Better

Environment

E

03.

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

8 DECENT WORK AND ECONOMIC GROWTH

17 PARTNERSHIPS FOR THE GOALS

Focus Areas

- Tracking our Environmental Targets
- Energy Efficiency
- Preserving Water
- Waste Management
- Eco-Friendly Packaging
- Managing Climate Risks

Ausnutria is dedicated to protecting the environment and preserving resources for future generations. The Group strives to adopt sustainable business practices and minimise its environmental impact of upstream operations and associated production procedures. To fulfil the Group's commitment to environmental sustainability, subsidiaries also make efforts to improve energy and water efficiency, manage emissions and water discharge, reduce material consumption and waste generation, and manage climate change-related risks related to operations.

KEY HIGHLIGHTS IN YEAR 2024

- **100% electricity used by Ausnutria Netherlands for operations has been offset through renewable energy sources**
- **Sourced all packaging materials from sustainable suppliers in Ausnutria Netherlands, including those certified by the Forest Stewardship Council (FSC) for chain of custody**
- **The new production facility, Pallas, in Heerenveen, Netherlands, has completed its construction and ensures a fully nitrogen-free and carbon-free production process**
- **Ausnutria PRC and Ausnutria Netherlands optimised the design of cardboard packaging and tin cans to reduce resource use**

TRACKING OUR PROGRESS ON ENVIRONMENTAL TARGETS

To enhance its environmental performance, the Group has introduced a series of ambitious targets focused on greenhouse gas (GHG) emissions, energy use, water consumption, and waste management. These targets were developed through a thoughtful combination of both top-down and bottom-up strategies. By adhering to these environmental targets, Ausnutria is positioned to monitor its progress towards sustainability while fostering the widespread implementation of sustainable practices.

Environmental targets by Year 2025[1, 2]	Progress achieved in 2024
GHG Emissions[3]	
Reduce total GHG emissions intensity by 20%	14%
Reduce the Scope 1 emissions intensity by 15%	15%
Reduce the Scope 2 emissions intensity by 20%	10%
Energy Consumption[3]	
Reduce the energy consumption intensity by 20%	13%
Reduce the natural gas consumption intensity by 20%	22%
Reduce the electricity consumption intensity by 15%[4]	+15%
Water Consumption[3]	
Reduce water consumption intensity by 35%	33%
Waste[5]	
Maintain the recycling rate of paper and wood at 100%	100%
Maintain the recycling rate of rest milk and rest powder at 100%	100%
Achieve the recycling rate of plastic of at least 90%	100%

The Sustainability Committee and the Sustainability Workgroup conduct regular reviews of the Group's environmental policies and initiatives. To ensure that all subsidiaries comply with relevant environmental laws and regulations in their respective regions, the Group has established comprehensive guidelines for implementing environmental management systems and operational standards. This approach highlights the Group's ongoing dedication to reducing the environmental footprint associated with its sourcing, production, and distribution activities. Additionally, both production facilities located in Kampen, Netherlands, and Changsha, PRC, have achieved ISO 14001 certification for their Environmental Management Systems.

ENHANCING ENERGY EFFICIENCY TO MINIMISE CARBON FOOTPRINT

A wide range of nations have devised strategies and policies with the aim of combating the negative impacts of climate change and strengthening their climate resilience. In the regions where the Group operates, the European Union aims for climate neutrality by 2050, while Australia intends to reach net zero by the same year. Meanwhile, the PRC plans to reach its peak carbon emissions by 2030 and achieve carbon neutrality by 2060. In alignment with these global efforts, the Group has established GHG emission targets to minimise its carbon footprint and expedite its transition to a low-carbon future. Using 2019 as the baseline year, Ausnutria aims to:

- reduce the total GHG emissions intensity by 20% by Year 2025
- reduce the Scope 1 emissions intensity by 15% by Year 2025
- reduce the Scope 2 emissions intensity by 20% by Year 2025

1 We will keep monitoring our progress to pursue continuous improvement and will review the targets in the coming years where necessary
2 The scope of the environmental target excludes the Global Headquarters Building in the PRC, Bioflag Huaian and Anhui factory
3 Using 2019 as the base year. For the GHG emission, the targeted reductions are calculated by market-based method
4 The absolute electricity consumption of 2024 comparing to that of 2019 has increased due to business expansions, which also contribute to an increased revenue and thus impacting the intensity figure. We will assess any feasibility to increase the energy efficiency regarding the productions in the future
5 Recycling rate target is for production-related waste only

In a bid to enhance overall energy efficiency and meet its emissions reduction targets, the Group has implemented a comprehensive management system for energy and emissions. This includes regular upgrades of equipment across its manufacturing sites. The heating, ventilation, air conditioning, and boiler systems, alongside lighting and other energy-intensive equipment, undergo routine inspections, maintenance, and replacements to guarantee optimal performance. Furthermore, the Group is committed to investing equally in the installation of solar panel systems at its facilities.

Operating with Low-Carbon Facilities

Ausnutria's new production facilities in Heerenveen, Netherlands, incorporate low-carbon technologies and energy-efficient designs to minimise carbon emissions. The milk processing plant Pallas, which has been completed construction in Year 2024, is scheduled to commence its first commercial production in early Year 2025. It promises a 100% gas-free production process for semi-finished baby and infant food formula, ensuring that production is 100% nitrogen- and carbon-free. Furthermore, this innovative facility is expected to reduce energy consumption by approximately 40% compared to traditional drying towers. Moreover, the plant saves 40% on the use of renewable energy, contributing to alleviating the power grid congestion issue in the Netherlands. The other Heerenveen factories, specifically the Pluto and Hector factories, reduce their reliance on natural gas by utilising geothermal heat systems to store thermal energy for heating and cooling purposes . The Group is also focused on transitioning to electricity-based heating at these new facilities, aiming for zero nitrogen emissions in compliance with environmental regulations and the Nitrogen Law in the Netherlands. The installation of pumps, engines, and ventilators at the new facilities will further boost energy efficiency. Furthermore, the phased closure of Ommen from October 2024 enables full transfer of manufacturing capacity to Pallas' 100% electric processes and Kampen's upgraded systems. While Kampen's total energy consumption has increased with the additional production load, its optimised infrastructure now achieves relative lower energy use per output unit compared to Ommen's former operations. This transition eliminates legacy emission sources while enhancing production efficiency across the network. Looking ahead, Ausnutria plans to convert its remaining manufacturing sites to electric heating to further decrease its dependence on natural gas.

Strengthening Energy Management to Enhance Energy Efficiency

Regular evaluations of energy efficiency are conducted by the Group at its manufacturing facilities, with new projects and upgrades initiated as necessary to enhance energy performance. By harnessing advanced digital technologies – including blockchain, big data, 5G, and artificial intelligence – Ausnutria effectively decreases both energy consumption and emissions. In Changsha City, the PRC, a mobile application facilitates real-time monitoring of energy usage across a variety of locations, such as manufacturing plants, laboratories, warehouses, and communal areas. This application allows for the real-time management of ozone systems, air conditioning systems, purification workshops, and air compression systems in the factories. If any irregularity in energy consumption occurs, the system quickly alerts staff, enabling swift corrective actions. The Group then leverages the data gathered from this real-time monitoring to improve its energy management strategies and identify further areas for enhancement.

To support its goal of low-carbon operations and further enhance energy efficiency, the Group is making significant investments to modernise its manufacturing facilities. In major factories located in the PRC, variable speed drives have been incorporated into air conditioning systems. This innovation allows electric motors to operate at their most efficient speeds, resulting in improved indoor ventilation and energy savings. Additionally, the exhaust systems in the laundry areas have been upgraded to boost ventilation while minimising the reliance on air conditioning. In the Netherlands, specifically in Leeuwarden and Ommen, the lighting throughout the facilities has transitioned entirely to energy-efficient LED bulbs. Insulation has been added to the warehouse in Leeuwarden, effectively reducing electricity consumption for heating purposes. It has also implemented a compressed air installation with a control system that disconnects production departments from compressed air during the weekend, mitigating the impact of leakage. In Kampen, the implementation of new valves on bag filter T3 has reduced compressed air consumption by 20%, achieving annual savings of 2,338,920 m^3, with parallel process optimisations increasing dry matter content in specific base powders by 1% - 3% to reduce water evaporation requirements and energy demand. To maintain temperature control, Leeuwarden is currently working on installing a Material Air Lock for the expedition wing, which will eliminate direct openings to the outside. In Heerenveen, factories have optimised their HVAC systems by reducing ventilation to 54% after 11 PM and on weekends, leading to substantial electricity savings of 5,229 kWh per week. All these efforts collectively contribute to a significant decrease in Ausnutria's energy consumption.

Managing habits is essential for decreasing electricity consumption. In the PRC, the permissible range for adjusting air conditioning temperatures has been restricted, and routine inspections are carried out to deter energy-wasting behaviours, such as opening windows while the air conditioning is operational. Each evening, after business hours, an energy-saving check is conducted to confirm that all lights and air conditioning units are turned off after use. In addition to these electricity-focused measures, we prioritise gas usage in the canteen through regular inspections and maintenance by gas operators, ensuring that equipment operates efficiently. Daily checks are performed to promptly identify and rectify issues like gas leaks. Furthermore, we conduct energy conservation education to enhance staff awareness about gas usage, promoting responsible consumption. These combined initiatives have contributed to a comprehensive strategy for optimising energy efficiency across the organisation, resulting in a 0.86% reduction in electricity usage at the headquarters office in the PRC in Year 2024.

Utilising Renewable Energy

The Group is committed to utilising renewable energy sources to effectively reduce its carbon footprint, incorporating both solar panel installations and carbon credit purchases into its strategy. In Year 2024, Ausnutria Australia expanded its solar panel deployment across multiple sites, achieving a significant reduction of around 31 MWh in electricity consumption, which represents a 17% decrease for the region. Due to the challenges associated with generating energy on-site, the focus is on acquiring renewable energy certificates rather than relying solely on conventional energy solutions. To this end, Ausnutria Netherlands has been actively purchasing renewable energy certificates on a voluntary basis, ensuring that it 100% offsets its energy consumption.

Solar panels implemented in Keysborough Site

Key Highlights on Renewable Energy in Year 2024

100% of electricity consumption for operations in the Netherlands was offset through renewable sources.

About 17% of total electricity consumption in Australia was saved by solar panel systems installed in the factories.

Managing Upstream and Downstream Carbon Footprint

Beyond focusing on its own carbon footprint, Ausnutria actively engages with its business partners across the supply chain to tackle Scope 3 emissions. This commitment involves fostering close collaboration with both upstream and downstream partners to implement effective strategies for emission reduction.

To minimise its carbon footprint, Ausnutria focuses on reducing transportation associated with its supply chain. In this effort, Ausnutria Netherlands has teamed up with Trivium Packaging, a forward-thinking producer of sustainable metal packaging, to ensure a reliable and consistent supply of cans. The facility in Heerenveen, which started operations in Year 2021, manufactures and distributes cans to nearby factories in both Heerenveen and Leeuwarden. This strategic location effectively shortens transportation distances for can logistics, thereby decreasing greenhouse gas emissions linked to distribution.

PRESERVING WATER FOR FUTURE GENERATIONS

Recognising the essence of effective water management, Ausnutria has adopted a comprehensive strategy focused on reducing water consumption, enhancing water recycling, and managing wastewater from its operations. To strengthen its approach to water use, the Group has established a Group-wide water target along all divisions. Using Year 2019 as the base year, Ausnutria aims to:

- Reduce water consumption intensity by 35% by Year 2025

The production of milk powder at Ausnutria primarily relies on wet processes. In Kampen, Netherlands, the Clean-in-Place (CIP) sanitary cleaning system has been upgraded to enable the recovery and reuse of final rinse water for subsequent cleaning cycles. In the PRC, factories have implemented automatic sensors on water taps to prevent unnecessary consumption, while condensed water from air-conditioning systems is also recycled. In Year 2024, the PRC continued to use automatic sensors for cleaning taps and established a recycled water system to cool the air-conditioning units in production workshops. Meanwhile, Ausnutria Australia has continued to improved water efficiency for cleaning Gut relief products, deeming to achieve reduction in water usage for cleaning processes in Year 2024.

Ausnutria conducts regular equipment inspections to effectively minimise water wastage. By promptly addressing any leaks found in taps, pipelines, and valves, the Group ensures efficient water management. Additionally, close tracking of water consumption data is underway to support an upcoming feasibility study focused on potential water recycling and reuse systems. Notably, the new Pallas factory in the Netherlands aims to reduce water consumption by 50% compared to traditional spray drying towers, achieved through the extensive reuse of water. These initiatives collectively contribute to reducing water wastage and enhancing overall efficiency, aligning with the Group's commitment to achieving its water reduction goals.

ADOPTING AN EXTENSIVE WASTE MANAGEMENT PLAN

A comprehensive set of procedures has been established by the Group to oversee waste management from its initial generation to final disposal, aiming to minimise any negative environmental effects. Furthermore, the Group has established 3 specific waste targets designed to steer its waste management practices and foster a culture of recycling. By Year 2025, Ausnutria aims to:

- Maintain the recycling rate of paper and wood at 100%
- Maintain the recycling rate of rest milk and rest powder at 100%
- Achieve the recycling rate of plastic of at least 90%

In pursuit of these targets, Ausnutria constantly seeks innovative methods to minimise waste sent to landfills. The Group collaborates with licensed waste operators in the area to ensure compliance with local regulations during waste collection and disposal. With comprehensive facilities at its disposal, Ausnutria is dedicated to environmentally responsible waste management. At its dairy manufacturing facility in Australia, a baling machine is utilised to significantly cut down on cardboard waste resulting from raw material packaging. Additionally, the packaging for dairy products in the PRC has been restructured and refined to further decrease cardboard use, thus reducing transportation requirements and their environmental footprint. All remaining packaging materials, including cardboard, plastic lids, and bags, are completely collected and recycled by authorised operators. In Year 2024, Ausnutria maintained an outstanding recycling rate of 100% for paper and wood and 100% for plastic.

Given that Ausnutria predominantly operates in the dairy sector, a significant portion of its non-hazardous waste is derived from leftover milk and milk powder. In Australia, any surplus is redirected as animal feed to minimise waste, whereas in the Netherlands, an external contractor converts most of this excess into biomass. The Group proudly reported a 100% recycling rate for both residual milk and milk powder in Year 2024.

To further enhance waste management, factories in Heerenveen, Netherlands, have implemented an autosampler that reduces the number of wasted tins by collecting powder before canning. A recurring issue with product ejections on the production line has been resolved, resulting in fewer movements, lower costs, and reduced carbon emissions. At the Netherlands head office and all factories, the transition to stoneware cups has eliminated nearly 600,000 disposable paper coffee cups annually, while new coffee machines collect coffee grounds for composting and reuse as a soil enricher. Phasing out water coolers with plastic bottles in the no-care zones has saved around 300 plastic bottles in 2024, along with reduced transport costs and emissions.

When it comes to managing hazardous waste from dairy and nutritional product production, Ausnutria adopts stringent measures. Chemical waste is stored securely in designated sealed containers and is regularly dispatched to licensed third-party services for safe disposal. To foster a culture of waste reduction, all employees are encouraged to practise waste separation and recycling right from the source.

PROMOTING GREEN DEVELOPMENT WITH ECO-FRIENDLY PACKAGING AND PRODUCT DESIGNS

Ausnutria prioritises environmentally responsible development and actively works to lessen the ecological footprint of its product design. By choosing tinplate for packaging, the Group ensures that its materials are 100% recyclable without limits, aligning with its sustainability goals. To enhance waste reduction, Ausnutria has implemented stringent packaging guidelines, including the elimination of dichromate, which helps to avert the generation of hazardous waste. Furthermore, the Group is moving towards more energy-efficient production methods for tinplate, demonstrating its ongoing commitment to sustainable practices.

Throughout the Year 2024, we continued to purchase from sustainable suppliers that provide packaging materials certified with FSC chain of custody certification in the PRC and the Netherlands. In Ausnutria Netherlands, all packaging materials are certified by the FSC chain of custody. To further cut down on paper usage, the Group has effectively reduced the weight of its cardboard packaging for certain products in the PRC, decreasing it from 230g to 200g, which represents a notable 13% lighter in weight. The procurement department has optimised the boxes used to wrap finished tins in the Netherlands, making them 17% lighter than the previous versions, resulting in a 14% reduction in carbon emissions. Furthermore, the design of tin cans has been refined to lessen the reliance on raw materials like iron. For instance, the dimensions of a 700g can have been adjusted from 165mm to 155mm, and a lower tin for one of the brands has been introduced, decreasing its height from 162mm to 146mm. These changes not only minimise material consumption but also demonstrate a commitment to efficient resource use. Improvements made to the final packaging processes in the Netherlands have also resulted in a remarkable 50% reduction in the use of stretch wrap foil on pallets . The implementation of inline auto sampling during powder processing has replaced the previous method of sampling tins after production, leading to a significant decrease in the disposal of completed tins. Looking ahead, Ausnutria remains firmly committed to these sustainable practices and aims to continually enhance its packaging strategies to minimise waste and encourage environmentally responsible development.

In an effort to advance sustainable product design, Ausnutria has developed two specific 'Green Product Design Standards' aimed at IMF and modified milk powder. These standards have been added to the database maintained by the Hunan Provincial Department of Industry and Information Technology, serving as a benchmark for assessing green product designs. In Year 2023, through the review and approval of the Changsha Municipal Bureau of Industry and Information Technology, Ausnutria infant formula milk powder (12-36 months old, stage 3) was selected as the 2022 Changsha City Green Design Product. This will be included as an important consideration in government's procurement, showing that Ausnutria's efforts for green development have been officially recognised.

ADDRESSING AND MANAGING CLIMATE RISKS WITH RESILIENCE STRATEGIES

Ausnutria recognises the significant threats and challenges that climate change presents to its operations. To address these concerns, the Group engaged a third-party consultant to carry out a comprehensive assessment of climate risks affecting its supply chain and overall operations. This involved extensive desktop research for each operational site to identify key physical and transitional risks, evaluate their likelihood, and assess the potential impact on Ausnutria's activities. In addition, since it is important for our business to understand the risks that climate change may pose to supplier operations and raw milk productivity, we have also specifically assessed the risks of climate change to supply chain disruptions.

The summary of the climate risks identified is as follows:

Physical Risks

Risk type	Impact	Justification
Flooding (riverine and coastal)	Asset damage and operation suspension	Ausnutria's factories are mainly located along the river or coast. Flooding may damage factories' equipment and facilities and leads to financial loss. In particular, water can cause critical damage to electric equipment and its components. Dysfunction of dairy processing machines caused by severe flooding may lead to the suspension of factory operations.
	Accessibility to factories	Flooding in nearby areas of Ausnutria's factories may impede employees from accessing the sites. Employees may have difficulties reporting for duty or resuming work upon flooding. This can have negative impact on productivity and affect the feasibility of resuming operations.
	Disruption in logistics	The majority of Ausnutria's products that are produced overseas are transported to mainland China for sale. Flooding disrupts logistics through trucking route disruptions and freight delays.
Extreme wind	Asset damage and operation suspension	Extreme wind may increase the frequency of tropical cyclones, tornadoes, and hurricanes. It could cause extensive damages to the factory properties when wind speed exceeds the maximum level that the buildings can withstand.
	Disruption in logistics	Majority of Ausnutria's products that are produced overseas are transported to mainland China for sale. Natural disasters caused by extreme wind can disrupt logistics through trucking route disruptions, shipping, and freight delays.
Temperature change	Increase operating cost	Rising mean temperature, as well as heatwave and extreme cold, can drive up Ausnutria's operating costs. The rise in indoor and outdoor temperature would lead to greater energy consumption for maintaining the cooling system and air condition system in production areas.
Water stress	Increase operating cost	While water is not used in production processes for the majority of Ausnutria's factories, factories like Kampen and Ommen rely on water for processes such as pumping, cooling circuits, cleaning and sanitising. Water stress may prompt government to raise water tariff, increasing the financial cost of water supply.

Transition Risks

Risk type	Justification
Policy and legal risk	The introduction of new policies may lead to increased operating costs and early retirement of current machinery. Meanwhile, with increasing awareness on climate risk, voluntary-based initiatives may scale up or become mandatory in the near future. Acknowledging the trend of existing policy helps prepare Ausnutria for future transition and avoid non-compliance penalties.
Technology risk	In Australia, government bodies encourage and promote the uptake of energy-efficient technologies for the dairy processing industry. In Europe, in response to the 2030 climate and energy framework, the EU has funded various projects to search for alternative solutions to reduce the emission from the dairy industry. The capability to adopt green technologies may help Ausnutria optimise its operation, operate with cost-effectiveness while minimising the environmental impacts.
Reputational risk	There is growing attention on the carbon footprint of dairy products. NGOs and international organisations have launched various dairy sustainability initiatives. Ausnutria may seize the opportunity to establish a positive company image by joining international or industry associations and responding to the sustainability initiatives. Aligning with the industry approach allows Ausnutria to maintain its dairy product competitiveness under the low-carbon trend.
Market risk	With the substantial increase in the vegan population in major economies, the demand for plant-based or non-dairy milk alternatives is growing at a rapid pace. The demand for such products grows particularly faster among adults, compared with infants and toddlers.

Supply Chain Disruption

	Justification
Likelihood	Milk farms in the Netherlands are most likely to be exposed to coastal flood risk, tropical cyclones, tornadoes, and hurricanes and water stress risk. Additionally, milk farms in Australia are most likely to be exposed to coastal flood risk and wildfires.
Impact	While Ausnutria does not own farms, its dairy business is highly dependent on the stable supply of quality raw milk from cow and goat farmers. Extreme weather such as flooding and strong wind may damage dairy farm components, including livestock, machinery, buildings, equipment, and food stock. This may affect the safety and provision of milk supply and pose an impact to the stable supply of raw milk sources. Ausnutria might face increasing procurement costs. In addition, road closures due to extreme weather events may result in logistics delays, affecting the milk quality. The financial loss caused by asset damage and suspension of operation may increase the production cost of milk farm and Ausnutria.

Ausnutria integrates climate risk considerations into its factory development processes. For the Smart Factory in the PRC, designs feature elements inspired by sponge city concepts to enhance resilience against projected shifts in rainfall patterns. The Group's objective is to strengthen the facility's ability to cope with climate impacts while effectively managing flood risks through advanced stormwater management. This Smart Factory has been meticulously designed with a focus on critical aspects such as infiltration, retention, storage, purification, reuse, and discharge, ensuring readiness for extreme weather scenarios. Key elements include a rain garden, permeable pavements, and a sunken green space that captures surface runoff, equipping the facility to handle rainstorms with a return period of 1 in 50 years.