedIn to woo young clients in addition to our strengthened public communications.
- Committed to building an all-media communication matrix, we have ramped up the marketing efforts launched to crowded places such as elevator spaces. We work with KOLs to promote interesting facts about biotechnologies. By far we are running about 80 new media accounts with more than 5 million followers. We have built a live-streaming team and collaborated with industry associations and vertical media to give full play of our impact in the trade.
- We play an active role in all kinds of high-end forums and industry summits to make our voices heard. By far, we have made valuable contributions as one planner, participator, organizer, and sponsor in a raft of conventions and events such as Angel Yeast Cup Contest and Congress for Chinese Fermented Dim Sum, Symposium on Organic Nitrogen Sources, and Symposium on Earlier Life Nutrition for Animals. In 2023, we organized 70 international exhibitions and participated in more than 150 international events.



About Development

Establishing Angle as a champion for a healthy life

Dedicated to technology and innovation, we provide the best solutions for food safety and nutrition & health.





Angle, recognized as a national high-tech enterprise and national model of technological innovation,

has a dazzling array of top-ranking R&D facilities, encompassing National Enterprise Technical Center, a post-doctoral scientific research workstation, Yeast and Strain Resource Technology Center, Bakery and Health Food Technology Center, Protein Nutrition and Seasoning Technology Center, Industrial Microbiology and Brewing Technology Center, Nutrition and Health Technology Center, Bio-agricultural Technology Center, Center for Biocatalysis and Enzyme Technology and Center for Green Materials and Environmental Protection.

Driven by progressing technologies, we integrate global resources to become a prize-winning industry leader.

We have spearheaded or participated in the formulation of all the national standards and industry norms for yeast and yeast derivatives.

We won the National Prize for Progress in Science and Technology twice.

We won the First Prize for the Provincial Scientific and Technological Progress 12 times.

We were recognized as the "High-quality Development Base of International Agricultural Trade" .

We were nominated for the 3rd China Quality Award.

We were honored as the National Model of Technological Innovation.

We were honored as a national model for excellent quality.

In 2023, Angle invested RMB 603 million in R&D, up by 12.50% year on year, rewarded by encouraging technical achievements.

A genetic breeding platform for baker's yeast has been established to develop new strains featuring fine genetic characters and high commercial value.

We played an active role in building a whole-genome sequence database for yeast. Our project, the Microbial Resource Bank Construction and Industrial Applications for the Primary Functions of Chinese Traditional Rice and Wheat Flour Fermented Products, was approved as a world-class endeavor.

Thanks to high sugar-tolerant yeast species and new enzyme technologies, we developed and launched Angle Instant Dry Yeast, one of our knock-out products.

We have achieved innovative products of raw and auxiliary materials to make both Chinese and Western traditional food better cater to the demands of food safety and healthcare nutrition.

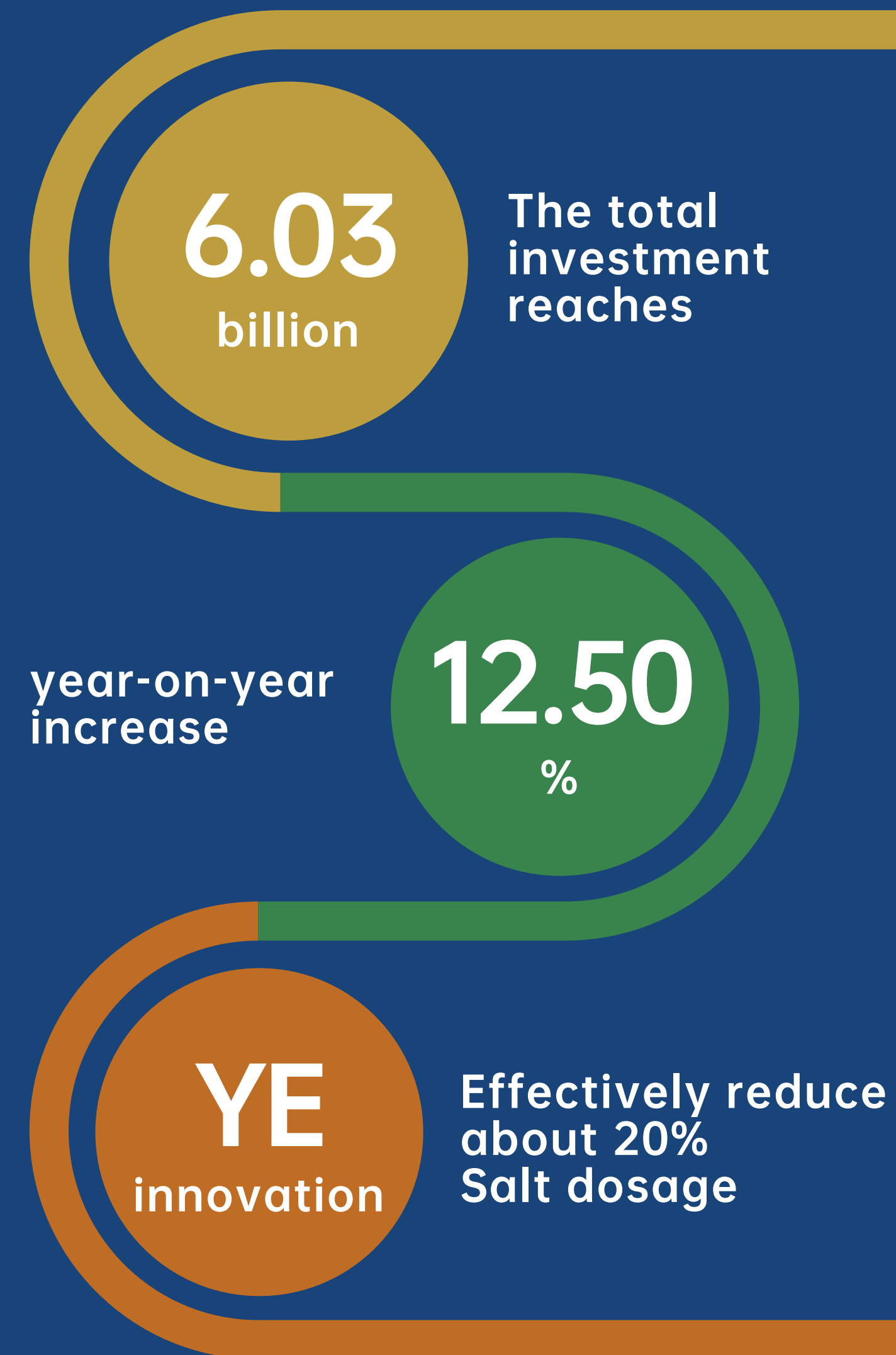
Among our 56 new items ranging from moisture-resistant icing powdered sugar, compound emulsifier, and butter to premixed flour, 45 of them hit the market and 5 had their formulas upgraded thanks to our efforts to source premium raw materials around the world.

We have managed to fine-tune the efficiency of the downstream fermentation industry with a series of innovative products, including multiple species inoculants, fermentative nutrients, yeast extract, and yeast peptone.

We have standardized the production of yeast culture-medium products to quantitatively control the organic nitrogen source nutrients.

We have provided a new impetus for the green growth of the food industry with our yeast protein, a nationally approved new food ingredient, and a raw material of quality protein extracted from yeast.

Leveraging such technical innovations as yeast breeding, efficient fermentation, composite enzymatic hydrolysis, and enhancing flavoring with less salt, we have managed to reduce about 20% of salt dosage, thus providing effective and sound salt reduction solutions without compromising the flavoring.



About Development

Pioneering the yeast industry with a global vision

We are dedicated to empowering global development for a smarter and better future for the yeast industry.





Globalization of markets

We devolve further into international markets by beefing up building a globalized marketing system. A well-rounded network has been unfolded with one international business center, 6 overseas business divisions, 5367 overseas distributors, and 1569 foreign employees.

As a part of our efforts to upgrade marketing platforms, we keep building overseas subsidiaries and hiring local marketing people.

In 2023, we incorporated a branch in Algeria to avail ourselves of the local market of yeast and raw food materials.

We navigate our international business holistically by upgrading the channel structures and expanding the pool of our professional distributors for each business arena.

Ramping up overseas marketing

This year, Angle was reported by such major media as FBTRA and FIA more than 20 times, doubling the record last year. We also launched a quality documentary about yeast protein to flex our marketing muscle.

We target our marketing efforts to the promotion of yeast protein, one of our knockout products by launching advertisements on YouTube across the markets in Africa and Asia-Pacific, where our videos have been watched more than 450,000 times.

We started to work with professional MCNs and new KOLs in the USA, France, and Kenya to maximize our local brand influence.

We created 50 short videos to promote our international business and animal nutrition. The promotional video about animal nutrition has been watched 75,000 times, reflecting our stronger presence on social media.



Enhancing intellectual property

We have built up an intellectual property management system to improve management regimes of intellectual property, help our staff know better about intellectual property protection, and foster the professional talents of intellectual property.

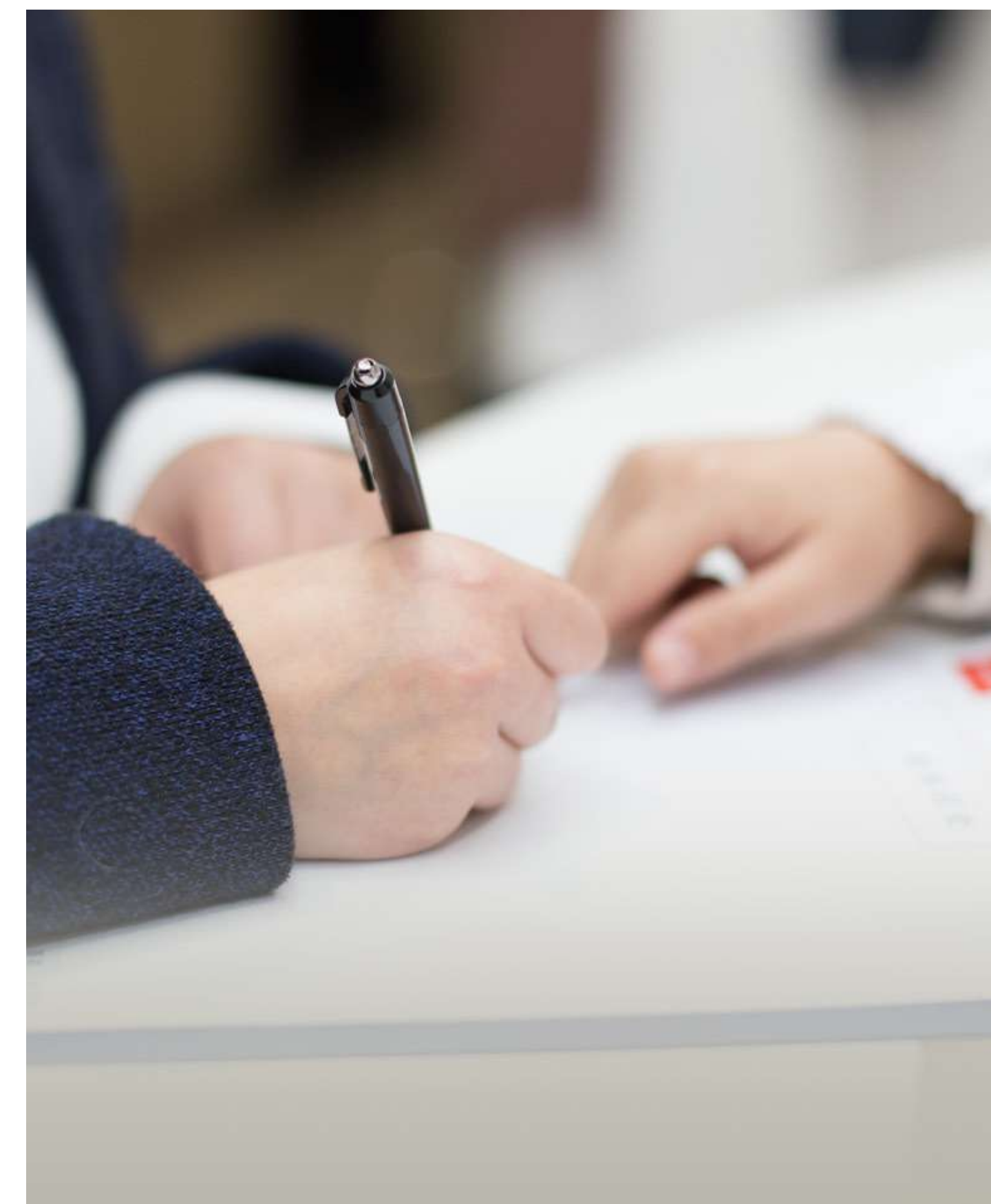
We have brought our strategic planning about intellectual property to the next level by contributing to formulating international standards for yeast products. This year, we were granted 90 patents out of the 159 patents we filed. Our intellectual property management system was approved by the relevant supervision authority.

We won the 24th China Patent Award for Excellence for our patented technique-"the Preparation Method and Application of High-protein Yeast Extract with a Mellow Taste".

We earned a high-value patent gold award in Hubei Province with "A Method for Preparing Reduced Glutathione from Yeast Cells".

By the end of 2023, Angle has applied for more than 1367 patents, including 159 domestic valid invention patents, 106 foreign invention patents, 180 utility models, and 58 appearance designs, covering a wide technical domain of yeast and relevant products.

We have applied for 170 international patents across more than 40 nations and regions such as the USA, Brazil, European Union, Canada, South Africa, Australia, South Korea, and Japan via PCT and the Paris Convention.



Empowering quality with digital intelligence

Digital intelligence-based "4+6 quality management model" has been used in synergy with Six Sigma quality management to make data application more accurate.

We enhanced the integration of IT applications with industrialization according to relevant standards and passed the national assessment.

Thanks to our efforts to build a private 5G network, we were included in the first batch of plants to fully access the 5G network in Hubei Province and recognized by the Ministry of Industry and Information Technology of the People's Republic of China as a model intelligent manufacturer in 2023.

We launched a new Supplier Relationship Management (SRM) System to record all the electronic evidence throughout the relevant in-house purchase process.



To implement projects of data analysis and visualization, we beefed up the information technology caliber for the analysis & management platforms across 11 business arenas, including finance, production, security, logistics, environmental production, and equipment.

We built a digital operation platform for the online management of personnel, clientele, payments, and orders to ensure smooth online operation interactions.

Angle was honored by the Ministry of Industry and Information Technology of the People's Republic of China as a 2022 National Excellent Intelligent Manufacturing Scene.

About Responsibilities



**Fair and
reliable partnership**



More transparent management mode

We made the links from Invitation to Bid & Purchase, Engineering, Sales, HR, Finance, and Administration more coherent, streamlined, and transparent.



A more developed distributor network

We have a big team of suppliers with stable and conforming raw materials in long-term coloration and development backed by mutual trust and support.



Better SRM control

We have enhanced the control over Invitation to Bid & Purchase with a new SRM system to secure the efficiency and traceability of purchase.

Social commitment to green development

Delimiting ecological red lines with responsibilities

- We have formulated an environmental self-monitoring program to fully supervise the discharge of wastewater, exhaust gas, and noise by a three-in-one approach of manual test + delegated monitoring + online monitoring.
- In 2023, all our pollutant discharge indicators proved to be up to standards in environmental monitoring by relevant supervising authorities.
- In a gesture to underline the environmental protection for overseas plants, we made sure that in 2023, all the relevant environmental protection facilities in our foreign sites were running well with all the pollutant discharge conforming to local environmental standards.
- Angle, recognized by the China Biotech Fermentation Industry Association as a national model of energy conservation and environment protection in the biological fermentation industry, played an active role in preparing and revising the Discharge Standard of Water Pollutants for Yeast Industry and drafting the Assessment Indicator System for the Cleaner Production of Fermentation Industry (Yeast).
- Angle was recognized as a national Green Plant by the Ministry of Industry and Information Technology of the People's Republic of China, marking our conformity to environmental-friendly protection standards. We also passed ISO14001 Environment Management System Certification.
- In our commitment to reducing carbon footprint, we performed the second round of footprint survey on F80, a foreign trade-oriented yeast extract product.



Social commitment to green development



Make our world greener with technology.

- We have redoubled our input in environmental protection by upgrading existing environmental treatment facilities. We have promoted energy-efficient equipment and techniques to recover residual heat and pressure, reduce energy consumption in our plants, and cut back carbon emissions.
- In 2023, we furthered cleaner production with continued falling indicators of energy consumption and pollutant discharge. The comprehensive energy consumption for unit products was reduced by 0.9% year on year. By far, we have brought down carbon emissions by 190,100 tons.
- We promoted the purification biological technology of waste gas bacterial sludge to boost the pollutant purification efficiency to 95%, thus reducing the chemical industrial ingredient consumption in the waste gas treatment system for a low-carbon, efficient governance.
- In 2023, our Environmental Technology Center was renamed as Green Materials and Environmental Technology Center, marking our foray into the research in Bio-based Material techniques, green material synthesis, new technologies of environmental governance, and material application.

About You & Me



About staff development

Safety

We attach prominence to life and safety.

- A project safety management mechanism has been built to accelerate intrinsic safety improvement.
- Efforts have been targeted at the key points and challenges of work safety management to identify the major risks of personnel security.
- A group-based emergency command platform has been built with a security visualization platform and a telecommunication system.
- In this year, we provided 1,623 security training sessions for 104,481 people and 609 emergency drills for 22,313 people.



Respect



We respect the freedom and dignity of every employee.

- We have created company policies, production procedures, and workplace environments according to industrial standards in line with labor conditions, health & safety, environmental security, and ethics with uninterrupted efforts to upgrade work conditions.
- We believe that as an employer, we can provide space for the employee's personal development while our employees would make Angle more competitive in turn". Upholding such a mutual benefit philosophy, we encourage employees to think big and aim high, growing together with Angle.
- We keep improving our career hierarchy system to establish a scientific career ladder for employees to give full play of their potential.
- We have launched a special incentive scheme for creators of major technical outbreaks to create an inspiring workplace where the R&D spirit is advocated and valued.
- We keep upgrading our employee training system by providing online study and live-streaming lectures with more than 90% of training goals fulfilled.
- In 2023, Angle had 11,897 employees, among which women accounted for 32.7%. We had 47 women working in middle management, an epitome of women's significant role in Angle's development.
- In addition to such long-term incentive schemes as restricted stock and enterprise annuities, we have provided group-chased housing for talents to attract competitive employees with a pleasant home environment.
- Generous about enterprise annuities, we paid nearly RMB 50 million annually. We have established a "home for expatriate workers" to solve their concerns of housing. We also established a team of matchmakers to help our workers find their love. In addition, we launched the Employee Assistance Program (EAP) to relieve people's psychological pressure. We also established a care and assistance system to bail out sick employees with a maximum allowance of RMB 200,000.
- Angle was honored as a National Model Employer for Harmonious Labor Relations

Relevant stakeholders



We attach prominence to investor relations and strive to protect the legal interests of our shareholders and creditors.

- We fulfill our obligations of information disclosure promptly, accurately, and truthfully to protect the shareholders' rights to know.
- We interact with global investors smoothly and constructively. In 2023, we attended more than 30 strategic review board events organized by securities traders, 100+ investor exchange meetings, and 80+ online teleconferences. Besides, we also worked with Huatai Securities to stage three online streaming events.
- With consistent returns to investors high on our agenda, we strive to protect investors' rights to earnings and fully consider creditors' legal interests while making major business decisions.
- Since going public in 2000, Angle has been providing dividends in cash each year. By far, we have made 23 dividend payments, namely, RMB 3.055 billion in total, exceeding the amount we financed from the capital market.
- In 2023, we were honored by QUANJING.com as the Outstanding IR Team, the Best Interactor for Medium and Small Investors, and the Best New Medium Operator. We were also recognized as one of the 2022 Top 100 Chinese Listed Companies with High Health Index,

Caring for others in need

We care for each group of people in need and fulfill our due responsibilities.

- We supported the construction of Tibet as a Hubei business by investing in the construction of intelligent production facilities for probiotics products in the Tibet Plateau.
- We donated RMB 900,000 to the flood-stricken Yechanping Village, Renheping Town, Wufeng Tujia Autonomous County to battle the massive flood.
- We provided an after-class program for village children in the summer holiday and hosted exciting sports meetings for villagers.
- At Angle, 2200 employees volunteered at the forefront to care for lone senior citizens and play their parts in blood donation.



- Angle Yeast (Cocodala) Co., Ltd. provided a condolence payment of RMB 150,000 for a special professional group in Yining City.
- Our branch in Russia donated 600,000 rubles to Lipetsk Oblast Social and Economic Development Fund.
- Our subsidiaries, Hongyu and Xiwang Food donated RMB 100,000 respectively to Yiling District Education Foundation to enhance educational development.
- In January 2023, Angle passed the EcoVadis social responsibility performance assessment.
- We launched the Angle Scholarship for China Three Gorges University.

About the future

A business could not grow properly without fulfilling its social responsibilities. Angle will follow its mission to develop yeast biotechnology and innovate for a healthy life and a win-win philosophy to care for our shareholders, creditors, customers, suppliers, employees, the environment, and society throughout our production and operation to provide healthy, quality products and services as always, thus creating more value for our customers. We shoulder our responsibilities and reward society by contributing to the public benefit with a grateful heart.





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