

SUSTAINABLE MANAGEMENT OF LAND AND WATER RESOURCES



- · Treated wastewater quality: COD = 36 mg/l
- Incidents or violations related to water and wastewater management: 0 cases
- Water consumption per 1,000 liters of product: 4.99 m³, down 28% compared to 2023



- Soil fertility increasing by an average of 12% following the implementation of farmer training and organic farming models.
- 100% of processing partners achieving organic certification.
- 100% of farming households committed to avoiding harmful impacts on natural ecosystems.
- 100% of organic raw material areas maintaining soil quality in compliance with Organic certification standards.

As climate change intensifies and production pressures grow, the sustainable management of land and water resources has become not only a core responsibility but also a defining element of Betrimex's long-term development.



SUSTAINABLE WATER MANAGEMENT

COMMITMENT TO WATER MANAGEMENT AND WATER RESOURCE CONSERVATION

At Betrimex, water is utilized not only for domestic purposes but also as a vital resource in the production processes. This has shaped the company's commitment to ensure that water use goes hand in hand with conservation efforts, environmental protection, and continuous efficiency improvements. This commitment forms an integral part of Betrimex's sustainable development roadmap towards the ultimate goal of achieving Zero Waste.

WATER SOURCES AND USAGE

Betrimex sources our water primarily from the Chet Say River, which serves as the main supply for production activities. All extracted water undergoes advanced filtration and treatment using modern technology. This process **strictly adheres to the National Technical Regulation on Drinking Water (QCVN 6-1:2010/BYT)**, including monitoring of 21 physicochemical and 5 microbiological parameters to guarantee the highest level of safety before use in production. Water is primarily used for:





Operation of cooling systems

WASTEWATER MANAGEMENT AND TREATMENT TECHNOLOGY

Betrimex deploys treatment technologies that integrate anaerobic, anoxic, and aerobic biological processes to thoroughly remove pollutants from wastewater. Betrimex's wastewater treatment system is designed and operated in strict accordance with applicable standards, ensuring that treated wastewater meets the requirements specified in Column A of QCVN 40:2011/BTNMT. The system comprises the following key stages:



Pre-treatment: Remove suspended solids and impurities.



Biological treatment: Use microorganisms to decompose organic matter.



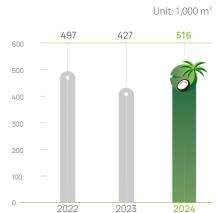
Chemical-physical treatment: Balance pH and extract excess nutrients.



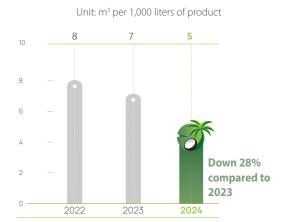
Automated monitoring system: Control critical parameters, including flow rate, pH, COD, TSS, temperature, and ammonia. This ensures that all treated wastewater consistently meets regulatory standards.

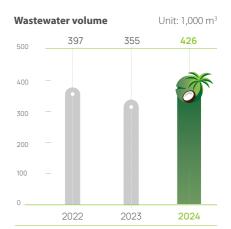
A notable feature of Betrimex's system is that all **monitoring data is continuously recorded and transmitted in real time** to the Department of Natural Resources and Environment via an automated reporting system. This not only ensures full transparency in environmental reporting but also enables regulatory authorities to closely monitor water quality and take immediate action if any risk arises.

Water consumption (domestic water and RO-treated water)

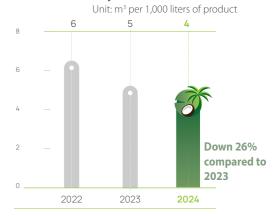


Water consumption intensity (domestic water and RO-treated water)





Wastewater intensity



WATER REUSE AND RESOURCE CIRCULARITY

Betrimex has successfully implemented systems to reuse treated wastewater for non-production purposes such as plant irrigation and facility cleaning. In addition, the company is currently piloting water circularity models that aim to repurpose wastewater for cooling processes, further decreasing the demand for freshwater extraction.



COLLABORATION WITH STAKEHOLDERS IN WATER RESOURCE MANAGEMENT

Betrimex not only implements internal measures but also actively collaborates with key stakeholders, including farming households, suppliers, and local authorities, to protect water resources within the community. Each year, Betrimex conducts training sessions focused on efficient and economical water use, specifically targeting farmers in our raw material areas.

GOALS AND DEVELOPMENT DIRECTION







SUSTAINABLE LAND MANAGEMENT

OVERVIEW AND THREATS TO SOIL HEALTH

Betrimex is committed to sustainable land management practices that protect natural resources and ensure the long-term productivity of raw material areas. Historically, improper farming practices have led to significant soil degradation, reduced water retention capacity, biodiversity loss, and diminished soil fertility. In particular, monoculture practices without proper soil care have exacerbated soil depletion and nutrient impoverishment.

SOIL MANAGEMENT MEASURES AND TOOLS

To address these challenges, Betrimex has implemented a range of sustainable soil management measures, supported by ongoing research, including:

Conversion to organic farming

Shift to organic methods that avoid synthetic chemicals to promote the health of soil microorganisms.

Research on crop rotation and intercropping

Introduce plants such as Pinto peanut (Arachis pintoi) and legumes to enrich the soil, fix nitrogen, and improve water retention.

Use of organic fertilizers and plant residues

Apply organic fertilizers and plant residues to regenerate nutrients and improve soil fertility.

Soil coverage and green manure

Utilize vegetation and green manure to reduce soil erosion, protect soil structure, and enhance humus content.

In 2024, Betrimex conducted training for 13,121 farmers on sustainable farming techniques with both centralized sessions and home-based formats.

SOIL QUALITY ASSESSMENT AND RESULTS

Once per year, Betrimex conducts comprehensive soil quality assessments, which are closely monitored through our Farmer Relationship Management (FRM) system. Key indicators tracked include:

Nutrient composition (N, P, K)



Humus content

Soil microorganism density

POLICY AND COMMITMENT TO NATURAL ECOSYSTEM PROTECTION

Betrimex is deeply committed to minimizing, or eliminating, any negative impacts on natural ecosystems through the following criteria:



No expansion of raw material areas into natural forests or land with high conservation value.



Development of raw material areas solely on land that has been previously farmed, ensuring no disruption to primary forest areas.



100% of suppliers are required to sign commitments to avoid any adverse impacts on natural ecosystems.



Strict environmental controls are enforced in collaboration with subcontractors and processing units.



100% of Betrimex's processing partners are fully licensed and achieve Organic certification on an annual basis.

Results in 2024



100% Percentage of farmers committed to not impacting natural ecosystems.



Land areas in Betrimex's processing areas, warehouses and factories are monitored and comply with ISO 14001:2015 and ISO 45001 standards.

FUTURE DIRECTION AND COMMITMENT

Betrimex will continue to advance soil restoration and biodiversity preservation through the following goals



15,000 hectares of raw material area certified organic.



Expand the network of farmers involved in the sustainable farming program.



Implement automated monitoring technology for real-time tracking of soil quality.