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| **Policy name:** Circular Economy & Resource Management Policy | **Approved by:** Mostafa El Naby (CEO) |
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## 1-Policy statement

At Baramouda, our entire business is built on the principle that **organic waste is not a burden, but a resource waiting to be transformed**. Every ton of food waste, spent coffee grounds, agricultural residue, or agri-industrial by-product we collect is the starting point of a **closed-loop process** that creates new value for farmers, communities, and the environment.

We do not send organic waste to landfill. Instead, we **capture it directly from farms, factories, restaurants, coffee shops, and processing plants** before it becomes a pollutant, and process it into high-value products from nutrient-rich organic fertilizers that restore soil health, to biofertilizers, biochar, vermicompost, and sustainable animal feed that strengthen food production systems.

Our operations are designed to **retain the maximum possible nutrient value** from every waste stream while minimizing environmental impact. This means reducing greenhouse gas emissions by preventing landfill decomposition, conserving water by producing soil-enhancing products that require less irrigation, and cutting reliance on synthetic fertilizers that are energy-intensive and harmful to ecosystems.

Baramouda's **digital waste management platform** records and tracks every stage of this process from collection and processing to product output, giving us full transparency and enabling us to produce verified impact reports for our partners. This data-driven approach allows us to prove, not just claim, our contribution to climate action, resource efficiency, and sustainable agriculture.

By embedding circular economy principles into every step of our operations, Baramouda ensures that the materials we collect remain in productive use, natural systems are regenerated, and communities benefit socially and economically. This is not just part of our work, it **is** our work, and it defines our role as a leader in sustainable waste management in Egypt and beyond.

## 2-Policy scope

This Circular Economy & Resource Management Policy applies to all Baramouda activities, facilities, and partnerships involved in the collection, processing, transformation, and distribution of organic waste-derived products.

It covers:

- **Waste Sources**: Agricultural residues, food waste, spent coffee grounds, animal manure, and agri-industrial by-products collected directly from farms, factories, restaurants, coffee shops, and processing plants.
- **Collection & Logistics**: All waste handling, transportation, and storage operations conducted by Baramouda teams or approved partners.
- **Processing & Production**: The conversion of organic waste into organic fertilizers, biofertilizers, biochar, vermicompost, sustainable animal feed, and any other value-added products developed by Baramouda.
- **Digital Waste Management**: Recording, tracking, and analyzing waste movement, processing efficiency, and impact data through Baramouda's digital platform.
- **Distribution & Use**: Delivery of final products to farmers, agricultural cooperatives, distributors, and other end-users, ensuring proper use for environmental and agricultural benefits.
- **Geographical Coverage**: All Baramouda operations across Egypt and in future international expansion markets.
- **Stakeholders**: All employees, contractors, collection partners, suppliers, and clients involved in any stage of the waste-to-product value chain.

By defining this scope, Baramouda ensures that circular economy principles and responsible resource management are embedded in every stage of our operations, from waste capture to product use in the field.

## 3-Policy objectives

The purpose of this policy is to ensure that Baramouda's circular economy principles are implemented consistently across all operations, maximizing the environmental, social, and economic value of organic waste. Our specific objectives are to:

1. **Achieve Zero Organic Waste to Landfill**
    - Divert **100% of the organic waste** collected from farms, factories, restaurants, coffee shops, and agri-industrial facilities into productive uses.
2. **Maximize Nutrient and Resource Recovery**

- Retain the highest possible nutrient value from every waste stream by producing organic fertilizers, biofertilizers, biochar, vermicompost, and sustainable animal feed.
- Continuously improve processing efficiency to increase output yields and reduce residual waste.

3. **Support Regenerative Agriculture**
    - Provide farmers with eco-friendly, nutrient-rich products that restore soil health, improve crop yields, and reduce the need for synthetic fertilizers.
    - Enhance water retention in soils to reduce irrigation needs and improve resilience in water-scarce regions.
4. **Reduce Environmental Impact**
    - Prevent methane emissions from landfill decomposition.
    - Replace fossil-fuel-intensive synthetic fertilizers with sustainable alternatives, lowering greenhouse gas emissions.
    - Minimize operational energy and water use throughout production.
5. **Leverage Data for Transparency and Improvement**
    - Use Baramouda's **digital waste management platform** to track quantities, sources, processing outcomes, and final product distribution.
    - Publish annual impact reports detailing waste diverted, water saved, $CO_2$ emissions avoided, and agricultural land improved.
6. **Encourage Innovation in Waste Valorization**
    - Invest in R&D to discover new uses for agricultural residues, industrial by-products, and other organic waste streams.
    - Test and develop innovative product formulations to address specific soil and crop needs in Egyptian and export markets.
7. **Promote Collaboration and Circular Partnerships**
    - Work with farmers, food businesses, industrial partners, and government entities to expand waste collection and resource recovery.
    - Share knowledge and best practices to encourage wider adoption of circular economy principles in Egypt and the region.

## 4- Key policy pillars and implementation areas

Baramouda's circular economy model is built on interconnected pillars that guide how we collect, process, and return organic resources back into the economy and environment. These pillars are supported by targeted implementation areas to ensure measurable impact.

**Pillar 1 – Waste Capture at Source**

**Implementation Areas:**

- Partner with farms, factories, food processors, restaurants, and coffee shops to collect organic waste before it becomes pollution or enters landfill.
- Provide waste segregation guidance to suppliers to improve processing efficiency and product quality.
- Expand collection networks to underserved agricultural and industrial areas.

**Pillar 2 – Closed-Loop Processing**

**Implementation Areas:**

- Process 100% of collected waste into usable products: organic fertilizers, biofertilizers, Mushrooms and sustainable animal feed.
- Reuse process water and minimize energy use within facilities.
- Maintain strict quality control to ensure products meet agricultural and environmental safety standards.

**Pillar 3 – Resource Efficiency and Value Retention**

**Implementation Areas:**

- Maximize nutrient recovery in fertilizers, feed, and mushroom production to deliver the highest agricultural and nutritional value.
- Continuously improve processing methods to increase output yield from each waste stream.
- Reuse or recycle any secondary by-products within Baramouda's production cycle.

**Pillar 4 – Regenerative Agriculture Support**

**Implementation Areas:**

- Provide farmers with products that improve soil structure, enhance water retention, and restore degraded land.

- Train farmers in sustainable agricultural practices and the correct application of Baramouda products.
- Work with agricultural cooperatives to scale the benefits of regenerative farming.

**Pillar 5 – Digital Tracking & Transparent Reporting**

**Implementation Areas:**

- Record all waste collection, processing, and distribution data in Baramouda's digital waste management platform.
- Generate verified impact reports showing waste diverted, $CO_2$ emissions avoided, water saved, and agricultural land improved.
- Share annual sustainability reports publicly to maintain accountability.

**Pillar 6 – Innovation in Waste Valorization**

**Implementation Areas:**

- Invest in R&D to develop new uses for agricultural residues and industrial by-products.
- Pilot innovative food products, such as mushroom cultivation from coffee waste, for both local and export markets.
- Collaborate with research institutions and universities on advanced waste processing and food safety technologies.

**Pillar 7 – Partnerships for Circular Growth**

**Implementation Areas:**

- Build long-term partnerships with suppliers, customers, government agencies and partners to expand waste recovery programs.
- Advocate for circular economy policies and incentives in Egypt and the region.
- Share expertise with partners to encourage broader adoption of waste-to-resource solutions.

## 5- Roles & Responsibilities

The successful implementation of Baramouda's Circular Economy & Resource Management Policy depends on clear responsibilities shared across all levels of the organization and among our partners.

- **Management**
    - Lead the integration of circular economy principles into all operational and strategic decisions.

    - Allocate resources, infrastructure, and partnerships needed to achieve zero-waste-to-landfill goals.
    - Approve and oversee annual circular economy performance reviews and impact reporting.
- **Operations Team**
    - Manage the collection, transport, and storage of organic waste from farms, factories, restaurants, coffee shops, and other partners.
    - Ensure waste handling follows segregation and quality guidelines to support efficient processing.
    - Operate processing facilities to produce organic fertilizers, biofertilizers, sustainable animal feed, and mushrooms in compliance with quality and safety standards.
- **Production & Quality Control**
    - Maintain strict quality checks for all finished products, ensuring compliance with agricultural, environmental, and food safety regulations.
    - Monitor production efficiency and resource usage, including energy and water consumption.
- **Data & Reporting**
    - Record all waste collection, processing, and product distribution data in the digital waste management platform.
    - Generate and share verified impact reports detailing waste diverted, emissions avoided, water saved, and land improved.
- **R&D Team**
    - Research and develop new methods for waste valorization, including innovative fertilizer blends, improved feed formulations, and mushroom cultivation processes.
    - Test and evaluate new product concepts for environmental and market performance.
- **All Employees**
    - Follow waste handling, safety, and product quality procedures.

- Support waste segregation at source and resource efficiency practices.
- Report any operational issues, safety concerns, or improvement opportunities to supervisors.

- **Partners & Suppliers**
  - Comply with Baramouda's waste quality, delivery, and sustainability requirements.
  - Cooperate in waste segregation and timely collection to ensure efficiency in processing.

## 6-Monitoring, Evaluation & Reporting

Baramouda measures the performance of its circular economy model through continuous monitoring, regular evaluations, and transparent reporting. This ensures that our zero-waste-to-landfill commitment is maintained, our operations remain efficient, and our environmental and social impact is measurable and verifiable.

**1. Monitoring**

- Track waste collection volumes from all sources, including farms, factories, restaurants, coffee shops, and agri-industrial partners.
- Monitor production output of organic fertilizers, biofertilizers, sustainable animal feed, and mushrooms.
- Record operational resource usage, including water and energy consumption.
- Maintain quality and safety records for all finished products.

**2. Evaluation**

- Review circular economy performance data quarterly to identify trends, opportunities, and challenges.
- Assess waste diversion rates, resource recovery efficiency, and greenhouse gas emissions avoided.
- Evaluate the effectiveness of partnerships and collection networks in expanding waste recovery.
- Use feedback from customers, farmers, and partners to improve processes and product performance.

**3. Reporting**

- Generate impact reports using data from Baramouda's digital waste management platform.
- Publish annual sustainability reports that include waste diverted, resources recovered, $CO_2$ emissions avoided, water saved, and hectares of land improved.
- Provide partners with tailored reports on the environmental and economic impact of their waste contributions.
- Communicate key achievements and updates on Baramouda's website and through stakeholder engagement activities.

## 7- Review & Update Cycle

Baramouda is committed to keeping this policy relevant, practical, and aligned with both our operational realities and global best practices in the circular economy.

- **Annual Review**: Management will conduct a full review of this policy once every 12 months, assessing progress against our zero-waste-to-landfill target, resource recovery rates, product performance, and impact reporting outcomes.
- **Mid-Cycle Updates**: If new regulations, technologies, or significant operational changes occur, the policy will be updated immediately rather than waiting for the annual review.
- **Employee & Partner Input**: Feedback from employees, farmers, factories, and other stakeholders will be actively sought to improve the policy and its implementation.
- **Publication of Updates**: All revisions will be communicated to employees, partners, and stakeholders, and the updated policy will be published on Baramouda's website with a clear version history.

## 8- Alignment with International Standards

Baramouda's circular economy practices are guided by internationally recognized frameworks and standards to ensure credibility and readiness for global market engagement.

We are **certified** in:

- **ISO 14001 – Environmental Management Systems**: Demonstrating our systematic approach to reducing environmental impact and improving resource efficiency.
- **ISO 9001 – Quality Management Systems**: Ensuring consistent quality, safety, and customer satisfaction in all products and services.

We also align with:

- **United Nations Sustainable Development Goals (SDGs)**, specifically:
    - **SDG 2** – Zero Hunger (through sustainable food production and soil regeneration).
    - **SDG 6** – Clean Water and Sanitation (through water-saving agricultural inputs).
    - **SDG 12** – Responsible Consumption and Production (through waste reduction and resource recovery).
    - **SDG 13** – Climate Action (through greenhouse gas reduction).
    - **SDG 15** – Life on Land (through ecosystem restoration).
- **Egyptian Environmental Affairs Agency (EEAA) Regulations** – Full compliance with national environmental laws and operational permits.

At Baramouda, our circular economy model is not an addition to our business,it is the foundation of everything we do. By capturing organic waste at its source, transforming it into valuable agricultural and food products, and returning it to the economy, we are closing the loop in a way that benefits farmers, communities, and the planet.

We measure success not just by the tons of waste diverted from landfills, but by the **soils restored, water saved, greenhouse gases avoided, and livelihoods improved**. Through innovation, partnerships, and transparent reporting, we are committed to expanding our impact across Egypt and into international markets.

This policy is our public commitment to keep resources in productive use, regenerate natural systems, and lead the transformation toward a truly circular economy in the agricultural and food sectors.