## SUMMARY OF THE PROJECT IN DESIGN \* (\*)

## ESG Brands<sup>™</sup>: Banana plant-based economic revitalization to mitigate climate change, bring back a natural fiber raw mater

COU	NTRY(IES)
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Y STRATEGY?	
PRELIMINARY CLASSIFICATION ENVIRONMENTAL AND SOCIAL IMPACT	
IDB Lab	LOCAL COUNTERPART AND
US 600 000	COFINANCING
	COUI Guate Y STRATEGY? CATION ENVIRONMENTAL IDB Lab US 600.000

## DESCRIPTION

The problem The fashion, textile, and materials industry grapples with systemic challenges rooted in greenhouse gas emissions tied to raw material choices and availability, coupled with issues in employment structures. Addressing these challenges not only aligns with the climate goals outlined in the Paris Agreement but also carries profound social implications, championing sustainable employment practices. Urgency is heightened by the looming threat of climate change, expected to usher in socio-economic repercussions like heatwaves, rising sea levels, and ecosystem damage. To proactively combat these issues, the industry is increasingly turning to agri-residues for alternative fibers, forging a sustainable solution. This deliberate shift away from conventional, environmentally taxing fiber sources reflects the sector's commitment to mitigating its climate impact and embracing a more eco-friendly, circular approach to production. This transformative initiative not only empowers the industry to lessen its carbon footprint but also signifies a pivotal step toward positiveenvironmental and social change.

The solution ESG Brands envisions a transformative approach that integrates the underutilized banana plant waste from Guatemala's agro-industrial sector into the textile industry's supply chain. By utilizing ESG's state-of-the-art processing technology, ESG Brands aims to create a circular and sustainable model, turning what was once considered waste into valuable resources for the textile industry and ensuring carbon is kept in circulation longer, no resources are wasted, and potable water is a co-product.

What makes this solution innovative is its multifaceted impact. Firstly, it tackles the environmental issues associated with traditional fiber production by repurposing agricultural waste, contributing to a more sustainable and circular approach following a proprietary process leveraging the 12 principles of green chemistry and requiring no wastewater treatment plants like other technologies or textile-fiber companies. Secondly, the utilization of advanced processing technology enhances efficiency, making the solution economically viable and scalable. This innovative model not only addresses environmental concerns but also fosters economic growth, job creation, and the establishment of sustainable supply chains, marking a significant departure from conventional practices in both the textile and agro-industrial sectors.

<sup>\*</sup>The information mentioned in this document is indicative and may be altered throughout the project cycle prior to approval. This document does not guarantee approval of the project.

<sup>\*\*</sup>The IDB categorizes all projects into one of six E/S impact categories. Category A projects are those with the most significant and mostly permanent E/S impacts, category B those that cause mostly local and short-term impacts, and category C those with minimal or no negative impacts. A fourth category, FI-1 (high risk) Financial Intermediary (FI)'s portfolio includes exposure to business activities with potential significant adverse environmental or social risks or impacts that are diverse, mostly irreversible or unprecedented, FI-2 (medium risk) FI's portfolio consists of business activities that have potential limited adverse environmental or social risks or impacts. FI-3 (low risk) FI's portfolio consists of financial exposure to business activities that predominantly have minimal or no adverse environmental and social impacts.

ESG Brands possesses a distinctive competitive advantage in the meticulous conversion of bast fiber into cottonized fiber. Unlike prevalent natural and bio-synthetic fibers that negatively contribute to environmental impacts, and hinder human health, ESG Brands approach fiber manufacturing surgically and gently to cottonize bast fibers, achieving results that are 70% faster, 75% cheaper, and significantly participating in assisting brands to meet their sustainability targets.

**The beneficiaries** By repurposing banana waste into fiber and the support of IDB and other catalyzing investors, ESG Brands will begin a historical journey to divert 10% of the cotton volume to banana fiber, reducing greenhouse gas emissions by 1.24 giga tons annually, and diverting 200 billion gallons of water (an amount equivalent to the world's largest lake) year over year. This effort addresses a USD\$600 billion global textile problem, empowering public-facing brands to achieve climate targets and contributing to global initiatives combating climate change, ensuring clean drinking water, and fostering economic opportunities and sustainability across diverse communities.

ESG Brands' product aligns with critical targets for sustainability, economics, and performance, boasting lower environmental impact, cost competitiveness comparable to organic cotton, and superior performance attributes. This innovation is facilitated by a tunable technology, enhancing its adaptability.

The partner ESG Brands stands at the forefront of sustainable innovation and manufacturing by transforming banana plant waste into high-quality textile-grade fibers for the apparel and fashion industry. Their commitment lies in efficiently converting a percentage of perennial banana plant waste into textiles and water, addressing both environmental concerns and fostering economic and social growth in the

regions where they operate.

The IDB Lab contribution will be up to US\$600,000, under the contingent recovery modality from CTF funds (core funds managed by IDB Lab through the GreenHub Facility).

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