

Policy name: Environmental sustainability policy	Approved by: Mr. Mostafa El Naby (CEO)
Policy number: 1	Issued date:

1-Policy statement

Baramouda is committed to transforming organic waste into valuable resources that restore soils, protect water, and strengthen food security.

We operate under a **zero-waste-to-landfill** commitment, ensuring that all collected organic material is processed into high-quality fertilizers, feed, or food through our **closed-loop circular economy model**.

Our **digital waste management platform** records every stage of the collection and processing process, analyzes performance data, and generates transparent impact reports. This allows us to track results, prove our environmental benefits, and continuously improve how we conserve water, cut greenhouse gas emissions, and regenerate farmland.

Sustainability is not an add-on for Baramouda, it is the foundation of our business.

By uniting biotechnology, resource efficiency, and transparent reporting, we deliver measurable, lasting benefits for farmers, communities, and ecosystems (now and for the generations ahead).

2-Policy scope

This Environmental Sustainability Policy applies to all aspects of Baramouda's operations and decision-making. It covers:

1. **Operational Activities:** All waste collection, transportation, processing, and production of fertilizers, feed, and food.
2. **Facilities & Locations:** Every Baramouda site, including offices, processing plants, and waste collection points, in Egypt and future international operations.
3. **Employees & Contractors:** All full-time, part-time, and contracted staff, as well as temporary workers engaged in Baramouda activities.
4. **Partners & Suppliers:** Any third-party entities providing products or services to Baramouda, including waste suppliers, agricultural partners, and distribution channels.
5. **Digital Platform Operations:** All data collection, analysis, and reporting activities carried out through Baramouda's waste management platform.
6. **Community Engagement:** Programs, training, and outreach initiatives involving farmers, customers, and community stakeholders.

This scope ensures that Baramouda's sustainability commitments are embedded into every stage of our value chain, from waste collection to final product use.

3-Policy objectives

The purpose of this policy is to ensure that Baramouda's environmental commitments are translated into clear, measurable, and actionable goals. These objectives guide our decision-making, day-to-day operations, and long-term strategy.

1. Eliminate Organic Waste to Landfill

- Operate under a **zero-waste-to-landfill** principle, ensuring 100% of collected organic waste is processed into usable products.
- Prioritize waste streams that have the highest environmental risk if left unmanaged (e.g., high-methane-emission food waste, contaminated agricultural residues).
- Develop partnerships with municipalities, agri-industrial facilities, and food businesses to capture waste before it reaches landfill.

2. Maximize Resource Recovery

- Convert collected organic waste into **fertilizers, feed, and food (3F)** that retain the highest possible nutrient value.
- Reuse or repurpose processing by-products (e.g. vermicompost) within Baramouda's production chain or in collaboration with local farmers.
- Explore new product development opportunities to expand the types of recovered resources, such as animal supplements.
- Expand resource recovery services to cover **industrial by-products** such as coffee grounds, crop residues, and organic processing waste from factories.

3. Conserve Water Resources

- Formulate products that increase **soil water retention and reduce irrigation needs**, directly supporting water-scarce regions.
- Monitor and report liters of water saved annually through customer use of Baramouda products.

4. Reduce Greenhouse Gas (GHG) Emissions

- Avoid methane emissions by diverting decomposable waste from landfill.
- Minimize the need for synthetic fertilizers, whose production is highly energy-intensive and carbon-intensive.
- Optimize logistics and transportation routes to reduce fuel consumption in waste collection and product delivery.

5. Ensure Transparent Environmental Reporting

- Utilize Baramouda's digital waste management platform to record, analyze, and store data on:
 - Waste volumes collected and processed.
 - Product output quantities.
 - Environmental impact metrics (CO₂ avoided, water saved, soil restored).
- Provide partners and farmers with personalized waste and sustainability reports through the platform.

6. Promote Regenerative Agriculture

- Support soil regeneration by supplying biofertilizers, organic fertilizers, vermicompost, and biological control.
- Conduct farmer training programs on sustainable agricultural practices and responsible fertilizer application.
- Collaborate with agricultural cooperatives and research institutions to expand regenerative farming adoption.

7. Continuously Improve Environmental Performance

- Review environmental performance metrics quarterly to identify efficiency gains and innovation opportunities.
- Invest in research and development to improve waste conversion processes, reduce energy and water consumption, and create higher-value products.
- Engage employees, suppliers, and industrial partners in identifying and implementing sustainability improvements.

4-Key Pillars and Implementation Areas

Baramouda's environmental sustainability efforts are built on core pillars that guide every stage of our operations. These pillars translate into clear implementation areas that ensure consistent action and measurable results.

Pillar 1 – Circular Economy Leadership

Implementation Areas:

- Operate a **closed-loop system** where all organic waste is processed into valuable products (fertilizers, feed, food).
- Work directly with **factories, farms, restaurants, and food processors** to eliminate landfill disposal.

- Continuously improve waste conversion rates and nutrient recovery efficiency.

Pillar 2 – Measurable Environmental Impact

Implementation Areas:

- Use the **digital waste management platform** to record and analyze waste collection and processing data.
- Generate impact reports detailing CO₂ emissions avoided, water saved, and acres of soil restored.
- Share environmental performance transparently with stakeholders, partners, and the public.

Pillar 3 – Resource Efficiency & Conservation

Implementation Areas:

- Develop products that reduce water needs and improve soil moisture retention.
- Optimize collection and transportation logistics to minimize fuel use and emissions.
- Reduce operational water and energy consumption across all facilities.

Pillar 4 – Regenerative Agriculture Support

Implementation Areas:

- Provide farmers with biofertilizers, vermicompost, biological control, and sustainable feed that restore soil fertility.
- Offer training and technical support on climate-smart farming practices.

Pillar 5 – Pollution Prevention

Implementation Areas:

- Ensure waste handling and processing prevent leachate, runoff, and air pollution.
- Maintain compliance with all Egyptian environmental regulations and applicable international standards.
- Conduct regular audits to identify and mitigate potential environmental risks.

Pillar 6 – Continuous Innovation & Improvement

Implementation Areas:

- Invest in R&D to enhance waste-to-resource technologies and product performance.
- Pilot new approaches to manage diverse waste streams, including industrial by-products.

- Collect feedback from partners and customers to refine processes and products.

5- Roles & Responsibilities

Achieving Baramouda's environmental sustainability objectives requires shared accountability across all levels of the organization and among our partners. The following roles define how responsibilities are distributed:

1. Senior Management

- Provide strategic leadership and ensure environmental sustainability is embedded in corporate decisions.
- Allocate resources (financial, technical, and human) to meet sustainability targets.
- Approve the annual **Environmental and Impact Report** and ensure it is publicly accessible.

2. Environmental Officer

- Oversee the implementation of this policy across all operations.
- Monitor environmental performance indicators (waste diverted, CO₂ avoided, water saved, acres restored).
- Manage the digital waste management platform to ensure data accuracy, completeness, and secure storage.
- Liaise with regulatory bodies to ensure full compliance with Egyptian environmental laws and applicable international standards.

3. Operations & Logistics Teams

- Ensure waste collection, transportation, and processing follow environmental best practices.
- Coordinate with partner factories, farms, restaurants, and other waste suppliers to ensure timely and safe waste removal.
- Maintain records on waste sources, quantities, and processing outcomes.

4. Production & Quality Control Teams

- Ensure fertilizers, feed, and food products meet environmental safety and quality standards.
- Implement pollution prevention measures within processing facilities, including waste segregation and leachate control.
- Track product yields and resource efficiency for reporting.

5. Digital Platform & Data Analysis Team

- Manage the collection, processing, and analysis of waste management data.
- Generate regular **impact reports** for internal use and partner disclosure.
- Work with the Environmental advisor to translate data insights into operational improvements.

6. Sales, Marketing Teams

- Communicate Baramouda's environmental achievements to customers, partners, and the public.
- Provide training and awareness sessions for farmers, factories, and community partners on sustainable practices.
- Gather stakeholder feedback to inform continuous improvement.

7. All Employees

- Follow environmental best practices relevant to their role.
- Report any environmental risks, non-compliance, or improvement opportunities to their supervisor.
- Participate in sustainability training sessions provided by the company.

8. Research & Development (R&D) Team

- Develop and test innovative waste-to-resource processes that increase recovery efficiency and reduce environmental impact.
- Improve product formulations (fertilizers, feed, food) to enhance nutrient value, soil health, and water retention capacity.
- Explore new uses for industrial by-products and agricultural residues to expand Baramouda's product portfolio.
- Collaborate with universities, research institutions, and industry partners to advance sustainable biotechnology solutions.
- Conduct life-cycle assessments (LCA) of new products to ensure environmental benefits outweigh resource inputs.

6- Monitoring, Evaluation & reporting

Baramouda ensures that environmental performance is measured, reviewed, and transparently communicated to stakeholders. This process is driven by our **digital waste management platform**, which records every stage of waste collection, processing, and product output.

1. Monitoring

- Track waste collection volumes from farms, factories, restaurants, and other partners.

- Monitor product yields (fertilizers, feed, food) and recovery rates for by-products such as biochar and vermicompost.
- Record environmental performance metrics, including:
 - Tons of waste diverted from landfill.
 - Liters of water saved through product use.
 - CO₂-equivalent emissions avoided.
 - Acres of land restored or improved.
- Ensure compliance with relevant Egyptian environmental regulations and applicable international standards.

2. Evaluation

- Conduct **regular reviews** of environmental performance against policy objectives and targets.
- Assess operational practices for opportunities to reduce emissions, conserve resources, and improve efficiency.
- Engage stakeholders including employees, farmers, partners, and factories in identifying environmental risks and solutions.

3. Reporting

- Produce **annual Environmental and Impact Reports** summarizing results, challenges, and improvement plans.
- Make key environmental performance indicators publicly available on Baramouda's website.
- Provide partners and stakeholders with clear, accurate updates on their contribution to environmental outcomes.
- Maintain detailed internal records for auditing, certification, and compliance purposes.

7-Review and update cycle

Baramouda is committed to keeping this Environmental Sustainability Policy relevant, effective, and aligned with our operational realities, environmental objectives, and regulatory requirements.

7.1 Review Frequency

- This policy will be formally reviewed **annually** by the Environmental officer and Senior Management.
- Intern reviews may be conducted if there are significant operational changes, new environmental regulations, or major sustainability milestones.

7.2 Review Process

- Assess performance data, environmental impact reports, and stakeholder feedback.
- Evaluate the effectiveness of current strategies and identify areas for improvement.
- Consult with internal teams, partners, and relevant external experts to ensure best practices are integrated.

7.3 Update Implementation

- Approved changes will be documented and communicated to all employees, contractors, and key partners.
- Updated versions will be published on Baramouda's website and made available to the public.
- Any significant changes in environmental commitments or targets will be highlighted in the annual Environmental and Impact Report.

7.4 Record Keeping

- All past versions of this policy will be archived for reference and compliance purposes.

8- Alignment with international standards

Baramouda's Environmental Sustainability Policy is built on recognized global standards, ensuring our operations are credible, transparent, and compatible with international best practices.

We are **certified** in:

- **ISO 14001 – Environmental Management Systems:** Demonstrating our systematic approach to environmental responsibility, pollution prevention, and continual improvement.
- **ISO 9001 – Quality Management Systems:** Ensuring our products, processes, and services consistently meet customer and regulatory requirements while driving continual quality improvement.

Our work also aligns with:

- **United Nations Sustainable Development Goals (SDGs)**, specifically:
 - **SDG 2** – Zero Hunger (through soil regeneration and sustainable agriculture).
 - **SDG 6** – Clean Water and Sanitation (through water conservation).

- **SDG 12** – Responsible Consumption and Production (through waste reduction and resource recovery).
- **SDG 13** – Climate Action (through GHG emission reduction).
- **SDG 15** – Life on Land (through ecosystem restoration and biodiversity support).
- **Egyptian Environmental Affairs Agency (EEAA) Regulations:** Full compliance with national environmental laws and guidelines.
- **Global Reporting Initiative (GRI) Principles:** Following recognized frameworks for sustainability and impact reporting.

By holding ISO certifications and aligning with these frameworks, Baramouda ensures our environmental and quality practices are globally recognized supporting trust with customers, partners, and international markets.

At Baramouda, environmental sustainability is not a separate initiative, it is the foundation of everything we do. From working with farmers and factories to transform organic waste into valuable resources, to delivering measurable benefits for soil, water, climate, and communities, we are committed to creating a cleaner, more resilient future.

Through our certified management systems, data-driven transparency, and partnerships across the agricultural and industrial sectors, we will continue to improve, innovate, and lead in sustainable waste management.

We recognize that protecting the environment is both our responsibility and our opportunity and we will act on it every day, for the benefit of current and future generations.

This policy represents our public commitment to environmental stewardship and continuous improvement.