

## Passive Paper Mill Project

### Grant Proposal: Innovation & Research Foundation for Textile Waste in Portuguese Arts & Crafts

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#### 1. Executive Summary

This proposal outlines the creation of a non-profit foundation that will serve as an innovation and research hub dedicated to exploring ways to utilize textile waste within Portuguese Heritage Arts & Crafts. The Foundation will combine cutting-edge sustainability practices with traditional craftsmanship to create a model for circular cultural production.

#### 2. Background & Rationale

The fashion and textile industry generates significant waste streams, while many heritage craft traditions in Portugal face risks of decline due to industrialization and lack of innovation pathways. By bridging these two challenges, the Foundation will provide a dual solution: valorizing textile waste and preserving Portuguese heritage crafts through experimentation, education, and sustainable economic models.

The project will also demonstrate environmental leadership by renovating a 750m<sup>2</sup> facility to Passive Building standards, achieving ultra-low energy demand and reducing operational emissions by over 70% compared to conventional buildings. The surrounding 3,200m<sup>2</sup> land will be regenerated into a pollinator-friendly landscape, vegetable garden, and living heritage farm, integrating Miranda donkeys, Cachena cows, and native Portuguese chicken breeds.

#### 3. Objectives

- Establish an R&D hub to explore textile waste applications in heritage crafts.
- Create a Passive Building demonstration site for cultural infrastructure.
- Preserve Portuguese heritage breeds and integrate them into a regenerative landscape.
- Deliver workshops, residencies, and public programs to foster education and community engagement.
- Contribute to the circular economy by piloting new models of sustainable craft production.

#### 4. Project Plan

Phase 1: Acquisition and design (Year 1)

Phase 2: Passive Building renovation and landscape regeneration (Year 1-2)

Phase 3: Studio setup and equipment installation (Year 2)

Phase 4: Program launch, residencies, and workshops (Year 2 onwards)

## 5. Budget

Startup Costs: €1,800,000

Breakdown:

- Property acquisition: €450,000
- Passive Building renovation (750m<sup>2</sup>): €1,000,000
- Studio equipment: €100,000
- Garden & livestock setup: €100,000
- Contingency: €150,000

Annual Operating Costs: €245,000

Including:

- Staff (4 FTE): €147,000
- Animal & garden upkeep: €25,000
- Property & equipment maintenance: €35,000
- Programs & activities: €38,000

Capital Depreciation:

- €120,000 annually (10-year straight-line)

Energy Savings:

- €20,000 annually (reduced utilities and maintenance via Passive Building systems).

## 6. Expected Outcomes

The Foundation will deliver:

- A world-class demonstration site for textile waste innovation and cultural sustainability.
- Significant carbon reduction through Passive Building standards.
- Regeneration of native biodiversity and preservation of Portuguese heritage breeds.
- A replicable model for circular economy approaches in heritage arts & crafts.

## 7. Conclusion

The proposed project integrates sustainable building, regenerative land use, and cultural preservation into a unified vision. With the requested funding, the Foundation will pioneer new ways of connecting tradition, innovation, and ecological responsibility, positioning Portugal as a global leader in circular cultural heritage initiatives, while at the same time, creating jobs and training programs for the community.