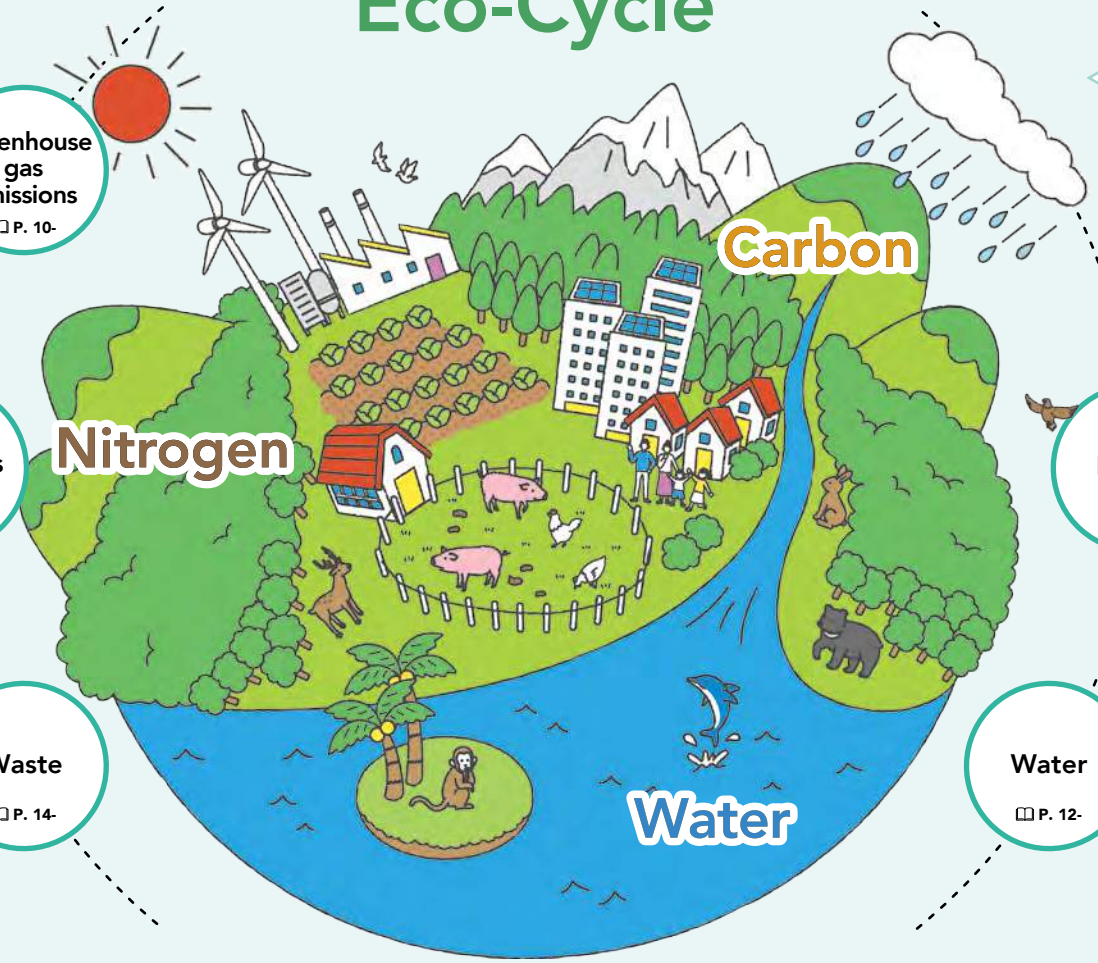
Medium- to long-term environmental targets to create an “Eco-Cycle”

In April 2025, the NH Foods Group announced its vision for environmental conservation, in which it identified five key focus areas for its supply chain: greenhouse gases, plastic, water, food loss, and waste. Using this template, we are promoting initiatives to reduce environmental impact from a medium- to long-term perspective.

Eco-Cycle



The Eco-Cycle consists of the carbon cycle, water cycle, and nitrogen cycle. For more details, please visit the NH Foods Sustainability website. (Japanese only)

https://www.nipponham.co.jp/corporate/sustainability/environment/goal.html

Greenhouse gas emissions
P. 10-

We are taking various actions to reduce greenhouse gases, including by introducing generation and waste cooking oil boilers, switching fuels, conducting research on the reduction of livestock-derived greenhouse gas emissions, and challenging ourselves to create carbon neutral farms, with the goal of achieving carbon neutrality by 2050.

Food loss
P. 13-

We are working to reduce food loss by developing products that can be stored at room temperature for extended periods, effectively utilizing by-products generated during the manufacturing process, and collaborating with food banks.

Waste
P. 14-

We are working to recycle residual food waste, effectively utilize livestock excreta generated on farms as fertilizer or energy, and utilize food waste and wastewater sludge from factories as feed or fertilizer.

Plastic
P. 11-

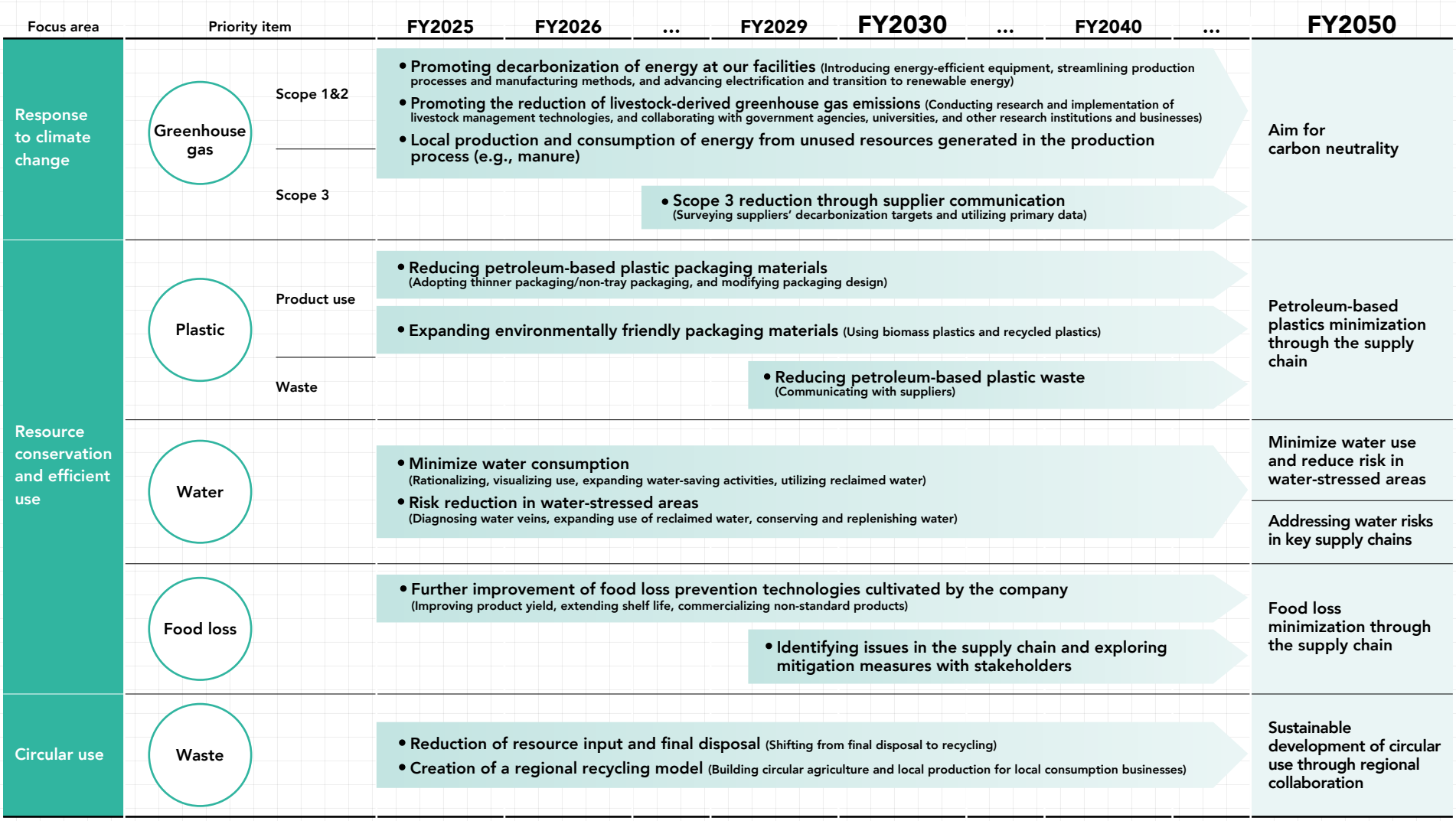
We have been taking actions to reduce packaging plastics for over 20 years, and we continue to take a multifaceted approach in this area, prioritizing product safety while reducing packaging materials and trays and using paper and biomass materials.

Water
P. 12-

We are constantly reviewing and improving our water usage, including measures to address water risks, primarily at our production facilities. We are also working to recycle wastewater and promote sustainable water use.

Roadmap to 2050

To achieve our vision for environmental conservation, we have established a long-term roadmap to fiscal 2050 in addition to our environmental targets for fiscal 2030.



The contents of this roadmap will be reviewed as necessary in light of changes in circumstances and technological advances.

Reducing greenhouse gases

The NH Foods Group recognizes that climate change is an urgent issue affecting everyday life and our business activities, and aims to achieve carbon neutrality by 2050.

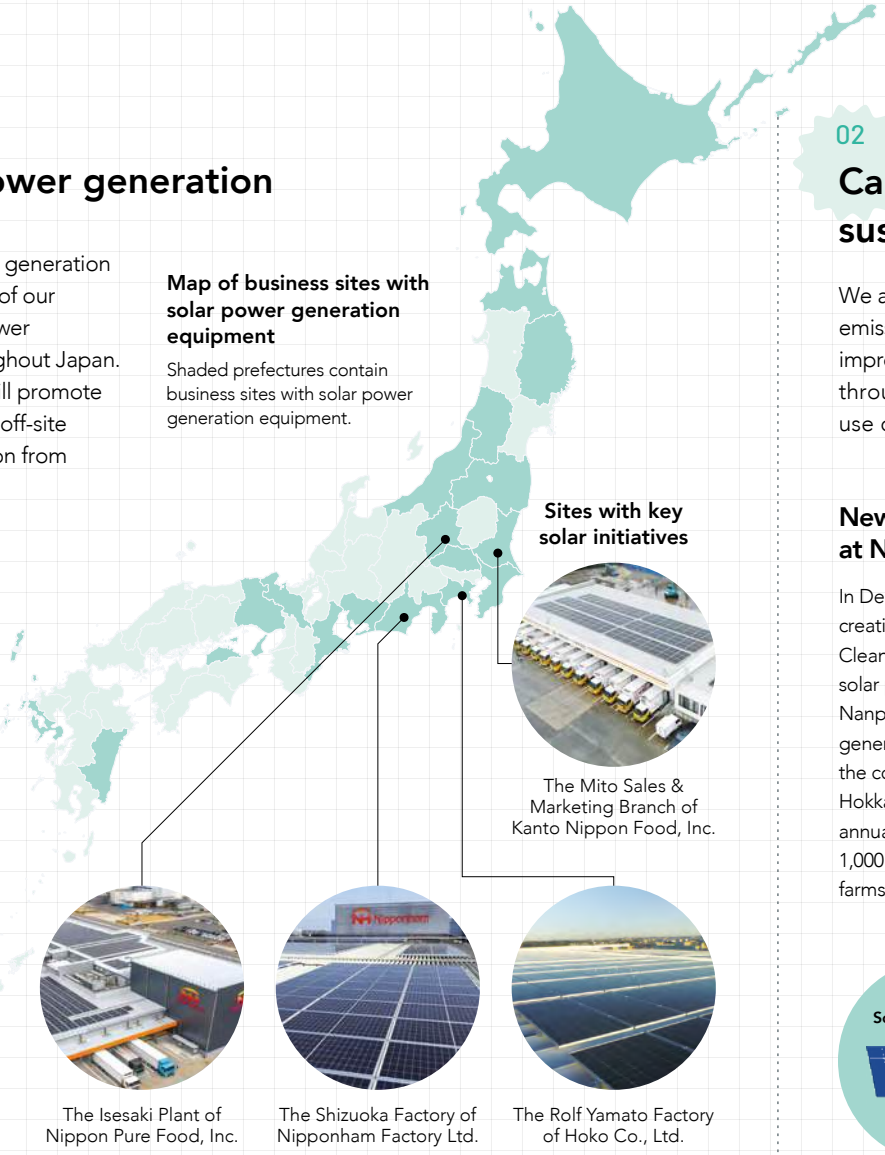
01 Greater growth of solar power generation

We are advancing the installation of solar power generation equipment within the grounds and on the roofs of our business sites. As of March 31, 2025, 40 solar power generation installations were in operation throughout Japan.

In order to achieve our targets for 2030, we will promote the introduction of renewable energy, including off-site models that use electricity from power generation from locations outside of our business sites.

Map of business sites with solar power generation equipment

Shaded prefectures contain business sites with solar power generation equipment.



Sites with key solar initiatives

The Mito Sales & Marketing Branch of Kanto Nippon Food, Inc.

The Isesaki Plant of Nippon Pure Food, Inc.

The Shizuoka Factory of Nipponham Factory Ltd.

The Rolf Yamato Factory of Hoko Co., Ltd.

New solar carports at Nippon Pure Food, Inc.

In fiscal 2024, Nippon Pure Food, Inc. introduced our Group's first carport solar power generation system at its Isesaki Plant. Solar carports are highly effective in terms of land utilization and provide heat shielding in hot weather and protection from the rain, thereby improving convenience for parking lot users.

Solar carports at the Isesaki Plant of Nippon Pure Food, Inc.

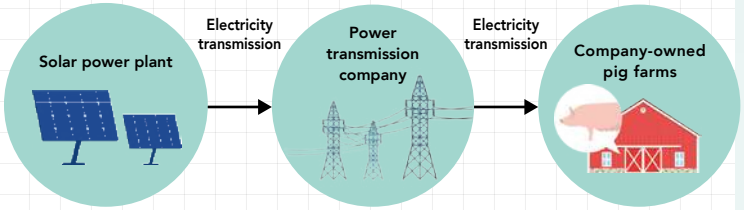
02 Carbon neutral farming to realize a sustainable livestock industry

We aim to operate farms with zero net greenhouse gas emissions (from fuel, livestock, and electricity). In addition to improving and streamlining energy self-sufficiency through solar power generation, we are considering the use of credits related to livestock and agriculture.

New solar power generation at Nippon Clean Farm Ltd.

In December 2024, as the first step toward creating a carbon neutral farm, Nippon Clean Farm Ltd. began operating a new solar power generation facility on land in Nanporo Town, Hokkaido. The electricity generated by this facility is transmitted to the company's own pig farms within Hokkaido. This initiative aims to reduce annual CO_2 emissions by approximately 1,000 tons across all of the company's pig farms in Hokkaido.

Solar power facility in Nanporo Town built by Nippon Clean Farm Ltd.



Reducing plastic use

Plastic is lightweight, durable, and convenient, but it also leads to environmental issues such as marine plastic pollution. The NH Foods Group uses plastic in various situations, and we are therefore working to reduce and recycle plastic, as well as use environmentally friendly packaging materials, while prioritizing product safety.

01

Reducing plastic use in *Kiwamiyaki* product series packaging

Our Group believes that it is important to effectively utilize resources and reduce environmental impact to preserve the natural environment that forms the foundation of our business. One such initiative is to reduce plastic usage by revising our packaging. For example, in the *Kiwamiyaki* series of products, we eliminated the inner pouch used to package hamburg steak by adjusting the manufacturing process. When combined with other plastic reductions from changing other packaging materials, we successfully reduced annual plastic use by 49.5%, equivalent to approximately 69 tons* (versus previous packaging materials).

We will continue to develop and improve our products with a focus on environmental and resource conservation.

Plastic use reduced by approx. 49.5%

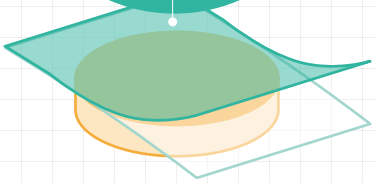
Kiwamiyaki Hamburg Steak with Demi-glace Sauce

* Calculated based on sales data from April 1, 2023 to March 31, 2024

Entier Lemon & Parsley

Uses approx. 12.4% recycled PET film

* Upper seal only



Package partially uses recycled PET film

02

Using recycled PET film in packaging for the *Entier* series of products

The *Entier* series of products actively incorporates environmentally friendly packaging materials. In particular, some products such as *Entier Lemon & Parsley* use recycled PET (polyethylene terephthalate) film for part of the upper seal, helping our effort to recycle plastic resources.

Additionally, the Group is working to use thin films as the base packaging for *Entier* products. This use of thinner materials not only reduces the amount of packaging materials used but also contributes to reducing CO_2 emissions throughout the supply chain.

Pursuing water sustainability

The NH Foods Group is engaged in water conservation activities, introducing water-efficient equipment, utilizing recycled water, and utilizing rainwater at its domestic and overseas sites.
In areas with high water risk, we are particularly working to mitigate risk by collaborating with local governments and stakeholder organizations.

01

Efficient water use through conserving food processing water

Nippon Food Packer, Inc. has significantly reduced its water consumption by identifying locations with high water usage, improving refrigerator defrosting devices, modifying cleaning nozzles, and raising employee awareness.

Inspections and adjustments achieve more efficient cleaning

02

Utilizing rainwater to reduce environmental impact

Nipponham Southwest Ltd. has introduced rainwater filtration equipment to collect and reuse rainwater.

This water is primarily used for automatic cleaning of sludge dehydrating equipment in wastewater treatment facilities and for dissolving chemicals, contributing to the effective use of water resources. Currently, this equipment does not operate on sunny days, but in the future, the company aims to increase the reuse of water by recovering cooling water on days without rain to improve operational efficiency.

Rainwater filtration equipment

03

Reusing wastewater as irrigation water

At Oakey Beef Exports Pty. Ltd., which packs and processes beef cattle, wastewater from its fields is treated using biomass technology (anaerobic and aerobic treatment) at a treatment facility. The purified water is returned to farmland as irrigation water for feed grains.

Irrigation equipment reusing water on a farm

04

Introduction of water reclamation equipment

At the Ayutthaya Factory of Thai Nippon Foods Co., Ltd., efforts to reuse water have been ongoing for some time. In November 2024, the company introduced water reclamation equipment to enhance recycling capacity, enabling approximately 30% of wastewater to be reused. The reclaimed water is utilized as cooling water for the cooling system and for flushing toilets within the facility.

Water reclamation equipment at the Ayutthaya Factory

Reducing food loss

The NH Foods Group is committed to fully enabling the bounty of nature to flourish and to building a sustainable society through upcycling, providing food products to Kodomo Shokudou, and providing food products in cooperation with food banks.

01

Reusing byproducts from the manufacturing process

With a focus on the upcycling, or the effective use of byproduct raw materials, Kamakura Ham Tomioka Co., Ltd. has sliced and dried byproducts from ham and sausage manufacturing, then reprocessed them into a new type of snack product.

HAMSOBE

02

Extending shelf life through improvements in product preservation methods and packaging technology

The NH Foods Group is working to extend shelf life by improving ingredient formulations, reducing damage by simplifying processes, and other methods. In fiscal 2025, the reduction of food loss has been added to its medium- to long-term environmental targets, with the goal of minimizing food loss throughout the supply chain by 2050.

Products with extended shelf lives

03

Providing food products to *Kodomo Shokudou* (children's dining rooms) to support healthy development for children

Nippon Pure Food, Inc. actively provides food products to local *Kodomo Shokudou* facilities and social welfare organizations. Since December 2024, the company's Isesaki Plant has been providing ingredients to these facilities through the Isesaki City Social Welfare Council's Isesaki Food Network Project. The Funabashi Plant has been continuing similar efforts since 2019, and the Nishinomiya Plant began similar efforts in fiscal 2024. All of these efforts have met with great appreciation from receiving institutions.

A special Christmas donation of NH Foods Group products

04

Partnering with food banks as a supplier

Japan Food Corporation has been donating food to food banks and other organizations since fiscal 2022. These foods include items that were partially tested for import customs inspections or have damaged outer packaging and are not suitable for general distribution, but all are within their expiration dates and safe to eat.

These donations have elicited kind words of gratitude from recipients.

Resource recycling

Our business is dependent on the earth's great natural bounty and the various blessings of life. To effectively use limited resources, we are working to reduce the generation of by-products and develop technologies for their effective utilization.

01

New products from unused parts

Developing value-added products

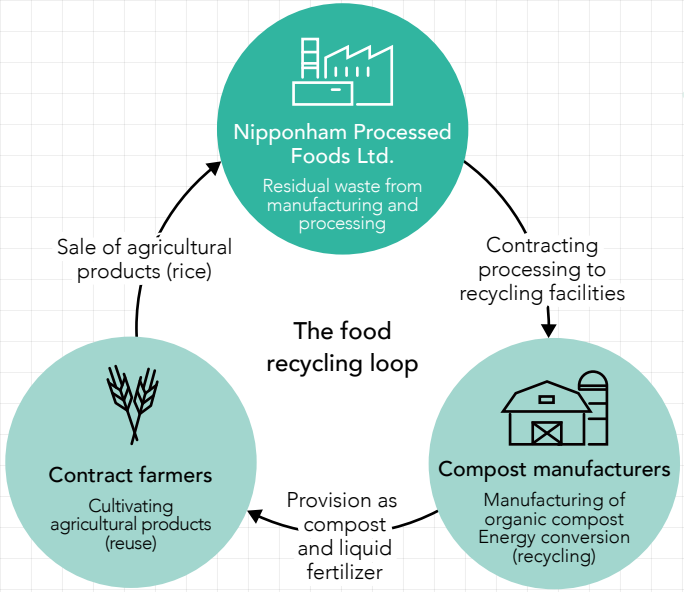
Focusing on chicken liver, which is not fully utilized during periods of low demand, we have used unique production methods to recreate the rich flavor and smooth texture of foie gras, a less accessible food item in recent years, into the product known as *Gras Foie*.

Gras Foie

R&D for better health

At NH Foods Ltd. Research & Development Center, we extract functional ingredients such as collagen, chondroitin sulfate, and placenta extract from underutilized pig and chicken cartilage and pig placentas, scientifically evaluate their safety and efficacy, and commercialize them as products.

Some of NH Foods Ltd.'s healthcare products featuring unused parts



02

Reuse of residual food waste from production

Residual food waste from production at Nipponham Processed Foods Ltd.'s Kuwana Plant is made into compost at DAIEI KOGYO CORPORATION. The compost is then used to cultivate rice, which is served in the plant's employee cafeteria.

This initiative has been certified by the Minister of Agriculture, Forestry and Fisheries and the Minister of the Environment as a Recycling Business Plan (Food Recycling Loop).

03

A new demonstration test with biochar made from livestock excreta

TOWING Co., Ltd. and NH Foods Ltd. have jointly launched a demonstration test using high-performance biochar at a farm owned by the NH Foods Group. This test will also verify the effectiveness of using carbonized chicken manure for crop cultivation and reducing greenhouse gas emissions in the composting process of pig manure. By incorporating livestock manure into raw materials, this initiative is expected to significantly contribute to the achievement of sustainable livestock farming.

Demonstration test in progress at a farm

What are the benefits of biochar?

(1) It improves soil moisture and fertilizer retention, promotes crop growth, and regulates the pH of acidic soils.

(2) By capturing carbon in the soil instead of releasing it into the atmosphere, it reduces carbon dioxide emissions and contributes to global warming countermeasures.

(3) It adsorbs harmful substances and excess nutrients, contributing to water purification.