

Yihai Kerry Arawana Holdings Co., Ltd. 2050 Net-Zero Targets and Roadmap



CONTENTS

01

PAGE 02
Message from the Chairman

04

PAGE 09
Baseline Year Emissions

02

PAGE 04
2050 Net-Zero Targets and Pathways

05

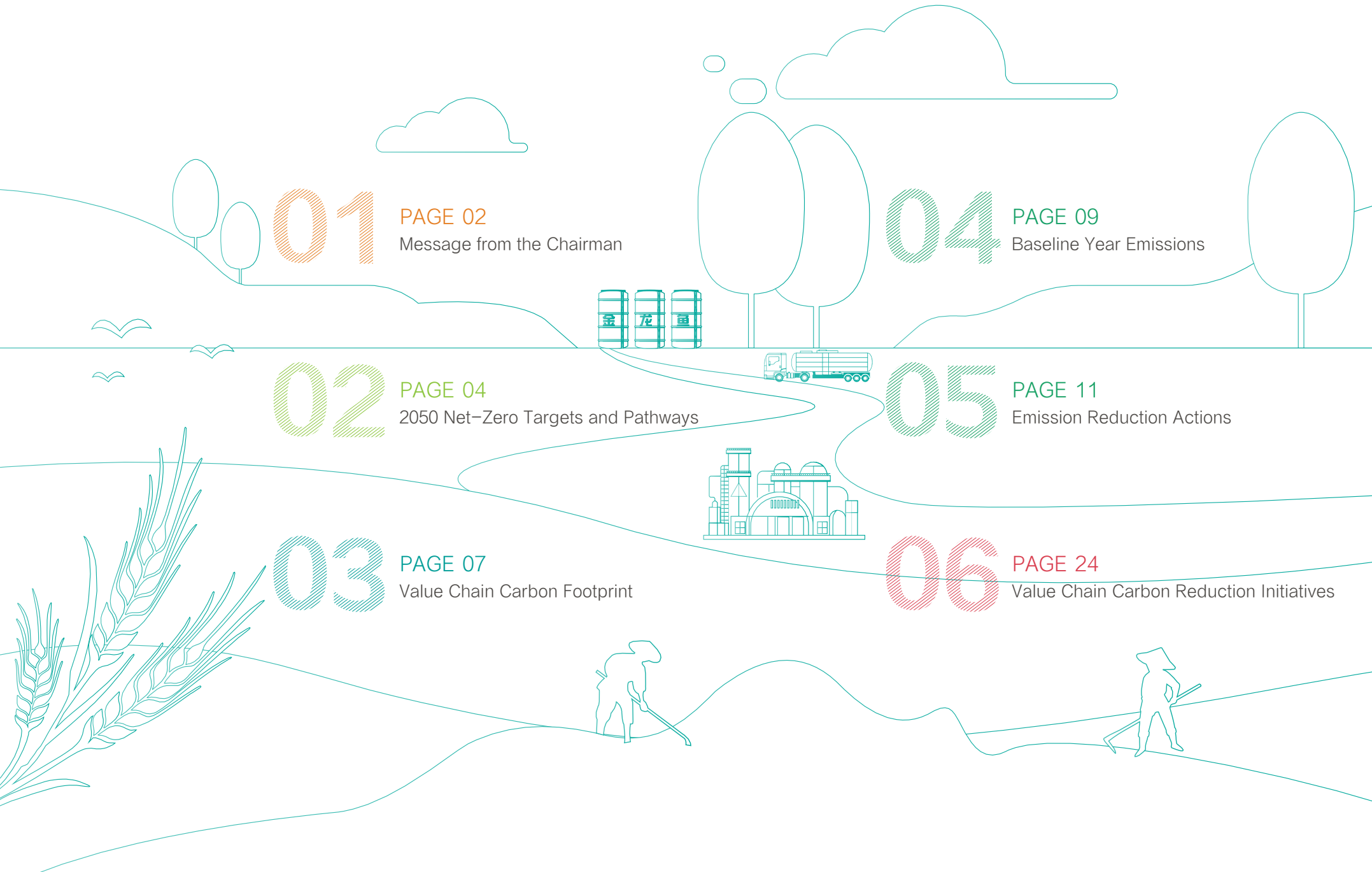
PAGE 11
Emission Reduction Actions

03

PAGE 07
Value Chain Carbon Footprint

06

PAGE 24
Value Chain Carbon Reduction Initiatives



01

Message from the Chairman





Message from the Chairman

In the context of global cooperation to tackle climate change, reducing greenhouse gas emissions has become a consensus within the international community. The grain and oil food industry is not only a crucial pillar of the national economy but also one of the sources of GHG emissions. Therefore, promoting the low-carbon transformation and upgrading of the grain and oil food industry to achieve net-zero emissions is important to driving the green development of the entire industry and the global economy. As a leading enterprise in the industry, we deeply recognize the importance and urgency of setting net-zero emissions targets. After thorough research and assessment, we have officially set and launched our 2050 Net-Zero Emissions Goal and Roadmap, showcasing our commitment and determination to achieve net-zero emissions to society.

We are fully aware that achieving net-zero emissions is a long-term and challenging task that requires the collaborative efforts of all sectors of society. Therefore, we are committed to building a green and low-carbon full-value chain system. While reducing our own GHG emissions through green and low-carbon operations, we also integrate sustainable concepts throughout the value chain—both upstream and downstream of our business. By doing so, we aim to drive our partners to reduce GHG emissions together, ultimately achieving net-zero emissions across the entire value chain.

We believe that the implementation of the Net-zero Action Plan will not only lay a solid foundation for the company's sustainable development but also provide valuable insights and serve as a model for the green and low-carbon transformation of the grain and oil food industry. We look forward to collaborating with partners both within and outside the industry, working together to contribute our wisdom and strength to achieving global climate goals.

Yihai Kerry Arawana Holdings Co., Ltd.

Chairman, Kuok Khoon Hong

02

2050 Net-Zero Targets and Pathways



Yihai Kerry Arawana 2050 Net-Zero Targets and Roadmap

2022 (Baseline Year)



Establishing a Solid Foundation and Advancing Green Practices

Anchoring the Baseline Year and Steadily Advancing Greenhouse Gas Reduction Actions through 8 Key Areas:

- Optimizing Energy Structure
- Improving Energy Efficiency
- Reducing Fugitive Emissions
- Practicing Low-Carbon Operations
- Achieving Carbon Neutrality Progressively
- Strengthening Supplier Management
- Promoting Low-Carbon Logistics
- Disseminating Low-Carbon Concepts

By the end of 2025, reduce packaging material usage by 15,000 tons, and strive to achieve an annual recyclable packaging rate of over 90%.

2030



Progressing steadily and Accelerating Emission Reductions

Following the established emission reduction roadmaps, practicing low-carbon operations, and comprehensively advancing greenhouse gas reductions to accelerate sustainable production and operations.

- Achieve an installed capacity of 200 MWp for solar photovoltaic projects by 2030.
- Significantly improve the energy efficiency of compressed air stations.
- Continuously increase the proportion of biomass replacing coal.
- Further enhance the overall utilization efficiency of waste heat and pressure.
- Actively explore the development and use of wind energy.
- Gradually expand the application of zero-carbon or carbon-neutral fuels.

2040



Full-Scale Advancement Towards Net-Zero

For greenhouse gas emissions that cannot be fully eliminated by existing reduction technologies, various high-quality carbon sinks will be utilized for compensation and offset, to ensure that the net-zero emissions target is fully achieved.

- Achieve 100% clean electricity usage by 2050.
- Reach 100% biomass substitution for coal by 2050.
- Maximize the recovery and utilization of biogas.
- Completely eliminate direct biogas emissions.

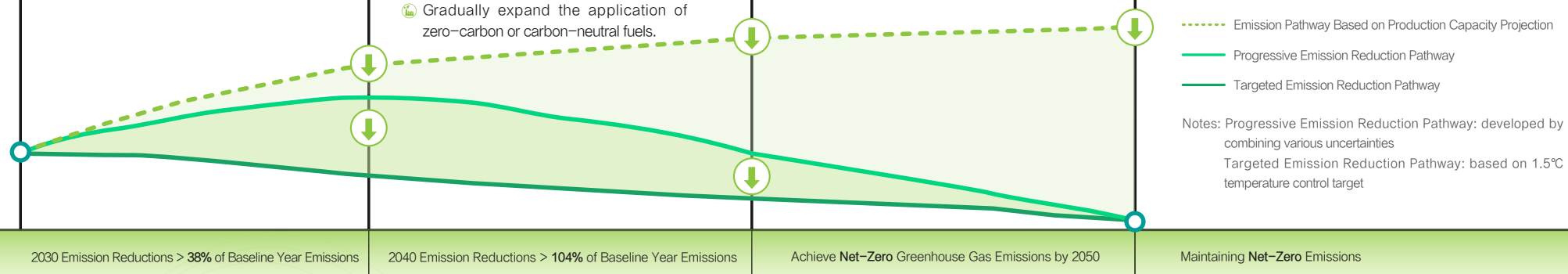
2050



Ongoing Emission Reductions, Paving the Way for a Net-Zero Future

We remain committed to adopting and leveraging new emission reduction technologies while adhering to sustainable operations to further reduce our greenhouse gas emissions.

At the same time, we actively embed sustainability principles throughout the value chain—both upstream and downstream—to drive collective emission reductions with our partners and accelerate the transition toward a net-zero future.



Scope 3:

By 2029, engage with 67% of our suppliers (covering purchased goods and services, upstream transportation, and distribution) to set carbon reduction targets. By 2050, achieve a 90% absolute reduction in Scope 3 greenhouse gas emissions.

Net-Zero Boundaries:

The net-zero boundary encompasses Yihai Kerry Arawana's own operations in Scope 1 and Scope 2, as well as major Scope 3 emissions (purchased products and services, upstream transportation, and distribution).

2050 Net-Zero Pathways

In pursuit of 2050 Net-Zero targets, we are committed to building a green and low-carbon full value chain system.

Efforts will be directed toward eight key areas "Optimizing Energy Structure", "Improving Energy Efficiency", "Reducing Fugitive Emissions", "Practicing Low-Carbon Operations", "Achieving Carbon Neutrality Progressively", "Strengthening Supplier Management", "Promoting Low-Carbon Logistics" and "Disseminating Low-Carbon Concepts" —to implement net-zero actions across our operations and the entire value chain.



03

Value Chain Carbon Footprint



Value Chain Carbon Footprint

The value chain of the grain and oil food industry is highly complex, with upstream and downstream participants spanning nearly the entire supply chain and closely interconnected with agriculture, manufacturing, and consumer goods markets.

We are committed to building a green and low-carbon value chain system, examining the carbon footprint impact of products across their entire lifecycle, and facilitating the achievement of the 2050 net-zero targets while actively addressing and mitigating the impacts of climate change.



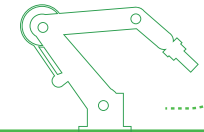
Raw Material Production and Transport



Raw Material Production and Procurement

Raw Material Transportation

This mainly includes GHG emissions from the production, procurement, and transportation of raw materials such as grain and oil food ingredients, packaging, and additives.



Product Manufacturing and Processing



Production Operations

Office Commuting

This mainly includes GHG emissions from fossil fuel consumption and process emissions during production operations and office commuting.



Product Transport and Distribution

Storage and Transportation

Product Distribution

This mainly includes GHG emissions from fossil fuel consumption during the storage, transportation, and distribution of products.



Product Disposal and Recycling

Product Disposal and Recycling

This mainly includes GHG emissions from the use, disposal, and recycling processes of the products.



04

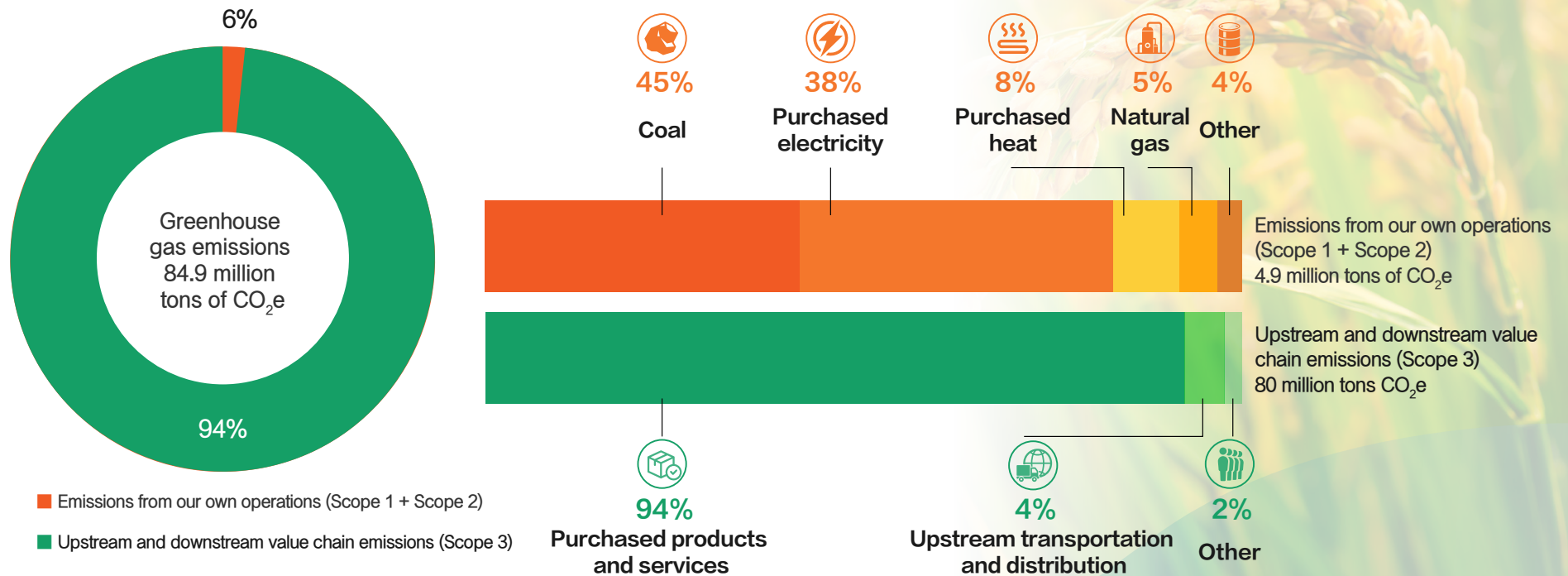
Baseline Year Emissions



Baseline Year GHG Emissions

Companies' GHG emissions stem from both direct emissions from its own operations and indirect emissions from the upstream and downstream value chain. GHG emissions from our own operations are composed of direct emissions (Scope 1) and indirect emissions (Scope 2). The direct emissions (Scope 1) primarily come from coal and natural gas, while the indirect emissions (Scope 2) mainly result from purchased electricity and purchased heat.

In addition, we actively engage in identifying and calculating the GHG emissions categories within the upstream and downstream value chain (Scope 3). The main categories of Scope 3 emissions are “Purchased Products and Services” and “Upstream Transportation and Distribution.” Reducing emissions in these two categories is a key focus in the development of our value chain emissions management and action plans.



Note: "Other" in Scope 1 includes diesel, biogas, gasoline, refrigerants, carbonates, carbon dioxide, coke, carbon dioxide fire extinguishers, liquefied petroleum gas. Scope 3 "Other" includes fuel and energy related activities, downstream transportation and distribution, capital goods, employee commuting, waste generated from operations, end-of-life disposal of products sold, business travel, investments.

05

Emission Reduction Actions



Raw Material Production and Transport

Raw Material Production and Transport Product Manufacturing and Processing Product Transportation and Distribution Product Disposal and Recycling

Within the categories of GHG emissions from the upstream and downstream value chain (Scope 3), the category of “Purchased Products and Services” accounts for 94%, covering raw materials such as grain and oil ingredients, packaging, and auxiliary materials.

We are taking emission reduction actions focusing on "Raw Material Production and Procurement" and "Raw Material Transportation." We will strengthen cooperation with key raw material suppliers and intensify efforts to reduce greenhouse gas emissions. Suppliers with significant emissions will be included in the emission reduction plan, and the scope of collaboration for emissions reduction will be expanded. Together, we will explore strategies for reducing greenhouse gas emissions.

Raw Material Production and Procurement

Strengthening Supplier Management

We plan to implement carbon emissions management for suppliers across the upstream and downstream value chain:

New Suppliers	During the entry process, we will focus on evaluating whether they have GHG emissions management mechanisms aligned with the company's 2050 net-zero targets.	Existing Suppliers	We will require suppliers to regularly provide annual GHG emissions inventories, specifying their emission sources, total emissions, and emission intensity.
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Additionally, we encourage suppliers to set greenhouse gas reduction targets and provide carbon footprint data for their products and services.

Advancing Sustainable Agricultural Practices

We will continue to carry out contract farming, with professional agricultural technicians guiding farmers in scientific farming practices to reduce resource consumption and minimize the impact of chemical fertilizer use on soil, water, local ecosystems, and GHG emissions. We will enhance supply chain transparency by introducing advanced tracking technologies to enable full traceability of our products from farm to fork.

Case

Rice Field Butler, Creating Green Ecological Rice

Based on local characteristics, the Company has introduced a natural rice ecosystem and adopted ecological planting methods, such as "duck-rice symbiosis", "shrimp-rice symbiosis", and "crab-rice symbiosis" in some of our rice planting bases. This not only produces a series of high-quality products, such as Arawana Duck Field Previous Valley Wuchang Rice, Arawana Crab-Rice Coexistence Panjin Rice, Arawana Shrimp Sweet Rice, etc., but also meets consumer taste needs and increases farmers' income.

In addition, while ensuring that rice production does not decrease, the use of chemical fertilizers and pesticides has been reduced, diminishing agricultural environmental pollution, improving the environment, and achieving a positive development of the agricultural ecosystem.



Practicing Sustainable Procurement

We adhere to the principles of sustainable procurement, and strictly complies with the Sustainable Procurement Policy and the Supplier Code of Conduct in the procurement process. We are committed to preferring suppliers who commit to NDPE (No Deforestation, No Peat, No Exploitation) (NDPE) principles, reducing the risk of deforestation. We strengthen the traceability management of raw materials and continually increase the proportion of sustainably certified materials, such as those with RSPO, SSAP, and other certifications.

Case

Signing the “Sustainable Palm Oil Procurement Strategic Agreement”

In November 2024, during the Roundtable on Sustainable Palm Oil (RSPO) 2024 Annual Global Roundtable (RT2024), Yihai Kerry and Yili Group signed the “Sustainable Palm Oil Procurement Strategic Agreement.” Both parties committed to promoting sustainable palm oil trade and procurement, represented by RSPO certification.

Prior to this, the two companies collaborated on sustainable palm oil best procurement practices and signed a transaction order for 750 tons of RSPO-IP certified palm oil, marking the first purchase of RSPO-IP certified sustainable palm oil in China.

Yihai Kerry’s Shanghai Kerry Food Industries Co., Ltd., as the supplier in this sustainable procurement case, successfully passed the RSPO audit and became the first company in China to receive RSPO-IP certification (the highest level) for sustainable palm oil.



Developing and Applying Digital Carbon Management Tools

For supplier management, we plan to introduce digital carbon management tools that integrate the “product carbon footprint” data across the upstream and downstream value chain. This will enable the visualization and management of product GHG emissions, providing data support for procuring low-carbon raw and auxiliary materials and conducting product research and development.

Raw Material Transportation

Promoting Low-Carbon Logistics

During the raw material transportation phase, we will actively promote low-carbon logistics and drive low-carbon transformation of logistics methods to reduce the environmental impact of raw materials.

Driving Low-Carbon Transformation of Logistics Methods

To reduce greenhouse gas emissions from upstream transportation and distribution, we encourage and urge our suppliers to use low-carbon or carbon-free fuels. At the same time, we regularly assess and optimize shipping routes to reduce travel distances and time, thereby lowering fuel consumption and minimizing greenhouse gas emissions.

International Transportation

Specifically, during maritime transport, we will collaborate with suppliers to actively explore the use of liquefied natural gas (LNG), biofuels, and other sustainable fuels as alternatives to traditional fossil fuels.

Domestic Transportation

We advocate for suppliers to actively utilize new energy vehicles for transportation to further reduce greenhouse gas emissions.



Product Manufacturing and Processing

Raw Material Production and Transport **Product Manufacturing and Processing** Product Transportation and Distribution Product Disposal and Recycling

Production Operations

Optimizing Energy Structure

We continuously increase the proportion of renewable energy to replace traditional fossil fuels and reduce greenhouse gas emissions. Our efforts focus on three key areas to optimize the energy structure: “Achieve 100% biomass substitution for coal gradually,” “Continue advancing the development of renewable energy sources such as solar and wind power,” and “Increase the proportion of clean electricity usage.” In addition, we are actively exploring efficient and clean energy utilization methods, such as wind energy and integrated smart energy solutions (generation, grid, load, and storage).

2030 Target



Achieve an installed capacity of 200MWp for solar photovoltaic projects.

2050 Target



Achieve 100% clean electricity usage and 100% biomass substitution for coal.

Achieving 100% Biomass Substitution for Coal Gradually

Case Rice Husk-Based Biomass as Coal Substitution

The Company actively utilizes biomass, primarily rice husk, as a substitute for coal in the boilers to generate steam and electricity for production and operations.

In 2023, the Company utilized a total of 354 thousand tons of biomass energy, with 335 thousand tons being rice husk. This is equivalent to replacing 161.2 thousand tons of fossil fuels and reducing GHG emissions by 447.5 thousand tons of CO₂e. Additionally, biomass (rice husk) boiler projects are currently under construction in multiple locations.



Continuing Advancing the Development of Renewable Energy Sources such as Solar and Wind Power

Case Photovoltaic Power Generation

The Company has introduced cooperative institutions to actively install solar photovoltaic power generation facilities on the roofs of its factories, aiming at replacing traditional energy with renewable energy, reducing energy consumption and GHG emissions.

In 2024, the total installed capacity of PV power generation projects has surpassed 100 MWp.



Increasing the Proportion of Clean Electricity Usage

Apart from constructing PV power projects on-site, the Company proactively sources and utilizes green electricity and nuclear power through various channels. In 2023, the company procured and utilized a total of 360,036 MWh of clean electricity, representing a 15% increase from 2022, thereby potentially reducing 205 thousand tons of CO₂e emissions.

Taking 2023 as an example



Procurement and use of clean electricity **360,036MWh**



15% increase from 2022

Reduce greenhouse gas emissions by approximately **205,000** tons of CO₂e



Improving Energy Efficiency

To drive continuous improvements in energy efficiency, the company has developed a comprehensive energy equipment renewal strategy, focused on upgrading and modernizing existing systems while implementing targeted efficiency enhancement initiatives.

Further Improving Energy Efficiency

Eliminating Energy Loss from Air and Gas Leaks

Replacing Outdated Equipment

Upgrading Facilities

Maximizing the Potential of Waste Energy

Eliminating Energy Loss from Air and Gas Leaks

Case

Eliminating Energy Loss from Air and Gas Leaks

A systematic compressed air leakage detection program has been deployed to identify and address inefficiencies in compressed air distribution networks. Using specialized detection equipment, leakage points are pinpointed and rectified, thereby reducing energy waste and associated GHG emissions.

In 2024, approximately 6,600 leakage points were identified, preventing the loss of 35 million cubic meters of natural gas and achieving an estimated 2,500-ton reduction in CO₂e emissions.



Detection of leaks

6,600

Reduced leakage

35 million m³

Reduction of greenhouse gas emissions

2,500 tons CO₂e

Replacing Outdated Equipment

Case

Application of Magnetic Levitation Chiller

To enhance operational efficiency and minimize energy consumption, the company is actively promoting the adoption of magnetic levitation chillers as a replacement for conventional cooling systems. Yihai (Guanghan) Oils, Grains & Foodstuffs Co., Ltd has replaced the original, outdated, inefficient, high-energy-consuming, and frequently malfunctioning screw chillers with more efficient magnetic levitation chillers to improve energy efficiency, reduce electricity consumption, and decrease carbon emissions.

This move not only annually reduces electricity consumption by 39% but also lowers process steam consumption by 5%, while simultaneously reducing GHG emissions by 188 tons.



Reduced power consumption

39%

Reduced steam consumption

5%

Reduction of greenhouse gas emissions

188 tons of CO₂e

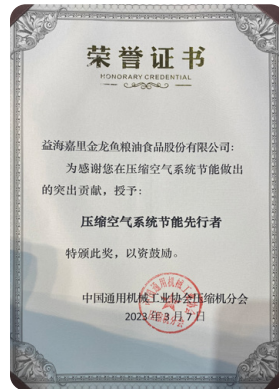
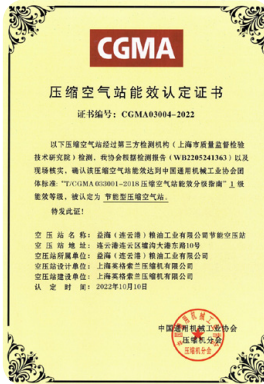


Upgrading Facilities

Case Compressed Air Station Energy Efficiency Enhancement

To improve operational efficiency, Yihai (Lianyungang) Grain and Oil Industry Co., Ltd. launched a compressed air station energy optimization project, addressing inefficiencies caused by outdated and high-energy-consuming equipment. The introduction of next-generation high-efficiency air compressors and post-treatment systems enabled a 25% reduction in energy consumption, cutting CO₂e emissions by 2,572 tons annually.

The project was independently verified by third-party experts, confirming that the upgraded compressed air station meets China's highest energy efficiency rating (Level 1) for such systems.



Reduction of energy consumption more than **25%**
Reduction of greenhouse gas emissions: **2,572** tons of CO₂e

Maximizing the Potential of Waste Energy

Case Boiler Flue Gas Waste Heat Utilization

In response to the current situation of insufficient utilization of flue gas waste heat from boilers, Wilmar HighPolymer Material (Lianyungang) Co., Ltd carried out the boiler energy-saving renovation and deep utilization of flue gas waste heat project.

Sending the waste gas from the production process to the boiler for blending can reduce environmental pollution while using the heat of the waste gas to reduce the use of boiler fuel. And at the same time, flue gas waste heat can be recovered and utilized by setting up a boiler tail cooler and other devices. The project is expected to save 8,714 tons of standard coal and result in an annual reduction of 25,252 tons of CO₂e emissions.



Energy saving: **8,714** tons of standard coal
Reduction of greenhouse gas emissions: **25,252** tons of CO₂e

Practicing Low-Carbon Operations

We are committed to developing low-carbon production technologies, continuously optimizing production processes, and implementing the "Reduce, Reuse, Recycle" (3R) approach in manufacturing. By promoting circular economy models, we aim to enhance the comprehensive utilization of production resources and minimize GHG emissions. Moving forward, we will further expand the application of circular economy principles and explore industry-specific low-carbon circular production models tailored to the grain and oil food sector.

Expanding the Scope of the Circular Economy

Yihai Kerry has continued to strengthen our exploration of new circular economy industrial models, such as Integrated Rice Manufacturing Model, wheat deep processing, soybean deep processing, corn deep processing, palm oil deep processing, and green processing and utilization of oil by-products.

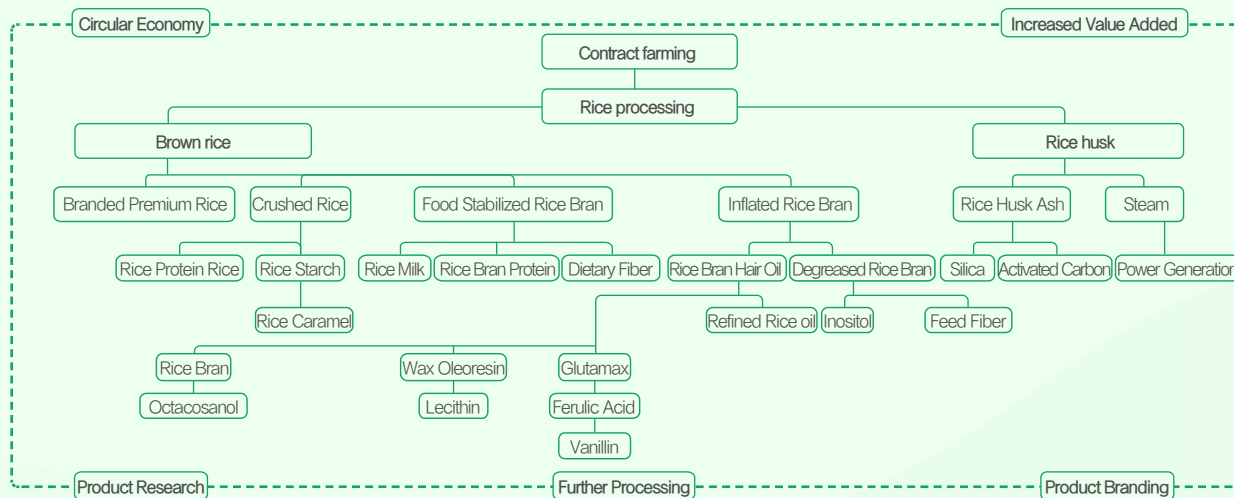
Through integrated resource utilization and value-added processing, we facilitate the transformation of traditional agriculture from extensive cultivation to precision farming, from primary processing to advanced refining, and from resource-intensive operations to high-efficiency, sustainable practices. This transition enhances industrial positioning, increases value creation, extends the industrial supply chain, and significantly reduces fossil fuel consumption and GHG emissions, contributing to the advancement of green and low-carbon development.

Case

Implementing the Integrated Rice Manufacturing Model of "Fully Eaten and Utilized"

In the traditional extensive industrial model, rice processing is normally only for obtaining rice. The Company actively explores the Integrated Rice Manufacturing Model, transforming rice husks, rice bran and other by-products, generated from rice processing, into high value-added products such as rice bran oil, rice bran wax, and precipitated silica. This not only improves resource utilization efficiency, but also effectively reduces environmental pollution. The extension of the rice processing industry chain and the added value by-products also profit the rice product R&D and innovation, providing consumers with high-quality and affordable rice, and achieving economic, ecological, and social benefits.

Yihai Kerry Rice Circular Economy Model



Developing and applying Low-Carbon Technologies

Case Rice Husk Pyrolysis Circular System for Heat & Husk Charcoal

The Company has innovatively launched a Rice Husk Pyrolysis Circular System for Heat & Husk Charcoal, which gasifies rice husks to form biomass gas for power and heat supply in the production and operation process, achieving carbon heat cogeneration and greatly improving the added value of comprehensive utilization of rice husk resources.

The rice husk charcoal produced after rice husk gasification can not only be used as a renewable and green heat-insulation covering agent, but also as a raw material for producing high-end and environmentally friendly precipitated silica and activated carbon products. The products are mainly used in automotive tires, water quality purification, etc., and will continue to be applied in downstream industries.

Rice husk charcoal cogeneration does not generate solid waste, but truly achieving a cross-border win-win situation for the rice processing industry and downstream industries.

According to calculations, if the 40 million tons of rice husks produced by the annual production of 200 million tons of rice in China are all used for combustion, it can achieve energy savings of 19 million TCE and reduce carbon dioxide emissions by about 53 million tons (calculated based on 5000 kcal/kg of raw coal).



Reduction of fossil fuels: **19** million tons of standard coal

Reduction of greenhouse gas emissions: about **53** million tons of CO₂e

Reducing Fugitive Emissions

We will gradually replace high-GWP refrigerants in industrial refrigeration systems, assess the necessity of fire extinguishers in various scenarios, and minimize the use and replenishment of CO₂-based fire extinguishers. Simultaneously, we continue to improve and promote the biogas recovery and utilization system to reduce fossil fuel consumption while preventing the environmental impact of fugitive biogas emissions.



Gradually replacing with low-GWP refrigerants



Decreasing the use of CO₂-based fire extinguishers



Maximizing the recovery and utilization of biogas

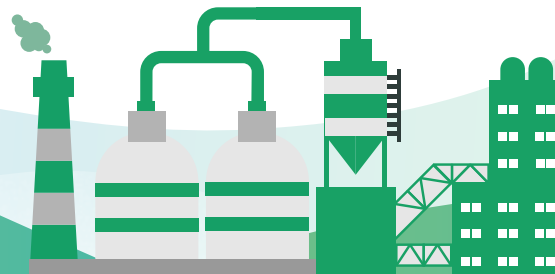
Case Biogas Recovery and Utilization System

In alignment with the principles of "biogas collection, carbon reduction through combustion, and energy utilization," the company has developed a comprehensive biogas recovery and utilization system that is continuously optimized and expanded.

The recovery system is designed to fully capture and utilize biogas generated during the wastewater treatment process in production facilities, effectively mitigating the greenhouse gas impact associated with direct methane emissions.

Priority is given to integrating recovered biogas into boiler operations, where it is co-fired to eliminate direct biogas emissions while serving as a partial substitute for boiler fuels. For any excess biogas that cannot be utilized or during equipment maintenance, controlled flaring is employed to prevent unregulated biogas release.

As of the end of 2023, a total of 11.855 million cubic meters of biogas has been recovered and utilized, replacing fossil energy consumption, such as coal and natural gas, by 9,729.5 tons of coal equivalent (TCE), and reducing GHG emissions by 183 thousand tons of CO₂e.



Achieving Carbon Neutrality Progressively

The company is committed to achieving carbon neutrality by systematically expanding carbon footprint verification across core products and obtaining carbon footprint certifications to ensure a continuous supply of environmentally friendly, low-carbon products. In parallel, a tailored approach is adopted to explore feasible pathways for carbon-neutral operations at manufacturing facilities, steadily advancing the construction of carbon-neutral factories. Through these initiatives, the company aims to reduce emissions across the entire production process while fostering industry-wide collaboration to drive the transition toward a low-carbon and sustainable future.

Steadily Advancing the Development of Carbon-Neutral Facilities

As of 2024, four company-operated factories—Kunming Food, Qinhuangdao Jinhai Special Oil, Shijiazhuang Buckwheat, and Shijiazhuang Food—have been successfully certified as carbon-neutral factories.

Case

Creating the First "Carbon Neutrality Factory" in the Domestic Grain and Oil Industry

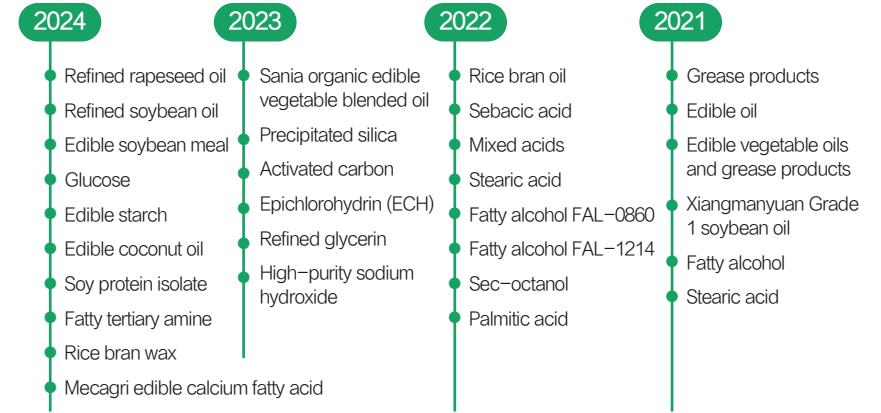
In 2022, the Company successfully built the first "carbon neutrality factory" in the domestic grain and oil industry, playing an essential role as a model to promote China's grain and oil industry to achieve the goal of "carbon peaking and carbon neutrality".

On top of minimizing its own GHG emissions through process optimization, package material reduction, photovoltaic power generation, and procurement of green power, Yihai Kerry (Kunming) Foodstuffs Industries Co., Ltd finally completed total carbon offsets through the Clean Development Mechanism (CDM) to achieve carbon neutrality.



Step by Step Expanding the Scope of Carbon Footprint Certification

As of 2024, carbon footprint verification has been completed for 30 key products.



Case

Zero Carbon Product – Organic Edible Vegetable Blended Oil

Sania
莎妮雅

Organic Edible Vegetable Blended Oil
(Containing 1,3-Dioleic Acid-2-Palmitic Acid Triglycerides)
Product Code: AROPO-09YL



The first "zero carbon" product certified by Qinhuangdao Jinhai Special Edible Oil Industry Co.

Office Commuting

Practicing Low-Carbon Operations

Implementing Green Office Practices and Low-Carbon Commuting

Equipment upgrade and renovation:

The lighting equipments in the parking lot of office building have been changed to automatic lighting, and energy-saving light tubes are used. All lighting systems in the building are LED energy-saving lamps.

Energy-saving habits:

Ensure that the air conditioning, lighting, projection equipment, and other power sources in the meeting room are turned off when the meeting is over or the meeting room is vacant.

Green Travel:

The Company has established travel policy that promotes green travel among employees, encouraging them to avoid air travel, but prefer economical high-speed trains and green energy vehicles.



Product Transportation and Distribution

Raw Material Production and Transport | Product Manufacturing and Processing | **Product Transportation and Distribution** | Product Disposal and Recycling

Storage and Transportation

Traditional logistics and storage operations are often associated with significant fossil fuel consumption, contributing to GHG emissions. Accelerating the transition to low-carbon logistics and storage solutions is a key strategy for reducing emissions in this phase of the value chain.

Drive the low-carbon transformation of logistics methods	Advancing the use of clean energy in storage and logistics
Optimizing transportation network Layout	Enhancing transportation efficiency
Developing and applying low-carbon storage technologies	Reducing the carbon footprint of products during storage and transportation

Driving the Low-Carbon Transformation of Logistics Methods

We are actively enhancing partnerships with logistics and transportation companies, encouraging and mandating suppliers to adopt clean energy transportation methods.

For urban vehicles, we continue to guide carriers in utilizing new energy vehicles through management policies and supplier onboarding procedures, thereby reducing GHG emissions. In addition, in alignment with national initiatives, we promote the "road-to-rail," "road-to-water," and intermodal rail-water transportation models, which significantly lower GHG emissions compared to conventional road transport.

Through the application of smart logistics technologies, we optimize cargo loading efficiency by continuously monitoring and adjusting loading conditions to ensure maximum capacity utilization. Additionally, we work closely with key carriers to develop intelligent dispatch solutions for bulk liquid transport and efficiently manage return shipments, thus enabling a more sustainable, closed-loop transportation system.

Optimizing Transportation Network Layout

We continuously enhance storage and logistics distribution in downstream operations by refining a multi-tier storage system, which includes central storages, regional distribution centers, and front-end storages. This structured approach improves urban distribution networks, enabling more efficient responses to varying regional and customer demands.

To further optimize logistics efficiency, we conduct regular assessments and adjustments of distribution center locations and capacities based on market dynamics. By strategically positioning storage facilities closer to major consumer markets, we minimize transportation distances, shorten delivery times, enhance operational efficiency, and reduce energy consumption.

Enhancing Transportation Network Layout	Establishing Logistics Hubs	Set up a logistics hub in Linyi as a central distribution center.
		Dispatch full truckloads to regional hubs based on sales forecasts.
		Utilize local logistics for final-mile delivery.
		Reduce costs, improve efficiency
	Urban Distribution Route Optimization	Optimize small-scale distribution.
		Collaborate with key logistics carriers to optimize delivery routes.
		Apply algorithm-based systems for efficient planning.
		Allocate vehicles rationally to maximize load efficiency.
		Enhance productivity and vehicle utilization.
		Shorten transport distances and cut logistics-related emissions.



Developing and Applying Low-carbon Storage Technologies

The company is committed to green grain storage, integrating energy-efficient storage solutions to enhance operational efficiency, minimize losses, and reduce GHG emissions.

Continuous innovation in energy-saving storage technologies, including intelligent temperature control systems and passive building design, further enhances sustainability and optimizes resource utilization.

Case Optimized Rice Storage Technology

By using green storage technology, thermal insulation and scientific temperature control processes and other technologies, we are able to protect the quality of rice storage and reduce storage energy consumption at the same time.

The Company has pioneered a multifunctional storage for "cooling/precipitation/ insecticide" in the industry, applying new technologies for green and fresh rice, which saves 30% of electricity compared to traditional storage. In thermal insulation and scientific temperature control processes, energy-saving of 1.8 million kW, leading to a 1,240-ton CO₂e reduction in GHG emissions.



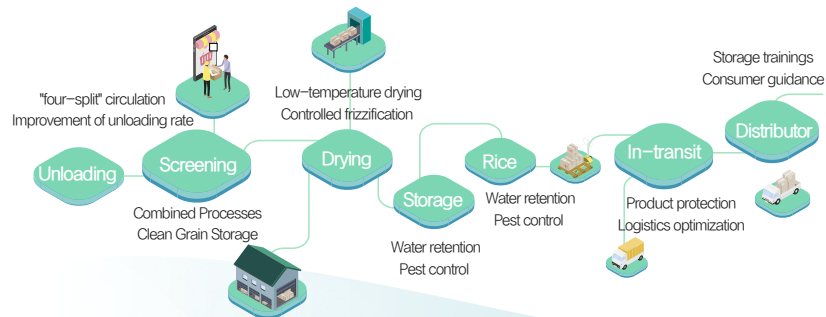
Compared with traditional storage power consumption: **30% savings**



Energy saving: **1.8 million kWh / 221 tons of standard coal**



Reduction of greenhouse gas emissions: **1,240 tons of CO₂e**



Product Distribution

Disseminating Low-Carbon Concepts

To promote sustainable consumption, targeted campaigns are organized to actively advocate for green and low-carbon concepts, fostering greater consumer awareness of environmental responsibility.

Engaging in Consumer Education and Guidance

Case Consumer Offline Experience

In alignment with China's Healthy China strategy, the Company prioritizes consumer education by promoting knowledge dissemination and raising public awareness of sustainable consumption.

To provide an immersive learning experience, Yihai Kerry Arawana has established health experience centers and transparent factories, offering consumers first-hand exposure to sustainable production practices. Through guided tours, real-time production line demonstrations, and interactive engagements, consumers gain deeper insights into the environmental attributes of products. This initiative not only strengthens public awareness of sustainable practices but also cultivates a culture of food conservation, helping to minimize food waste and reduce GHG emissions.



Product Disposal and Recycling

Raw Material Production and Transport Product Manufacturing and Processing Product Transportation and Distribution **Product Disposal and Recycling**

Disseminating Low-Carbon Concepts

To minimize environmental impact while ensuring food safety, we prioritize the use of durable and long-lasting packaging materials that allow for multiple uses, effectively reducing packaging consumption and associated GHG emissions. Additionally, recycled plastics are incorporated into non-food packaging, reducing dependency on virgin plastic materials and mitigating emissions throughout the product lifecycle.

Using Circular Packaging Materials

Case Promoting Reusable Packaging to Reduce Cardboard Consumption

The traditional packaging for injection-molded products in factories, primarily relying on cardboard boxes, to reduce disposable packaging consumption and minimize the risk of foreign object contamination. The Company has actively promoted the adoption of foldable reusable crates as an alternative to single-use cardboard boxes, which can lead to an annual reduction of over 8 million cardboard boxes and a decrease of more than 6,400 tons in paper material consumption.



Reduced the use of cardboard boxes by more than **8 million pieces**



Reduce paper material consumption by more than **6,400 tons**

Encouraging the Use of Recycled Plastics

Case Application of Recycled Plastics in Feed Packaging

In compliance with the requirements of national food safety-related laws and regulations, we add a certain percentage of recycled plastic to the feed packaging materials, so that the plastic can be recycled and reused during its life cycle.

The feedstuff packaging is estimated to promote the recycling of about 15,000 tons of plastic annually and reduce the consumption of 36,000 tons of standard coal upstream of the industry chain. The feed packaging won the Blue Planet Project Sustainable Packaging Competition-Recycling Utilization Awards for its outstanding recycled plastic recycling solution and action cases.

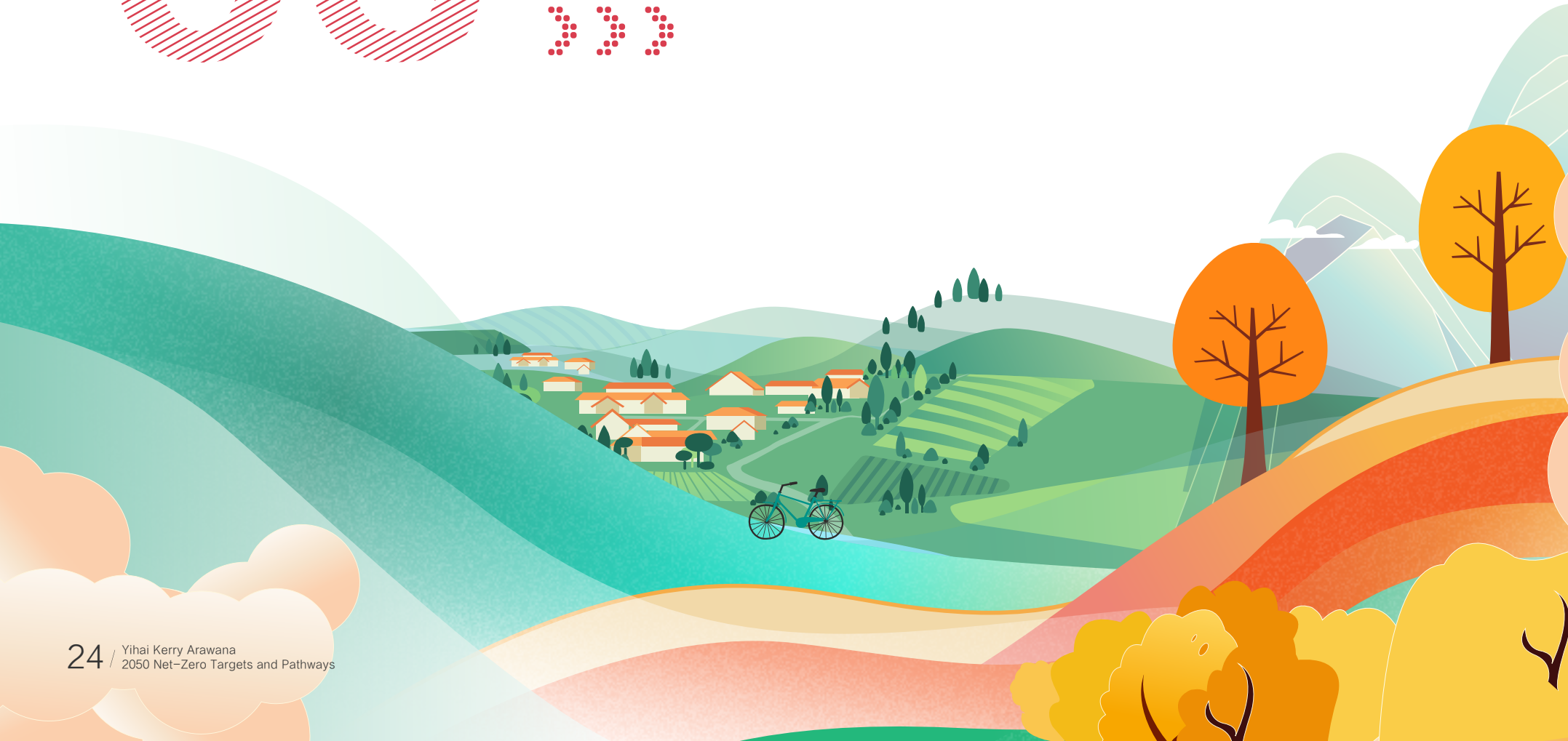


Feedstuffs packaging annual average push about **15,000 tons** of plastic recycling



06

Value Chain Carbon Reduction Initiatives



Value Chain Carbon Reduction Initiatives

As a leading enterprise in the grain and oil food industry with years of experience, we firmly believe that to achieve Yihai Kerry Arawana's vision of "building an ideal group," we must further integrate "green development" into our management and operations. We are committed to implementing the concept of sustainable development and actively responding to and practicing the nation's dual carbon strategy and green reforms.

We understand that achieving net-zero emissions is a challenge that cannot be accomplished alone. The road ahead is long and arduous. Therefore, we call on all our upstream and downstream value chain partners to join us in the pursuit of net-zero emissions. Based on the roadmap we have set, we will continue to upgrade our production processes and business models, and encourage all stakeholders to work with us in promoting the grain and oil food industry's transition to net-zero in China.

To achieve the Net-Zero emissions goal, we extend the following initiatives to our peers:

- Join hands to explore feasible pathways for achieving net-zero emissions in the grain and oil food industry. We will continuously enhance the awareness and action on climate change and greenhouse gas reduction within the industry, contributing to the development and improvement of industry standards.
- Use the net-zero emissions target as an innovative driving force for both our operations and industry collaboration. We will explore pathways to sustainable agriculture, promote low-carbon logistics, innovate circular economy models, optimize energy structures, and minimize GHG emissions to the greatest extent possible.
- Continuously develop low-carbon/zero-carbon products and services to enhance consumer awareness of low-carbon living. We aim to stimulate the potential for low-carbon consumption and actively guide consumers to adopt and practice low-carbon consumption concepts and behaviors.

Under the leadership of our Net-Zero targets, we will continue to deeply implement the development concept of "more environmentally friendly, lower carbon, and sustainable." Through products, services, technology, and supply chains, we will empower our value chain partners and jointly create a green, low-carbon ecosystem. Together, we will advance toward zero-carbon and win a sustainable future.

Note: All data in this report comes from Yihai Kerry Arawana's survey.



Yihai Kerry Arawana

2050 Net-Zero Targets and Roadmap

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