GEF-8 REQUEST FOR CEO CHILD ENDORSEMENT/APPROVAL

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General Child Project Information

Child Project Title	
Eliminating hazardous chemicals from supply chains in Ecuador	
Region Ecuador	GEF Project ID 11175
Country(ies) Ecuador	Type of Project FSP
GEF Agency(ies) UNDP	GEF Agency Project ID 9594
Project Executing Entity(s) Ministerio de Ambiente, Agua y Transición Ecológica (MAATE)	Project Executing Type Government
GEF Focal Area (s) Multi Focal Area	Submission Date 6/26/2024
Type of Trust Fund GET	Project Duration (Months) 72
GEF Project Grant: (a) 5,565,596.00	Agency Fee(s) Grant: (b) 500,904.00
PPG Amount: (c) 150,000.00	PPG Agency Fee(s): (d) 13,500.00
Total GEF Financing: (a+b+c+d) 6230000	Total Co-financing 46,598,759.00
Project Sector (CCM Only)	

Rio Markers

Climate Change Mitigation	Climate Change Adaptation	Biodiversity	Land Degradation
Significant Objective 1	No Contribution 0	No Contribution 0	No Contribution 0

Project Summary

Provide a brief summary description of the project, to offer a snapshot of what is being proposed. The summary should include: (i) what is the problem and issues to be addressed? ii) as a child project under a program, explain how the description fits in the broader context of the specific program; (iii) what are the project objectives, and if the project is intended to be transformative, how will this be achieved? and (iv) what are the GEBs and/or adaptation benefits, and other key expected results. (max. 250 words, approximately 1/2 page)

The construction and textile sectors in Ecuador use a considerable amount of hazardous chemicals in their production lines. Construction waste in Ecuador represents 13% of the total solid waste generated, meanwhile, in the textile production process, there are several hazardous wastes according to each stage of the process, such as treatment sludge, used mineral oils, contaminated containers, packaging material waste and fly ashes.

Under this context, the main objective of this child project is to promote transformation change in construction (bricks, bamboo, and other construction materials and waste) and fashion (cotton and abaca natural fibers) supply chains by replacing resource-intensive chemical processes and materials with sustainable alternatives and by creating circular and transparent supply chains by eliminating/reducing these negative chemical impacts into the environment in Ecuador.

For the construction sector this child project will focus, specifically on bricks, bamboo, and other main construction supply chains, while for the fashion sector, namely the textile industry, it will concentrate on the vegetable fiber value chains produced from cotton and abaca plants. Both supply chain interventions will concentrate on the best suited producing territories at the national level.

This Child Project will be transformative and innovative by fully responding to and reflecting the four levers identified by the GEF under the *Elimination of Hazardous Chemicals from Supply Chains Integrated Program* (IP), i.e.: financial leverage, governance and policy, innovation and learning, and multi-stakeholder dialogues, by replacing resource-intensive processes and materials with sustainable alternatives and creating and strengthening circular and transparent supply chains.

The project will provide GEBs by improving 85,902 ha, avoiding 1,017,209 MTCO2, reducing 1800 t of POPs containing products, reducing 31.52 gTEQ, and benefiting at least 79,860 women and 53,240 men, with a total of 133,100 beneficiaries.

Child Project Description Overview

Project Objective

Promote transformation change in construction (bricks, bamboo, and other construction materials and waste) and fashion (cotton and abaca natural fibers) supply chains by replacing resource-intensive chemical processes and materials with sustainable alternatives and by creating circular and transparent supply chains by eliminating/reducing these negative chemical impacts into the environment in Ecuador.

Project Components

1. Regenerative design and circular business models

Component Type	Trust Fund

Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
1,017,500.00	8,519,166.00

Outcome:

A. Innovative, regenerative products are available and designed using circular business models.

Output:

A.1 Policy environment enabled for design sustainability and circularity.
A.2 Strengthened capacity of public planners, corporations, producers, and academia using circular business models.

2. Innovative materials

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
1,271,830.00	10,648,581.00

Outcome:

B. Sustainably sourced, innovative, responsibly managed, recycled and recyclable materials, regenerative or nature-based where possible, are used in products (substituting non-renewable materials).

Output:

B.1 A more favorable environment is enabled for innovative materials and more sustainable inputs to substitute non-renewable materials.

3. Cleaner production

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
1,780,560.00	15,843,221.00

Outcome:

C. Production and manufacturing processes are transformed to require less water, energy and no hazardous chemicals; produce less pollution and waste; and design for zero waste.

Output:

C.1 National stakeholders strengthened to support sustainable reductions along the targeted supply chains.

4. Sustainable consumption

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
474,930.00	3,976,420.00

Outcome:

D. Markets for innovative products are created and behavior shifts favor longevity over unnecessary consumption.

Output:

D.1 Promoted change in consumer behavior towards better and less consumption.

5. Post-use and 9Rs

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
576,076.00	4,823,280.00

Outcome:

E. Reverse logistic processes are implemented which return products and materials back to manufacturers to reuse or recycle.

Output:

E.1 Awareness of project stakeholders raised on the management of industrial chemicals (POPs), related wastes and safer alternatives.
E.2 Knowledge management system for best practices and communications at national and global levels established.

M&E

Component Type	Trust Fund
Technical Assistance	GET
GEF Project Financing ($)	Co-financing ($)
166,500.00	1,394,045.00

Outcome:

F. Accountability and adaptive management is ensured to track and maximize program results.

Output:

F.1 Monitoring and Evaluation (M&E) and adaptive management applied.

Component Balances

Project Components	GEF Project Financing ($)	Co-financing ($)
1. Regenerative design and circular business models	1,017,500.00	8,519,166.00
2. Innovative materials	1,271,830.00	10,648,581.00
3. Cleaner production	1,780,560.00	15,843,221.00
4. Sustainable consumption	474,930.00	3,976,420.00
5. Post-use and 9Rs	576,076.00	4,823,280.00
M&E	166,500.00	1,394,045.00
Subtotal	**5,287,396.00**	**45,204,713.00**
Project Management Cost	278,200.00	1,394,046.00
Total Project Cost ($)	**5,565,596.00**	**46,598,759.00**

Please provide Justification

The PMC cost represents 5.2% of the total GEF grant, which is slightly higher than the 5% standard. The PMC will contribute to the assurance of adequate implementation of activities in the country, as well as the needed coordination with other Child projects and the Global Coordination Child Project. These figures were notified to the Government of Ecuador and MAATE (the EA) upon PFD and Child project approval. During the design phase, the EA, agency, and consultants, designed the budget based on the figures of the approved Child project.

CHILD PROJECT OUTLINE

A. PROJECT RATIONALE

Describe the current situation: the global environmental problems and/or climate vulnerabilities that the project will address, the key elements of the system, and underlying drivers of environmental change in the project context, such as population growth, economic development, climate change, sociocultural and political factors, including conflicts, or technological changes. Since this is a child project under a program, please include an explanation of how the context fits within the specific program agenda. Describe the objective of the project, and the justification for it. (Approximately 3-5 pages) see guidance here

The Republic of Ecuador is located on the north-west of South America, bordering Colombia and Peru, with 2,237 km of diverse coastline adjoining the Pacific Ocean and a population of 17,643 million inhabitants. Ecuador is one of seventeen megadiverse countries worldwide. Due to its location in the neotropics, a diverse range of ecosystems coexist, divisible into four main regions: the marine coast, Andean highlands, eastern Amazon, and Galapagos Islands. The main threat to biodiversity in Ecuador is deforestation driven by firewood harvest, urban expansion, petroleum exploration and exploitation, unsustainable agriculture, and mining.

The target sectors for this child project are the construction and the textile sectors. Even though both supply chains are not necessarily related, they have common activities that affect sustainability. The child project will stimulate innovations in new materials, technologies, and practices and in tandem will create markets and demand for new materials. For the construction sector, this child project will focus, specifically on bricks, bamboo, and other main construction products while for the fashion sector, in the textile industry, concentrating on the vegetable fiber value chains produced from cotton and abaca plants.

The current situation for construction sector:

The housing deficit for 2021 was 4.706.128 homes, mainly social-interest housing where the Government of Ecuador (GoE) can implement programs and projects to improve the housing deficit but including sustainability issues like the reduction or elimination of construction materials with harmful chemical inputs. Construction waste in Ecuador represents 13% of the total solid waste generated.

Traditionally, the construction sector has been predominantly male-dominated, with men occupying a majority of roles in construction (511,000 men). Women's participation has traditionally been extremely low in most construction occupations (10,000 women) because of the perceived nature of physical demanding work.

In 2021, a baseline of POPs in compounds was generated, specifically focusing on PFOAs, SCCP, PFHXs, among others, all present in the construction industries of interest for this project. This yielded remarkable results as well and showed that Ecuador imports more than 600.000 tons of products with PFHXs and more than 450.000 tons of products with PFOAs and PFAs annually. SCCPs were found in many products including rugs (1,226 tons/year) used in the construction sector. While PCBs were not monitored, it is highly possible they are present in many construction materials such as sealants and coatings.

Bricks are an essential construction material in Ecuador, of which 95% of the production is carried out by micro-artisanal enterprises. The annual production of bricks is over 40,000 tons per year. The main energy source is firewood, however, these operations also used rubber tires, plastics, and other forms of high-energy intensive waste to feed low-efficiency baking kilns. The use of firewood as fuel for bricks releases emissions to the environment of particles such as carbon monoxide (CO), benzene, formaldehyde, acrolein and polyclinic aromatic hydrocarbons, carbon dioxide (CO2), dioxins and furans. The use of other burning sources generates nitrous oxides (SOx), volatile organic compounds (VOCs), heavy metals (arsenic, cadmium, chromium, mercury, nickel, zinc, vanadium) and others, which impacts flora and fauna, damaging natural landscapes.

At the national level, 46 species of bamboo are registered in 600.026 hectares. The use of bamboo as a sustainable material in construction contributes to three avenues:

i. Environmental: The bamboo cane captures 4 to 6 times more carbon than trees, playing an important role in mitigating climate change. It helps the regeneration of soils and soil retention because it prevents erosion due to rains and floods, avoids landslides, and stores water in its culms which guarantees the provision of moisture to the soil even in dry seasons,

ii. Economic: It allows low-income families to use this material to build their own homes, and

iii. Social: Transfer of skills and contributes to addressing the country's housing deficit.

Other construction materials and waste which generate a wide variety of hazardous wastes include mineral oils; asphalt waste with a high tar content; waste from the extraction and separation of minerals (tailings and leachates containing cyanide, mercury, arsenic or possessing corrosive characteristics); mineral washing and cleaning waste containing cyanide residues, mercury, arsenic; solid waste such as debris and packaging plastic materials contaminated with hazardous materials; sludge from various sources; used tires or parts thereof; waste inks, paints, among other types of waste.

There are other materials and inputs containing hazardous chemicals to be considered within the framework of this project that can affect human health, including but not limited to paints, enamels, sealants, coatings, and coating additives. Insulating materials are also widely used in the construction industry that have the presence of hazardous chemicals such as polybrominated diphenyl ethers (PBDEs), brominated flame retardants (BFRs). These substances are widely used in building materials (electrical wires, insulation, and structural elements) that require the fire-protective features of these chemicals.

Other products present in the construction sector have lead content, such as lead paint and the use of raw glass based on lead oxide, which is also a global priority, considering that lead is a toxic metal of widespread use and causes environmental pollution and health problems. Also, asbestos is still used in different applications due to its resistance to heat, degradation and corrosion.

The current situation for the fashion sector:

The Ecuadorian textile industry manufactures products from all kinds of fibres: cotton, polyester, nylon, acrylics, and silk, with an average production of 30,000 tons/year.

From the analysis carried out for the textile sector within the framework of the PPG Phase, the following aspects were identified:

i. Chemicals are used in the textile industry for their water, stain, and oil repellent properties. Textile products where PFAS have been identified are fashion apparel, uniforms, sportswear, outdoor items, footwear, carpets and rugs, backpacks, swimwear, and upholstery,

ii. an analysis carried out in 2021, found that in Ecuador 131 substances and products are suspected of containing POPs such as fluorinated compounds (PFAS), brominated compounds (PBDEs and HBCDD) and chlorinated compounds (SCCPs and PCCMs), of which, three types of fabrics were identified as containing PFOs, PFOAs, and PFAS, and

iii. in the textile production process, there are different hazardous waste according to each stage of the process.

Cotton (Gossypium hirsutum): Ecuador's design, clothing and fashion industry is mostly reliant on the import of cotton fiber. It includes a wide range of products such as: garments, carpet knotting, spinning with natural or synthetic fibers, finishes and chemical fibers. The imported cotton fibers are mixed with other chemicals, where the largest amount of waste is generated, especially hazardous substances use in pre-treatment processes in which a wide variety of toxic solutions and dyes are used.

The cotton value chain In Ecuador is determined by the following links:

i. Supply: where agricultural chemical pesticides are commonly used in cotton production to control pests such as moderately hazardous insecticides and mildly hazardous herbicides,

ii. Processing: In the collection centers, the handling and loading of polypropylene bags is done by hand or with mini tractors that often break them down and contribute to fiber contamination,

iii. Demand and final consumption.

However, in Ecuador, the average consumer prefers polycotton or polyester, because these fabrics provide greater warmth at lower prices. At the end of life, these types of garments become textile waste.

Abaca (Musa textilis): Ecuador is the second largest producer of abaca worldwide, sharing between 10 and 20% of the total. It is produced on large farms and production is increasingly mechanized. The abaca value chain is determined by the following steps:

i. Sowing: where the fertilizers used are urea and potassium muriate,

ii. Harvesting,

iii. Manufacturing: which includes the use of caustic treatment with sodium hydroxide for scouting, the use of sodium carbonate for bleaching, mechanical softening treatments, mild bleaching that needs active chlorine and sodium carbonate to achieve a dye of good characteristics, dyeing, as abaca is a cellulosic fiber.

Section 2.3 of the ProDoc, provides an overview of key relevant institutions that are relevant to the success of this child project, i.e.:

- The public agencies directly related to the implementation of this child project include key relevant ministries such as the Ministry of Production, Foreign Trade, Investment and Fisheries (MPCEIP), the Ministry of Environment, Water and Ecological Transition (MAATE) and the Ministry of Urban Development and Housing (MIDUVI).

- Several public agencies attached to these ministries, including the National Technical Committee on Pesticides (CTNP). This entity, made up by MAATE, the Phytosanitary and Animal Health Regulation and Control Agency (AGROCALIDAD) attached to the Ministry of Agriculture and Livestock (MAG), and the Agency for Sanitary Regulation, Control and Surveillance (ARCSA) attached to the Ministry of Public Health of Ecuador (MSP), has direct competence in the management of pesticides through the review of previous dossiers on the registration of Pesticides for Agricultural Use (PQUA) in the agronomic, ecotoxicological and toxicological fields, respectively. The National Customs Service of Ecuador (SENAE), the National Agricultural Research Institute (INIAP) and the National Institute of Popular and Solidarity Economy (IEPS).

- Decentralized Autonomous Municipal Governments (GADM), Decentralized Autonomous Provincial Governments (GADP), the Galapagos Governing Council (CGG) and the Agency for the Regulation and Control of Biosecurity and Quarantine for Galapagos (ABG).

- National associations of producers, such as the Association of Chemical Producers of Ecuador (APROQUE), the Chamber of the Agricultural Innovation and Technology Industry (INNOVAGRO), Crop Protection and Animal Health Industry Association (APCSA), National Corporation for Popular and Solidarity Finance (CONAFIPS), Ecuadorian Council for Sustainable Building (CEES), Positive Builders, International Bamboo and Rattan Network (INBAR), and the Export and Investment Promotion Corporation of Ecuador (CORPEI).

- College of Architects of Ecuador Pichincha (CAE-P). A dynamic, critical, independent, and inclusive guild that convenes, supports, and serves professionals; defends and promotes architecture as a discipline. It ensures the quality of architectural work and actively influences with proposals for the development of cities.

- Academia. They include the following universities: Northen Technical University (UTN), University of Azuay (UDA), Technical University of Manabi, and the National Polytechnic Schill (EPN).

Ecuador has also a comprehensive legal and regulatory framework to address the adverse environmental impacts of both supply chains which defines obligations and responsibilities in terms of clean production and the proper management of waste and hazardous chemicals and processes. However, ensuring social and environmental compliance from informal manufacturers remains a challenge. This context is fully developed, for both supply chains, in Sub-section 2.3.2 *Legal and Regulatory Framework associated with the Construction and Textile Sectors* of the Project Document.

Ecuador also has several ongoing initiatives to integrate environmental awareness in the supply chain of commercially driven markets in both sectors. These could be 'engines' that drive cutting-edge and environmentally friendly production practices for this child project with a log-term vision, such as the Ecuador Competes Initiative, the Circular Economy White Paper, and others aligned with the overall objective of this child project.

From the gender perspective, this child project recognizes the gender dimensions of hazardous chemicals use and differentiated exposure risks in both industries. Construction activities in Ecuador, as in many countries in Latin America, is viewed as a masculine or male dominated activity which is predominantly carried out by adults, however, there is a need to consider other vulnerable groups as well as gender since both sectors also rely heavily on migrant, rural, youth, illegal, indigenous peoples and informal labor, with high risks of intersectionality creating extreme vulnerabilities. The textile industry, traditionally, has employed a significant number of women, especially in roles such as garment workers, seamstresses, and textile workers. This trend has been observed globally, with women often comprising a large portion of the workforce in textile factories. The small-scale, informal textile sector hires women based on contract work or through payment in kind, with a lack of social security and often in deplorable working conditions.

Objective of the child project:

The development challenge is to overcome a sectorial context that encompasses a series of economic, social, technological, and political gaps that delay the national capacity in Ecuador to address the significant environmental impacts of the construction and textile sectors, specifically, to eliminate harmful/hazardous chemicals and toxic waste of highest impact, under an environmentally sound management approach.

Under this consideration, the main objective of this Full-Size Project is to promote transformation change in construction (bricks, bamboo, and other construction materials and waste) and fashion (cotton and abaca natural fibers) supply chains by replacing resource-intensive chemical processes and materials with sustainable alternatives and by creating circular and transparent supply chains by eliminating/reducing these negative chemical impacts into the environment in Ecuador.

Key barriers and root causes that need to be addressed by the child project:

There is a group of barriers to systemic transformation in both sectors in three different levels of causes for eliminating hazardous chemicals from both supply chains, within the framework of national and international guidelines on chemical substances and hazardous waste management, i.e.: immediate causes, underlying causes and structural/root causes.

The following four immediate causes have been identified at the PPG stage as key drivers of global environmental degradation that need to be tackled by this child project for both supply chains:

- Limited enforcement of the existing policies and regulations for the sound elimination of hazardous chemicals from supply chains.

- Need to enhance financial opportunities to create green supply chains.

- Essential need to develop innovative, cost-efficient, materials and processes.

- Lack of multi-sectorial communication and outreach information of sustainable alternatives.

The ToC analysis identified the underlying drivers and their root causes of environmental change for the *construction* sector:

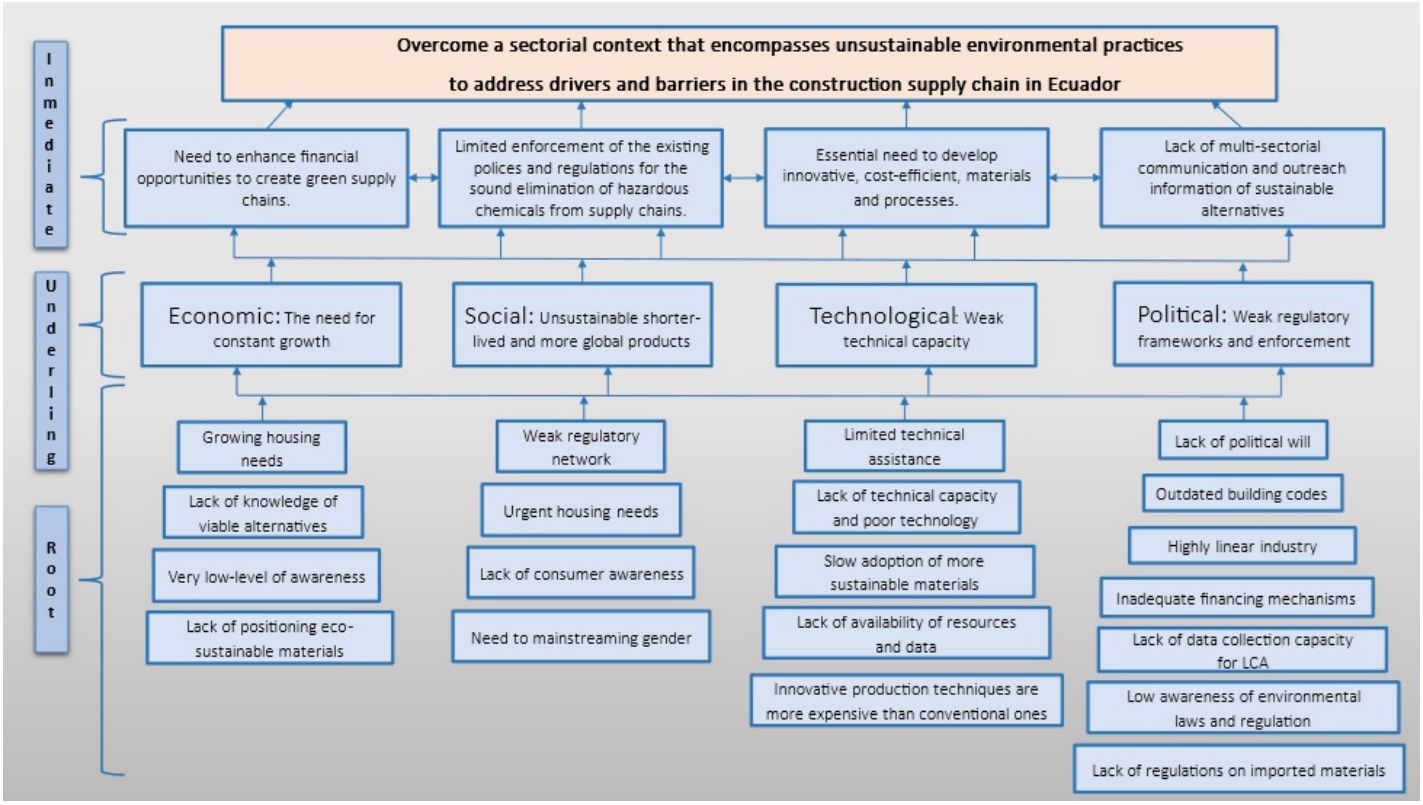
From the *economic* driver: The need for constant and consistent growth, which fuels increased consumption rates, due to the following root causes: growing needs for housing and other types of buildings, lack of knowledge of viable alternatives, very low-level of awareness and information outreach, and the lack of positioning of eco-sustainable materials such as bamboo compared to traditional materials.

From the *social* driver: The consumption narrative from industry, paired with lack of consumer awareness, due to the following root causes: a weak regulatory network, urgent housing needs, lack of consumer awareness, and the need for gender mainstreaming.

From the *technological* driver: a weak technical capacity, due to the following root causes: limited technical assistance, the lack of technical capacity and poor technology, slow adoption of more sustainable materials, the lack of availability of resources and data, and innovative production techniques are more expensive than conventional ones.

From the *political* driver the underlying cause is the weak regulatory framework and enforcement, due to the following root causes: the lack of political will, outdated building codes, highly linear industry, inadequate financing mechanisms, the lack of regulations on imported building materials, the lack of data collection capacity for Life Cycle Assessments, and the low awareness of environmental laws and regulations.

The following graph summarizes the problem tree for the construction sector:



The ToC analysis identified the underlying drivers and their root causes of environmental change for the *textile* sector (for a detailed presentation of the ToC, please refer to ProDoc 3.2 Theory of Change):

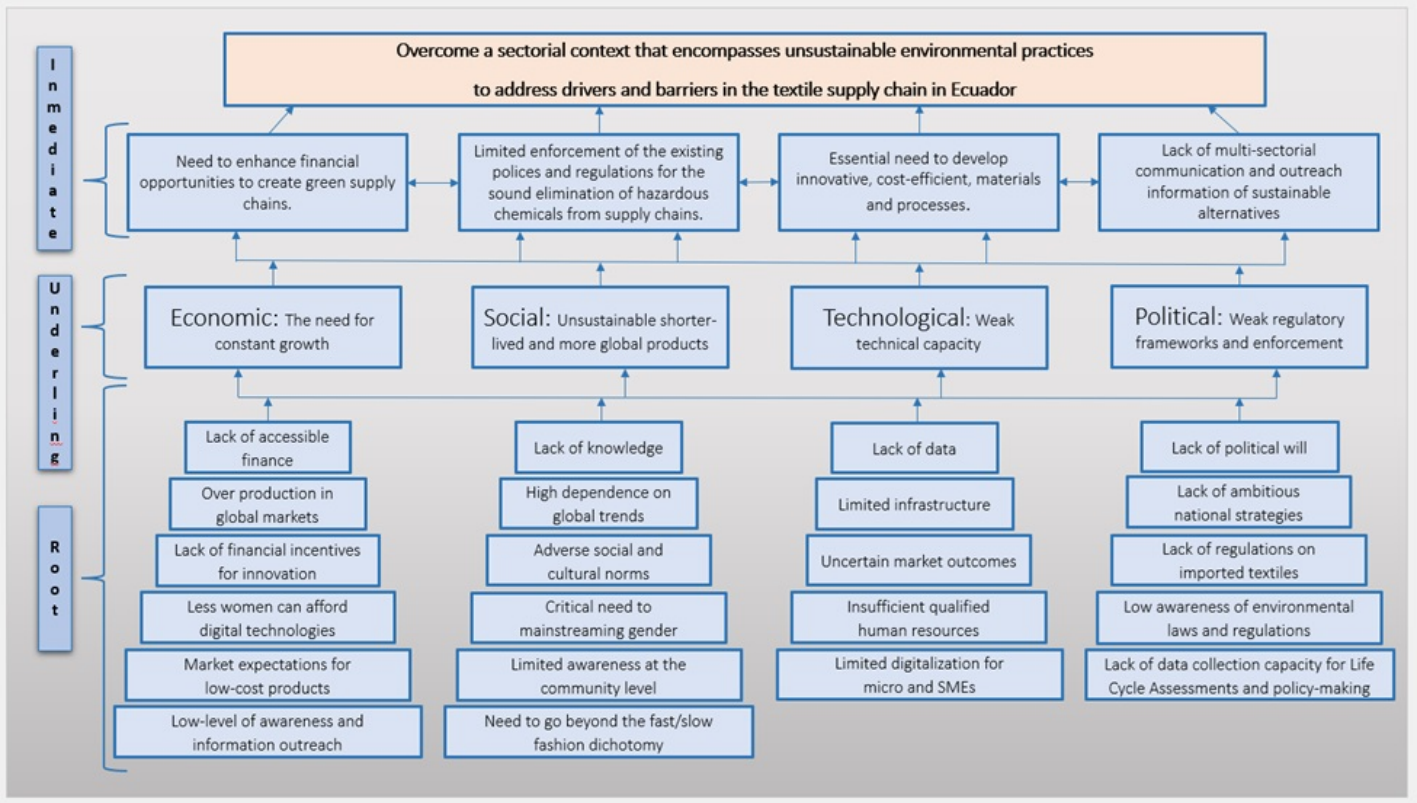
From the *economic* driver: The need for constant and consistent growth, which fuels increased consumption rates, due to the following root causes: the lack of accessible finance, over production in global markets, the lack of financial incentives for innovation, women are disadvantaged in terms of access to digital technologies, market expectations for low-cost products, the low-level of awareness and information outreach.

From the *social* driver: The phenomenon for unsustainable shorter-lived and more global products, due to the following root causes: a lack of knowledge, high dependence on global trends, adverse social and cultural norms, critical need to mainstreaming gender, limited awareness at the community level, and the need to go beyond the fast/slow fashion dichotomy.

From the *technological* driver: a weak technical capacity, due to the following root causes: the lack of data, limited infrastructure, uncertain market outcomes, insufficient qualified human resources, and limited digitalization for micro and SMEs.

From the *political* driver the underlying cause is the weak regulatory framework and enforcement, due to the following root causes: the lack of political will, the lack of ambitious national strategies, the lack of regulations on imported textiles, low awareness of environmental laws and regulations, and the lack of data collection capacity for life cycle assessments and policy formulation.

The following graph summarizes the problem tree for the *textile* sector:



To achieve the planned outputs and outcomes of this FSP, it will be necessary to engage various stakeholders that will be critical to deliver on the GEBs, i.e.: national and sub-national authorities, mainly the Ministry of Environment, in partnership with the Ministry of Housing and the Ministry Production, Foreign Trade, Investment and Fisheries. These partners will be the responsible parties for the execution of this child project, together with regional and municipal governments, whose main interest is the achievement of the child project's overarching objective of development by carrying out the necessary implementation of national policies, under the mandate of the MEAs already ratified by Ecuador.

The implementation of this child project also requires the active participation of numerous and diverse allies such as private companies committed to becoming greener partners and are already engaged in the cotton, bamboo, and abaca markets, financial institutions, both private and state-driven financiers, universities actively performing research and development at the national level, NGOs that offer learning spaces and generate synergies with all actors in both supply chains as well as integrating gender equality, Gender-based Violence prevention, and socio-economic approaches.

There is a group of GEF-financed projects and other initiatives currently under implementation related to the development challenge this child project is also addressing, which could provide additional support to strengthen this institutional partnership approach in the Ecuadorian context. Thanks to the involvement of the same institutional partners in some of them, under the leadership of the Ministry

of Environment, it is expected that the achievement of the outcomes for this FSP will be of mutual benefit. Specifically, this FSP will ensure coordination and count on the capacity built and knowledge gathered from the concurrent projects that are already in progress.

The child project will build on lessons learned from previous projects in Ecuador. At the national level, there are other ongoing national projects that this project will cooperate with such as the National Program for the Environmentally Sound and Life-Cycle Management of Chemical Substances (PNGQ), the UNDP-led Violet Boots Initiative, the planetGOLD Global Program, and the Financing Agrochemical Reduction and Management in Ecuador (FARM). These are GEF-financed ongoing projects implemented by the UNDP Country Office in Ecuador that offer the opportunity for synergism with this child project in terms of knowledge management, lessons learned, capacity building materials, databases, proven technologies and market opportunities.

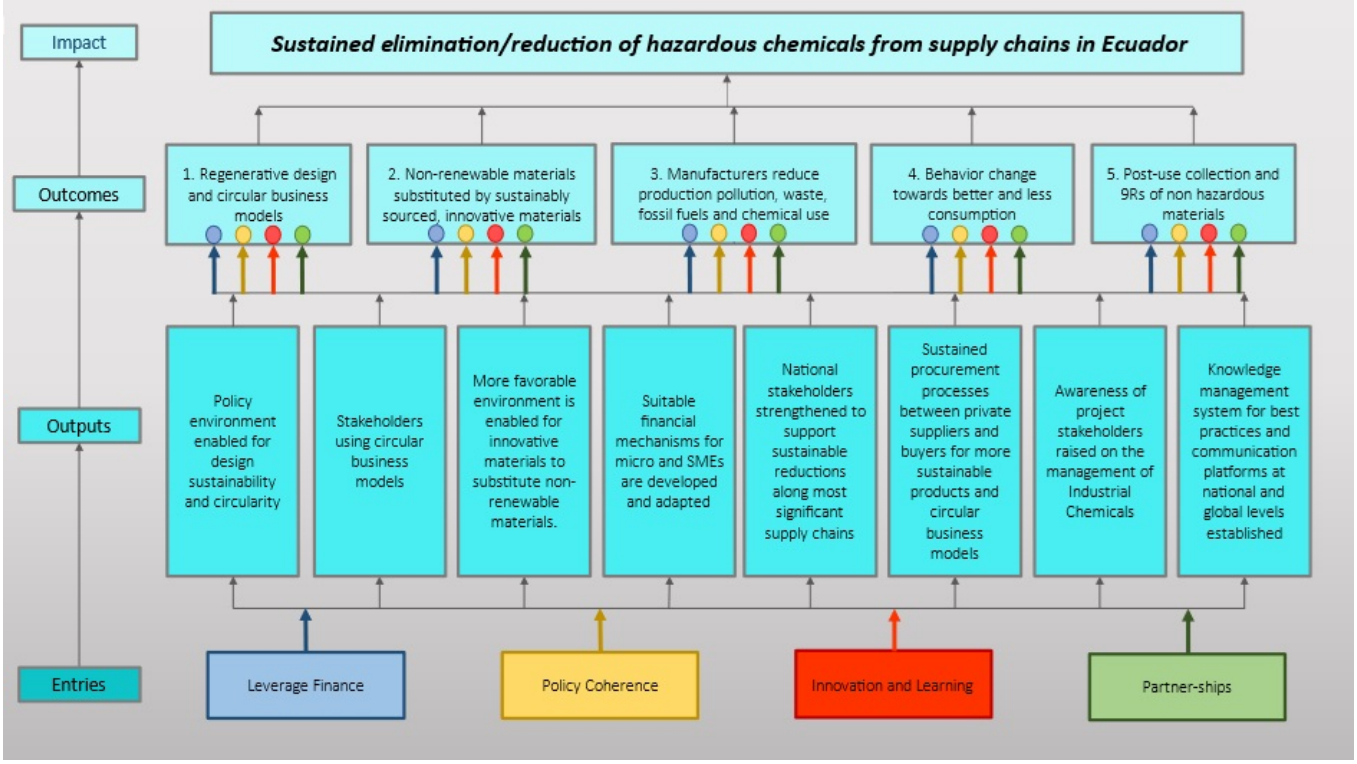
B. CHILD PROJECT DESCRIPTION

This section asks for a theory of change as part of a joined-up description of the project as a whole, including how it addresses priorities related to the specific program, and how it will benefit from the coordination platform. The project description is expected to cover the key elements of good project design in an integrated way. It is also expected to meet the GEF's policy requirements on gender, stakeholders, private sector, and knowledge management and learning (see section D). This section should be a narrative that reads like a joined-up story and not independent elements that answer the guiding questions contained in the guidance document. (Approximately 3-5 pages) see guidance here

The integrated approach proposed for the Ecuador child project fully responds to and reflects the four transformation levers identified by the GEF Integrated Programme (financial leverage, governance and policy, innovation and learning, and multi-stakeholder dialogues), to promote a transformation change in the construction and fashion industries by replacing resource-intensive processes and materials with sustainable alternatives and creating and strengthening circular and transparent supply chains, as shown in the Supply Chains Integrated Program's Theory of Change (ToC), through six components, i.e.:

- Regenerative design and circular business models
- Innovative materials
- Cleaner production
- Sustainable consumption
- Post use 9Rs, and
- Monitoring and Evaluation throughout the child project's implementation.

To improve the provisions to protect human health and the environment against the use of hazardous chemicals in both sectors; there are significant challenges that need to be faced to overcome the barriers mentioned above. As summarized from the Theory of Change analysis, the following Figure shows the alternative pathway and solutions, based on the entries proposed by the Global Integrated Programme:



These environmental benefits will be visible in both supply chains by:

a. Strengthening institutional capacities and regulatory framework to improve the appropriate management of chemicals during supply, storage, transport, use and export. The child project will also trigger alternative schemes for these industries to eliminate, reduce or replace chemicals that have adverse effects on the environment and health, with safe and cost-effective alternatives.

b. Stimulating market demand for alternative/renewable materials and products in both sectors.

c. Promoting best available techniques and best environmental practices for monitoring, preventing, and reducing emissions and releases of hazardous chemicals in key supply chains.

d. Enabling the implementation of circularity by manufacturers in the construction and textile sectors to promote responsible consumption to change from linear to circular systems, and

e. Supporting post-use and 9Rs reverse logistics together with knowledge management systems for best practice communication outreach at the national and global levels.

Component 1. Regenerative design and circular business models

The area of focus of Component 1 is to design sustainability and circularity into products before the material sourcing, manufacturing and production stages begin. This component tackles the first stage of the supply chain—regenerative design and business models—through a focus on promoting innovation and learning, leveraging finance, and multi-stakeholder dialogues and partnerships (throughout). Policy coherence should be included as appropriate, particularly in governance at national level.

The user´s needs are immersed into complex and interdependent environmental, social and economic systems. Both approaches, regenerative design and circular business models implies a product design which is suitable for people and takes into consideration its entire life cycle, minimizing the use of hazardous chemical substances, raw materials and energy consumption during the production stage as well as during the product´s lifetime.

Under this component, the child project will support Ecuador with policy and institutional actions to address the challenge of a "weak policy and regulations environment" through supporting capacity building -under a multi-stakeholder approach- to promote innovation and learning using circular business models to reduce or eliminate materials for the use of vegetable fibers (cotton and abaca) in the fashion industry and bricks, bamboo and other inputs in the construction sector.

Activities under this Component will be accomplished through the collaboration with various stakeholders, including public sector entities such as MAATE, MPCEIP, MIDUVI, MSP, MAG, Agrocalidad, and SENAE.

Partnerships, in the textile supply sector, will be also established with private sector organizations and civil society groups, including the International Organization of Bamboo and Rattan (INBAR), the Association of Chemical Producers of Ecuador (APROQUE), the Chamber of Textile Industries of Ecuador (AITE), the Corporation for the Promotion of Exports and Investments (CORPEI), INNOVAGRO, the Association of Community Women of Tosagua (AMUCOMT), and the National Chamber of Footwear (CALTU), among others.

Strategic alliances with private sector entities in the construction supply chain, under this Component, include:

- CEES: For the development of the first national certification for sustainable buildings and enhancement of projects and initiatives within the sustainable construction industry.
- CAE-P: This Association of Architects will provide guidance on sustainable materials for architectural projects and the formulation of national and local regulations.
- MENTEFACTURA: Offering guidance for the development of policies, plans, programs, and projects focused on energy efficiency in the construction sector and addressing climate change.

For leveraging financing, the child project design will emphasize, in Component 2, under Activity B.1.ii, a holistic framework to leverage financing of innovation, as well as in conjunction with Component 5, Activity E.2.i, the creation of multi-stakeholder dialogues to disseminate knowledge and best practices implemented in this component regarding the designing, implementation, and validation of innovative circular business models in both sectors. From a gender perspective, the activities include improving access for vulnerable groups and strengthening the academic sector while also fostering collaboration with the business sector to enhance the quality of life for the vulnerable groups identified in both value chains.

From a gender perspective, the activities include improving access for vulnerable groups and strengthening the academic sector while also fostering collaboration with the business sector to enhance the quality of life for the vulnerable groups identified in both value chains, in accordance with the lines of action #1 and #2 of the Gender Action Plan (Annex 10).

The following outcome and two outputs are proposed to trigger the desirable change in the current paradigm for both supply chains:

Outcome A of Component 1 is: *"Innovative, regenerative products are available and designed using circular business models"*.

Historically, the construction sector in Ecuador has a poor record in incorporating changes in processes, materials and techniques. Opportunities that emerge in the context of this child Project in the construction sector are positive because sustainable innovations will last for decades. For this outcome it is important to note the use of low-impact alternative materials, especially with focus on the development of new materials from industrial by-products and waste and the increase in the use of locally available materials, which in turn boosts the national economy.

For the textile sector, incentives for innovative materials, together with appropriate regulations, can make market behaviour more sustainable and more able to foster less-polluting chemical practices in the cotton and abaca value chains.

Output A.1: Policy environment enabled for design sustainability and circularity.

This output will promote institutional policy changes to support market adoption, barrier removal and efforts to mobilize financial resources in both sectors (Outcome B.1). A new policy package will incentivize the flow of innovative and alternative materials in both supply chains. At the same time, these fresh policies aim to regulate the production and imports of unsustainable materials by reducing or eliminating their use, and to prevent their move to other supply chains.

This child project, under this output, also aims to establish policies and regulations that promote equal opportunities for emerging green jobs. It also seeks to encourage ongoing multi-stakeholder dialogue to facilitate a shift in the current paradigm.

To achieve output A.1, the following incremental activities will be undertaken:

The following incremental activities will be carried out to achieve Output A.1:

i. Enhancing national environmental policies and regulations (standards[1]1 and certifications[2]2) in the construction and textile value chains.

The assessment will propose, if needed, changes to regulations that limit circular practices and promote changes in existing national and territorial policies in Ecuador that can be modified through the lens of chemicals. This activity will implement and enhance strategies framed in the circular economy, focusing on the production of bricks, bamboo and key construction inputs in the construction sector while the textile sector will focus on cotton and abaca, including but not limited to:

For both sectors (summary):

- Import regulations.
- Public procurement standards.
- Extended Producer Responsibility (EPR) as a public policy to minimize environmental costs related to the production of goods along their lifecycle.
- Options for enhancing the transparency and traceability of chemicals.
- Antitrust barriers.

For construction supplies:

- Update waste management guidelines.
- Officialization of the PRTE INEN 061 (2R) 'Painting' regulation.
- Development of standards and regulations for the certification of sustainable buildings and structures.

For textile products:

- Policies and standards for the marketing of clothing.
- Regulations on fresh incentives for trade and production by the economy, industry and trade government bodies, among others.

ii. Enabling a <u>consistent regulatory environment</u> for the reduction and where feasible elimination of hazardous chemicals in the *construction* industry.

The standards that will be updated or developed during the implementation of the child project should be carried out together with the governing bodies of the State and the main stakeholders, in order to reflect their needs and expectations. To carry out this activity, the following actions will be developed:

- Analysis of chemical substances (industrial POPs, among others) used in the value chain of the construction sector, through the National Production Registry and imports registered in the country.

- Development an inventory of sources and uses of chemical substances (compound elements, mixtures, solutions or products with chemical composition) in the construction sector.

- Prioritization of substances based on the guidelines of the chemical conventions, hazards, exposure and warnings, analysis of the risk to health and the environment of the prioritized substances.

- Application of risk management measures through: the Globally Harmonized System, labeling, training, gradual reduction/elimination if applicable through public policy.

- Evaluation of alternatives to reduce and, when feasible, gradually eliminate dangerous chemical substances in the construction sector through a public policy.

- In the event that dangerous chemical substances are identified for elimination, the MAATE will prepare the due-diligence report and the corresponding import restriction resolution before MPCEIP and COMEX.

- Assessment of the viability of the construction market for the development of technical standards, certification of sustainable construction and the application of eco-labels for materials free of hazardous chemicals in bricks, bamboo, tiles, rice husk panels and paints.

- Promotion of access to national incentives for financing real estate projects, access to tax benefits, facilities for obtaining construction permits and urban planning benefits through a “National Certification of Sustainable Buildings”, as per Activity E.1.iv, of Component 5.

- Development of minimum standards for BAT and BEP. The standards should be developed together with the major players in the construction industry to reflect their needs and expectations, for example, by replacing the practice of using raw glass with lead oxide to provide shine and transparency in the artisanal production tiles with a frit that does not contain lead (Pilot intervention #2 of Table 8).

- Development of procurement standards for key sustainable innovative materials used in the construction of social housing, in close coordination with the Governing Body and CEES, as part of its ongoing Sustainable Construction Program.

- Development of eco-labels for materials free of hazardous chemicals in construction.

- Creation of inter-institutional agreements between the public sector and private builders to help reduce the country's current housing deficit, with social housing projects that can obtain a national certification of sustainable construction.

- Reforming and creating regulatory frameworks that integrate green chemistry in the production of innovative sustainable materials to improve the transparency and traceability of chemicals in the construction supply chain.

- Collaboration agreements and commitments with the artisanal sector of construction materials production to reduce the worst environmental practices and techniques that currently features in informal supply chain.

- The child project will promote a legal framework to facilitate financial mechanisms for the construction sector (artisanal brick makers, bamboo foresters, bamboo producers, rice and abaca farmers, among others) as well as for builders of eco-sustainable buildings.

In addition, and in line with components 2, 3 and 4, this activity will also consider:

- Transparency and traceability of the supply chain through the digitization of information.

iii. Enabling a coherent regulatory framework for the reduction and where feasible elimination of hazardous chemicals in the *textile industry*.

The standards that will be updated or developed during the implementation of the child project should be carried out together with the governing official agencies and the main stakeholders, in order to reflect their needs and expectations. To carry out this activity, the following actions will be developed:

- Analysis of chemical substances (industrial POPs, among others) used in the value chain of the textile sector, through the National Production Registry and imports registered in the country.

- Development of an inventory of sources and uses of chemical substances (compound elements, mixtures, solutions or products with chemical composition) in the sector.

- Prioritization of substances based on the guidelines of the chemical conventions, hazards, exposure and warnings, analysis of the risk to health and the environment of the prioritized substances.

- Application of risk management measures through: the Globally Harmonized System, labeling, training, gradual reduction/elimination if applicable through public policy.

- Evaluation of alternatives to reduce and, when feasible, gradually eliminate dangerous chemical substances in the construction sector through a public policy.

- In the event that dangerous chemical substances are identified for elimination, the MAATE will prepare the justifying report and the corresponding import restriction resolution before the MPCEIP and COMEX.

- Assessment of the feasibility in the textile market of the development of technical standards and eco-labeling of materials free of hazardous chemicals in cotton and abaca.

- Promote the development of sustainable public procurement with the State, in coordination with suppliers of key products, through a public policy.

- Reform and create a regulatory framework that integrates green chemistry into innovative sustainable materials to improve transparency and traceability of chemicals in the textile supply chain.

- The project will promote a legal framework for the registration of innovations, intellectual property and trademarks to facilitate financing for SMEs.

In addition, and in line with the justification of components 2, 3 and 4, this activity will also consider:

- Transparency and traceability of the supply chain through the digitization of information.

Output A.2 Strengthened capacity of public planners, corporations, producers, and academia using circular business models.

The child project has identified a group of stakeholders from the private sector and academia who will contribute to the development of innovative sustainable materials in both sectors. Within the framework of this

output, institutional strengthening will involve the participation of the public and private sectors and trade unions, to boost the transformation of the supply chains in the processing of renewable products.

During FSP implementation, the tradeoff between the achievement of global indicators for the reduction and, where feasible, the elimination of hazardous chemicals with economic development objectives, should be carefully assessed.

For the construction industry, the child project will focus on strengthening technical capacity in the artisanal brick sector, roof tiles, bamboo sector, production of materials based on vegetable fibers (rice husks) and the paint industry, since the construction industry is one of the industries that contributes most to the generation of UPOPs.

In the case of the textile industry, the child project will strengthen the technical capacity of cotton and abaca growers to improve their production techniques. It will also promote the implementation of BAT/BEP in the manufacturing segment, thereby reducing the use of hazardous chemicals such as PFOS, PFOAS, PFHXS, SCCPs, POPs, flame retardants, chromium (6+) and other substances of interest.

Activities under this output will also include agro ecological best practices for cotton and abaca (textiles) and bamboo (construction) crops, in order to reduce and, where feasible, eliminate the use of highly hazardous pesticides, and promote sustainable land management.

To achieve Output A.2, the following incremental activities will be undertaken:

i. Strengthening capacity building to key market stakeholders to promote innovation and learning in circularity in both sectors, by creating a national network of responsible producers.

This activity will provide proactive stakeholders with technical assistance for the implementation BAT/BEP on a commercial scale, considering the following aspects:

- Institutional strengthening: First, highly hazardous agrochemical pesticides used on cotton and abaca crops will be identified, and then a plan will be developed to introduce safer alternatives as biological control agents. This activity will be carried out in close coordination with the National Technical Committee on Pesticides, INIAP and the academia.

- Highly Hazardous Pesticide (HHPs) Reduction Plan: This plan will include the justification for reducing or, where feasible, eliminating highly hazardous chemical pesticides and an assessment of available disposal alternatives. Where alternatives are not available, limited field trials will be conducted to seek other disposal alternatives. In addition, in coordination with INIAP and the academia, tests will be developed for the use of biological control agents in cotton and abaca crops.

- Product Registration: In the event that the collection of information reveals the use of unregistered agricultural chemical pesticides, the Project Management Unit (PMU) will work in coordination with the Technical Committee on Pesticides to conduct a cost-benefit analysis to initiate their registration process.

- Development of guidelines to good agricultural practices and strengthening of technical assistance to farmers in pest management for cotton, abaca and bamboo crops, integrating gender equality approaches, aligned under Annex 10.

- Creation of strategic alliances with key stakeholders such as academia, CEES, among others, to strengthen current capacity and professional resources in laboratories for the analysis of chemical substances in construction materials and textile products.

- Design and implementation of a training program to strengthen national and local technical capacities through the development of supplier/buyer exchange knowledge management systems, both nationally and globally. The training will focus on knowledge of successful practices, standards and application techniques, allowing for the development of improvement opportunities to promote sustainability.

ii. Designing and implementing innovative circular business models in the *construction* value chain.

This activity aims to introduce a circular economy approach into business models by implementing BAT/BEP practices into processes to bring alternative products and technologies to commercial scale.

The following pilot interventions are considered:

- Artisanal production of lead-free roof tiles: Implement BAT/BEP practices and appropriate technologies in the production of roof tiles to eliminate the use of lead, reduce/eliminate UPOPs emissions and reduce CO2 emissions, in collaboration with the Environmental Commission of the Autonomous Government of Cuenca, the University of Cuenca and the Salesian University.

- Artisanal brick production: In tandem with the previous pilot intervention, to also implement BAT/BEP and appropriate technologies in brick production to reduce/eliminate UPOPs and CO2 emissions, in collaboration with the above stakeholders.

- Innovative Renewable Materials and Inputs for Construction: Integrate bamboo and rice husk as sustainable innovative alternative materials in construction projects in partnership with the territorial GADMs, the private company ANGUA and the International Bamboo Network (INBAR), among others.

In addition to the use of bamboo and rice husks, other building materials will be considered in the implementation of the pilot activities, such as the removal of asbestos from roofs. Following the publication of the PRTE INEN 061 (2R) 'Painting' regulation, the environmental management of paints containing more than 90 ppm of lead (hazardous waste) will be supported and the traceability of lead chromate pigment throughout the supply chain will be verified.

This activity will be aligned with activities B.1.iii of Component 2 and C.1.ii of Component 3 but will focus on regenerative design and circular economy business models to increase the added value of materials and products through innovation and learning, incorporating traceability of upstream production practices with reliable data.

iii. Designing and implementing innovative circular business models in the *abaca* and *cotton* value chains.

The child project will assist in the preparation, training and implementation of technical guidelines for the agricultural management of these crops, through the reduction and, where feasible, elimination of highly hazardous pesticides, as well as the reduction/elimination of UPOPs emissions, GHGs and other hazardous chemicals by considering the following pilot interventions:

For cotton:

- Mixed-color cotton: Repowering cotton production in coordination with the national government (AGROCALIDAD, MAATE, MSP, INIAP), private associations (AMUCOMT Women's Association), academia (Technical University of Manabí) and NGOs (Brazilian Cooperation Agency).

- Cotton and other fibers: Environmentally appropriate disposal of personal protective equipment with flame retardants used in industry and public services (Fire Department, Police, Army), including the development of disposal protocols in coordination with MAATE and management companies that have the corresponding environmental permits.

For other fibers:

- Other fibers (environmentally sound disposal): This involves the proper disposal of personal protective equipment (PPE) containing flame retardants (HBCDD) and perfluoro alkylated and polyfluoroalkylated substances (PFAS) used in various sectors, including public services such as firefighting, armed forces, police, and healthcare, where exposure to thermal and electrical emission sources is a concern.

  This initiative will include the development of regulations and disposal protocols in coordination with MAATE and other authorized environmental agencies. Depending on the specific sector utilizing the protective equipment, alternatives to flame retardant products will be explored, focusing on inherently flame-retardant materials such as wool or Kevlar (polyparaphenylene terephthalamide), which is commonly used in firefighters' helmets and military uniforms.

For abaca:

- Innova-abaca fashion: Inserting abaca fiber as an eco-alternative material for the manufacture of innovative fashion products, as well as a complementary element in conventional products such as shoes and bags. This action will be developed in partnership with the GADP Tungurahua and Santo Domingo de los Tsáchilas, the National Chamber of Footwear (CALTU), the National Polytechnics School, the Technical University of the North and the private company ANGUA.

  Innova-abaca packing: Incorporation of abaca fiber as an eco-alternative to replace the jute fiber, polypropylene and other sacks with abaca fiber bags for packaging agricultural, mining and other products. This action will be developed in partnership with the Association of Textile Industries of Ecuador (AITE), the Technical University of the North and private enterprises.

This activity will be aligned with activities B.1.iii of Component 2 and C.1.ii of Component 3 but will focus on regenerative design and circular economy business models to increase the added value of materials and products through innovation and learning, incorporating traceability of upstream production practices with reliable data.

Component 2. Innovative materials

The area of focus of Component 2 is to support and scale-up the use of sustainably sourced, innovative, responsibly managed, regenerative, nature-based and recycled/recyclable materials in products in the construction and fashion supply chains, specifically, an extensive adoption of innovative, safer, and sustainable production practices in these value chains.

As expected results, the child project proposes the gradual substitution of construction and textile materials and products containing hazardous chemical substances, for those without such substances. To achieve this, it will focus on the eco-design of products to eliminate or replace (with non-toxic) POPs and other chemical substances of concern. This will have a double effect: reducing chemical contamination and stimulating the development of new products or materials. From the gender perspective, the project will also search for new business opportunities for vulnerable groups through incubators and investment proposals.

From a gender perspective, the child project will also seek new business opportunities for vulnerable groups through technical assistance from local economic development units or agencies, , in accordance with the line of action #2 of the Gender Action Plan (Annex 10).

This component will primarily be led by MAATE, MPCEIP, and MIDUVI, in collaboration with the private sector, particularly small and medium enterprises (SMEs), cooperatives, and women's associations, financial institutions such as: BANECUADOR and CONAFIPS, among others.

The following outcome and output are proposed to trigger the desirable change in the current paradigm for both supply chains:

Outcome B of Component 2 is: *"Sustainably sourced, innovative, responsibly managed, recycled and recyclable materials, regenerative or nature-based where possible, are used in products (substituting non-renewable materials)".*

In the *construction* sector, viable proposals will be considered in partnership with the academia to develop innovative research leading to alternative materials with lower environmental impact. Similarly, strategic actions to stimulate investment and innovation will be supported in conjunction with the interest of the private and public sectors.

In the *textile* sector, several regions of Ecuador, such as Tungurahua, Imbabura and Pichincha, have the potential to influence an alternative path in the current processing of cotton and abaca, respectively. This outcome will build on these conditions to develop and promote an alternative and practical business opportunity for profitable options.

This outcome will strengthen the capacity of cotton and abaca crops through the implementation of best agricultural practices, the strengthening of technical assistance in pest management to reduce and, where feasible, eliminate highly hazardous pesticides, the promotion of gender equality and the improvement of the living conditions of farmers.

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Output B.1 A more favorable environment is enabled for innovative materials and more sustainable inputs to substitute non-renewable materials.

The following incremental activities will be carried out to achieve the proposed output:

i. Designing public policy measures and incentives on green materials to reduce/eliminate harmful chemicals in both sectors.

This activity aims at strengthening the technical capacity at the national level to support the substitution of non-renewable materials in both sectors.

For the *construction* industry, in coordination with the central government, trade unions, academia and NGOs, the child project will promote innovation and efficient processing of materials based on plant fibers such as bamboo, abaca and rice husk. It will also strengthen the tile manufacturing process by replacing the use of glass that contains lead oxide.

For the *textile* industry, through institutional capacity building, the child project will improve technical skills to support the competitive commercial introduction of alternative products made from the abaca fiber. This will have a positive impact in reducing CO2 emissions by substituting imports of other non-renewable materials.

To generate incentives in both sectors, the following actions will be carried out:

- Identification and assessment of baseline incentives to consider the pros and cons of current incentives for green materials.
- Assessment of new alternatives for environmental incentives in both value chains, based on analysis to adequately determine the costs and benefits applied to green materials. Incentives for innovative and environmentally sustainable materials will be analyzed and selected.
- If there are no applicable incentives, the development of new incentives will be proposed through the development of a public policy, in addition to analyzing the feasibility of reforming secondary regulations to limit or put safeguards on tax incentives. This includes reforming the Presidential Decree that regulates goods with a 0% Value Added Tax (VAT) rate, so that the beneficiaries of the incentive comply with the standards of good environmental practices.
- The child project will promote partnerships with key stakeholders to implement at least one of the recommended incentives.
- Systematization of lessons learned for dissemination to key stakeholders, as per Output E.2 of Component 5.

ii. Strengthening channels of collaboration with financial institutions to leverage financing in both sectors.

The child project will work with financial intermediaries, allowing entrepreneurs to access financing opportunities to promote companies that can supply new materials and products, reduce investment risk, promote innovative competitiveness and incentivize green procurement in public tenders.

To strengthen collaboration channels that allow access to financing in both sectors, the following actions will be developed:

- Strengthen financial capacity to provide access to credit for artisanal brick makers, bamboo foresters, bamboo producers, rice, cotton and abaca farmers, among others, as well as textile manufacturers and entrepreneurs to apply BAT/BET.

- Boost financing and risk management programs for value chains, applying the concepts of circular economy, cleaner production with respect to environmental quality criteria (pollution), adaptation and mitigation of climate change, in close collaboration with the National Popular and Solidarity Finance Corporation (CONAFIPS) and BanEcuador.

- Coordination with the Government of Ecuador (GoE) and banking entities for accessing credit lines for industrial innovation, repowering of equipment and machinery for SMEs that apply BAT/BET.

- Training for staff of financial institutions on how to evaluate investment projects using criteria related to the circular economy, environmental quality, climate change adaptation and mitigation, and a gender approach to financial inclusion.

- Training of producers, farmers, foresters, artisans, builders and SMEs in business management, so that they can access products with financial benefits, formulate investment plans adapted to their context and improve their incomes.

- Financial capacity building through raising awareness for women and youth from legally established organizations in the value chain of both sectors to access commercial lending channels.

- Develop a guideline for producers, farmers, foresters, artisans, builders and SMEs on credit alternatives and financial benefits.

- Design the legal framework for national and international registration of innovations, intellectual property and trademarks to facilitate access to finance.

A variety of financial mechanisms were identified during the PPG that could be applied or adopted to leverage investments during the execution of the child project (please, refer to Table 9 of ProDoc).

A variety of financial mechanisms were identified during the PPG that could be applied or adopted to leverage investments during the execution of the child project (please, refer to Table 9 *Financial mechanisms to leverage new investments*, of the ProDoc).

iii. **Creating and promoting business model opportunities for vulnerable groups through incubators and investment proposals for cost-effective alternatives in the *construction* supply value chain.**

This activity will create and promote hands-on business opportunities for vulnerable groups as an instrument of public policy and mobilization of innovative finance, through incubators and investment proposals for cost-effective alternatives in the brick, bamboo and rice husk value chains promoting innovation and learning, following the pilot interventions launched in Activity A.2.ii of Component 1 and Activity C.1.ii of Component 3.

The PMU will adjust the scope of work during the implementation of the child project, including, but not limited to, the following:

- Update of the inventory of UPOPs emissions.

- Development of the inventory of chemical substances (POPs, among others) used in the construction sector.

- Elaboration and implementation of technical standards or guidelines of BAT/BET in the production of construction materials (artisanal brick kilns).

- Update of the atmospheric emissions module of the RETCE Report system, which is located in the Unified Environmental Information System (SUIA) of the MAATE so that companies can record the emissions and releases of POPs NIs, GHGs and other pollutants.

- Execution of at least one monitoring of analysis of UPOPs emissions and GHG in brick kilns where best BAT/BET are implemented.

- Design and implementation of a hands-on training campaign as a follow-up to Activity A.1.ii/Component 1.

- Develop a business opportunity to mobilize innovative financing.

- Carry out the Gender Action Plan and the Gender-based Violence risk management.

iv. **Creating and promoting business model opportunities for vulnerable groups through incubators and investment proposals for cost-effective, bio-based alternatives in the *cotton and abaca* supply value chains.**

For cotton and abaca, this activity, aligned with Activity A.2.iii/Component 1 and Activity C.1.iii of Component 3, aims to focus on the challenges currently faced by the cotton and abaca supply chains to increase innovative actions that allow these products to compete with more profitable agricultural activities.

By providing technical assistance, it will support key stakeholders for formalization as a public policy instrument and mobilization of innovative financing, for example, for organized cotton producer groups to strengthen the value chain.

This activity includes the following actions:

- Development of an inventory of chemical substances (industrial POPs, dyes, etc.) in the textile sector.

- Implementation of best agricultural practices, the strengthening of technical assistance in pest management to reduce and, when feasible, eliminate highly hazardous pesticides in cotton and abaca crops.

- Carry out a Life Cycle Assessment (LCA) of agricultural production for both crops.

- Development of BAT/BET guidelines for the textile production chain.

- Validation of the guidelines and practical training as a follow-up to Activity A.1.iii/Comp.1.

- Development of a business opportunity to mobilize innovative financing.

- Carry out the Gender Action Plan and the Gender-based Violence risk management.

- Assessment of the technical, social, economic and environmental feasibility of repowering cotton production in Ecuador.

Component 3. Cleaner production

The area of focus of Component 3 is to support and enable the replacement and/or upgrading of conventional, unsustainable production and manufacturing processes with innovative processes that require less water, energy, hazardous chemicals, conserve natural resources and produce less pollution, emissions and waste. For the implementation of the activities under this Component, the child project will coordinate, through MAATE, the Executing Agency, with other public institutions such as MPCEIP, MIDUVI, SENAE, also with academic institutions, analytical laboratories, and private companies such as: *Angua* and INBAR, as well SMEs and CSOs.

Along these lines, the alternative path will tackle the third stage of the supply chain—production and manufacturing—through a focus on promoting innovation and learning (aligned with Component 1), leveraging finance (aligned with Component 2), and multistakeholder dialogues and partnerships (throughout) of Component 5. As far as possible, policy coherent activities should be included as appropriate, particularly in the governance at national level.

Alternatives to the business-as-usual practices will be evaluated and compared considering the identified risks, and the safest, most feasible, hazardous chemical-free alternatives that fit the intended users will be selected. The proposed pilot projects will be undertaken to identify the required technological approach as well as environmental and health impacts, and to establish the necessary control measures. Criteria for the feasible path will be drawn up and aligned with Ecuador's specific needs, recognizing gender needs and implementing –inclusively- a gender equality action plan (Annex 10). Criteria for the feasible path will be drawn up and aligned with Ecuador's specific needs, recognizing gender needs and implementing –inclusively- a gender equality action plan (Annex 10).

Through this Component, this child project aims to establish closer interaction and collaboration with the entrepreneurs who are involved in both supply chains. Coordination mechanisms and the implementation of commercially driven pilot experiences will foster alternative investments; by establishing incentives for the chosen pilot locations and by enhancing dialogue and collaboration between multi-stakeholders. The ultimate objective of the coordination mechanism will be to balance benefits for each of the participating stakeholders in the supply chains for both industrial processes.

The following outcome and output are proposed to trigger the desired change in the current paradigm for both supply chains:

Outcome C of Component 3 is: *"Production and manufacturing processes are transformed to require less water, energy and no hazardous chemicals; produce less pollution and waste; and design for zero waste".*

This child project will convene multi-stakeholder participatory processes within the supply chains to convert them towards green models: developing public policies for the implementation of the principle of Extended Producer Responsibility (EPR), developing guidelines for the environmentally sound management of waste and hazardous chemicals generated in both value chains, implementing BAT/BEP and facilitating access to incentives and financial benefits, among others, integrating communication, awareness-raising and training strategies on the innovative products and processes, as per Component 6.

Output C.1 National stakeholders strengthened to support sustainable reductions along the targeted supply chains.

This output will target sustainable approaches that are integrated and applied in the construction and textile industries, with a focus on circular economy, green chemistry, cleaner production and the concept of research, development and innovation (R&D&I), reducing and/or eliminating the use of hazardous chemicals (Cr+6, POPs, non-POPs, VOCs, others) during the life cycle of the innovating products.

Pilot projects will be implemented for responsible production free of harmful chemicals. The expected impacts of the pilot demonstrations will tackle land degradation through improved practices for the sourcing of raw materials, the removal of hazardous chemicals and waste through improved design and manufacturing and will reduce GHG emissions through the promotion of low-carbon activities.

The following incremental activities will be carried out to achieve Output C.1:

i. **Strengthening the capacities of national entities and private producers in relation to imported chemicals and viable alternatives for the reduction/elimination of hazardous chemicals in the construction and textile value chains.**

The main driver for the execution of this activity is to develop and implement a knowledge management and communication strategy adapted to the Ecuadorian context, socially and economically, for the target sectors, which includes:

- Strengthen national capacity to prevent illegal imports and trade of hazardous chemicals among responsible and stakeholder authorities, through the design and implementation of a capacity-building programme and a communication outreach strategy.

- Development of a Training Manual to guarantee the formalization of the capacity building program due to staff turnover.

- Development of an online platform 'Knowledge Hub' (as per activities D.1.ii of Component 4 and E.2.i of Component 5).

- Promote the exchange of knowledge and experiences in South-South and regional cooperation schemes among other child projects to strengthen the capacities of the regions in the sustainable development of both sectors.

- Strengthen laboratories' capacity in academic centers for the determination of lead content in paints, as there is currently only one accredited laboratory, and the promotion of eco-labeling for paints used in the construction sector.

- Train laboratories in academic, public and/or private centers for the analysis of POPs identified in the textile sector.

- Promote eco-labelling in construction products and textile and clothing products.

As a highly demonstrative effect, the child project will support, within the framework of this activity, the removal of asbestos from the roofs of buildings in the Galapagos Islands by replacing them with bamboo-made structure, in collaboration with the Governing Council of the Islands and the EU-funded project Mente Factura.

In addition, a pilot project will be carried out for the textile sector, which includes the environmentally sound disposal of clothing containing flame retardants (HBCDD), perfluoroalkyl and polyfluoroalkyl substances (PFAS) used in various sectors of industry and citizen services (Firefighters, Armed Forces, Police, Health and Industry).

ii. **Designing and implementing a training program for the use of viable alternatives for the conventional production of bricks, tiles, asbestos removal, and plant fiber-based materials (bamboo, abaca, and rice husks).**

Brick and Tile: This activity will be carried out in the Province of Azuay through the strengthening of technical capacities to generate changes in the brick production processes and promote a transition towards circularity throughout this value chain.

Elimination of asbestos in roofs: This activity will be developed in three islands of the Galapagos Island Region, through the transfer of knowledge and application for the replacement of asbestos roofs with bamboo structures. To implement this pilot project, a guideline will be developed on the environmentally sound management of asbestos.

Waste use (Bamboo): This pilot intervention will be carried out in Pichincha and Manabí provinces for the use of the waste generated during the bamboo construction process for the production of kitchen utensils, household utensils and construction finishes.

Construction materials based on vegetable fibers (bamboo, abaca and rice husks): For this activity, training will be carried out to use these organic fibers in materials for sustainable construction, such as the production of modular panels. The child project will support an alternative construction for public use in a selected city to be selected during the implementation phase.

With the execution of these activities and pilots, it will be possible to reduce and, when feasible, eliminate hazardous chemical substances through the implementation of BAT/BET in the artisanal production processes of tiles and bricks and the elimination of asbestos roofs, reducing the generation of emissions such as UPOS and GHG in the construction sector, and avoiding open burning during post-harvest processes.

Under this activity, the following actions will be carried out:

- Previous activities: Signing of agreements and commitments among stakeholders (public and/or private) and strategic alliances.

- Initial assessment: Defining the baseline considering the social, cultural, economic and environmental aspects of each pilot intervention.

- Participatory research: From the initial assessment, an action plan will be drawn up in a participatory manner, to solve the identified problem.

- Participatory action: Implementation of the action plan for the transfer of knowledge of BAT/BET to reduce the generation of GHG and UPOPs emissions, as well as the reduction of hazardous chemicals, where feasible.

- Evaluation and information dissemination: This activity involves the validation of the generated knowledge and the evaluation of effectiveness, through the monitoring of the proposed indicators. Among the impacts to evaluate, the increase in the number of technical personnel who can promote the implementation of eco-innovative materials and more sustainable and efficient construction systems will be considered, along with the reuse of the waste generated from the construction supply value chain.

This activity is aligned with activities A.2.ii/Component 1 and B.2.iii/Component 2.

iii. Designing and implementing a training program for the use of viable alternatives for conventional *cotton and abaca* processes.

Cotton: It is one of the most widely used fibers in the manufacture of fabrics and textiles worldwide. In Ecuador, public policies have been implemented to strengthen its production with inadequate results. This project aims to promote the cultivation of colored cotton as an input for the local textile producers, by introducing innovative varieties of colored cotton seeds. This initiative will be facilitated through institutional coordination with INIAP and the Technical University of Manabí. In this way, it is expected that new cotton fields will be a more profitable and innovative alternative than the traditional cotton varieties.

Abaca: Abaca fiber is highly valued for its resistance and versatility and is presented as an eco-innovative alternative for the textile sector. Private-driven actions include: strengthening the production of abaca in Ecuador by raising awareness of its quality as a textile fiber and carrying out promotional campaigns aimed at designers, manufacturers and consumers, to position abaca packaging products, footwear and fashion accessories.

On the other hand, there is a need to train small abaca farmers on best agricultural practices and harvesting techniques to improve the quality of the fiber from its source. There is also a need to establish quality and sustainability technical standards, as well as to implement eco-labels for abaca textile products in order to generate a change towards more responsible and sustainable consumption.

Waste Harvesting (Cotton): This action will be carried out in the Province of Manabi focusing on the use of the waste generated during the post-harvest process, using the cotton waste as livestock feed, among other viable options.

In addition, the environmentally appropriate disposal of Personal Protective Equipment (PPE) with flame retardants (HBCDD), perfluoroalkyl and polyfluoroalkyl substances (PFAS) used in industry and public services (Fire Department, Armed Forces, Police, Health and Industry exposed to thermal and electrical emission sources) will be carried out under this activity. To carry out this action, a guide will be developed on the environmentally sound management of deteriorated PPE.

With the execution of these activities and pilot interventions, it will be possible to reduce and, when feasible, eliminate hazardous chemical substances (industrial POPs, among others), reduce GHGs, through the implementation of good agricultural practices, pest management for cotton and abaca crops, and the implementation of BAT/BET in the manufacturing processes of the textile sector.

This activity is aligned with activities A.2.iii/Component 1 and B.1.iv/Component 2.

For the development of all the activities under this Component, the following actions will be carried out:

- Previous activities: Signing of agreements and commitments between stakeholders (public and/or private) to define the scope of each strategic alliance.

- Initial assessment: Assess the baseline considering the social, cultural, economic, and environmental aspects.

- Participatory research: From the initial assessment, an action plan will be drawn up in a participatory manner to solve the identified problem.

- Participatory action: Implementation of the action plan, transferring knowledge of the BAT/BET in order to reduce and, when feasible, eliminate hazardous chemicals (industrial POPs, dyes and dyes, among others).

- Support the diversification of specific markets through the regulation and implementation of eco-labels in innovative and sustainable materials and processes, encouraging the collaboration of trade unions and large textile industries.

- Carry out the Environmental and Social Management Framework (ESMF).

- Evaluation and dissemination: This action involves the verification and validation of innovative knowledge and its assessment for effectiveness by monitoring key indicators. Among the results to be evaluated under a cleaner production approach, include: the increase in the number of trained personnel who can promote the implementation of eco-innovative materials, the optimization of production processes (reduction of consumption of water, energy, materials and inputs), and the use of the waste generated from this value chain (circularity).

Component 4. Sustainable consumption

The area of focus of Component 4 is to create the market context necessary to support activities in Components 1, 2 and 3, by creating markets for innovative products and stimulating upstream and downstream behavior change toward more sustainable consumption and use practices.

This component tackles the fourth stage of the supply chain of the Integrated Programme —consumption and use—through a focus on creating a coherent regulatory environment and multi-stakeholder dialogues and partnerships, fostering consumer behavior change (including through sustainability communication), as well as possible activities in promoting innovation and learning, and leveraging finance, as appropriate. From the gender perspective, the child project will explore opportunities for sustainable public procurement that include requirements on participation of vulnerable groups at the consumption stage.

From the gender perspective, the child project will explore opportunities for sustainable public procurement that include requirements on participation of vulnerable groups at the consumption stage, in accordance with the line of action #1 of the Gender Action Plan (Annex 10).

The following outcome and output are proposed to trigger the desired change in the current paradigm for both supply chains:

Outcome D of Component 4 is: *"Markets for innovative products are created and behaviour shifts favour longevity over unnecessary consumption".*

This outcome will aim at promoting the creation of national markets that will not only include producers and public sector but also academia and research centres that will promote further research on viable chemical-free alternatives for both supply chains. This represents an opportunity to introduce a circular economy approach for innovative producers to re-use waste, with a sound technical approach avoiding the use of harmful chemicals and the exploitation of raw materials.

Stakeholders can align their requirements to promote circular economy, decent jobs, and environmental and waste management standards, influencing a change in current purchasing practices. For instance, public entities can facilitate the insertion of innovative and sustainable materials in the market, due to the high demand of certain end-uses.

Output D.1 Promoted change in consumer behavior towards better and less consumption.

This output will aim at promoting the creation of a national platform that will not only include producers and public sector but also academia and research centres.

The following incremental activities will be carried out to achieve Output D.1:

i. Creating strategic alliances with academia and research centres to test potential alternatives and participatory research for *brick and bamboo* production.

The PMU, in collaboration with the group of universities and research centres committed during the PPG phase, will carry out the following actions:

- Scientific research and experimental case studies for the validation of innovative proposals.

- Preparation of technical studies on the health and environmental impacts of hazardous chemical substances of the selected supply chains.

- Develop proposals for innovation, validation, and diffusion of technologies for both sectors.

- Strengthening or provision of equipment and supplies for laboratories in the public sector for the sampling and analysis of hazardous chemical substances, characterization of raw materials and finished products in both supply chains.

- Enhance laboratories´ accreditation at the national level for sampling and analysis of chemical substances (industrial POPs and other substances).

- Collaborative alliances for the monitoring of UPOPs, Industrial POPs/products.

- Sponsorship of links between university students and research laboratories within the framework of internships and the exchange of collaboration in both chains.

- Participate in the communication outreach strategy (activities C.1.i of Component 3 and E.2.i of Component 5) where academia and laboratories will promote the exchange of knowledge and know-how on sampling and analysis procedures for chemical substances and the characterization of raw materials and finished products in both value chains.

- Support key producers to obtain an environmental footprint assessment.

ii. Creating strategies to encourage behavioral change towards responsible and sustainable consumption.

The child project will promote a change of behaviour towards more responsible and sustainable consumption of the innovative materials being pursued. It will also strengthen the economic and environmental benefits of this path for alternative consumer behaviour through the following actions:

- Develop a public policy that promotes the change of consumer behavior in tune with Outcome A of Component 1.

- Promote public-private cooperation in the implementation of sustainable production and consumption processes in both value chains.

- The implementation of a communication outreach strategy, aligned with Activity C.1.i of Component 3, to encourage more responsible and sustainable consumption by:

a. Establishing the graphic design for diffusion (billboards, posters, banners, information stickers, t-shirts, caps and souvenirs) and technological channels for the dissemination of audiovisual production (website, social networks, content creators, radio spot, infographics, virtual audio and audio workshops), educational material (theatre station and recreational workshops).

b. Creating marketing strategies through digital marketing digital and consumer-driven guidelines.

Component 5. Post-use and 9Rs

Component 5 will focus on actions that enhance the value of products, materials and resources which maintain their useful life for as long as possible, reduce waste generation to a minimum and activate consumer behavior focused on sustainable and responsible production and consumption trends. This approach will be aligned with the long-term global goals of the *2030 Agenda for Sustainable Development* and multilateral environmental agreements (MEAs). The focus of action of this component aims at working on products, processes and knowledge transfer, as follows:

- Products.

  Reject: Seeking alternatives for reduction and, where feasible, elimination of hazardous chemicals, materials and products that do not have environmental viability, through the strengthening of control and regulation.

  Rethink: Empowering efficiencies to transfer value along the supply chain versus manufacturing substitute products.

  Reduce: Taking advantage of the consumption of resources (water, energy and waste) in the manufacture and use of products.

- Processes.

  Reuse: Seeking the application of manufacturing techniques of resistant materials to prevent their unique use and maintaining qualities of resistance, durability, among others to extend the useful life of the product.

  Remanufacturing: Generating research, development and innovation capacities in the links of the chains to implement and improve manufacturing processes that allow the generation of new alternatives for secondary products.

  Restore: Seeking to generate technical and logistical capacity that allows the incorporation of a product that has exceeded its threshold of use with innovative treatments.

  Recycling: Analyzing waste recovery options in the different links for reuse.

- Knowledge transfer.

Redefine: Generating technical guidelines that allow reconverting consumption models for obsolete alternative products and materials to give them a different use from the original.

Repair: Promoting a knowledge network that allows the dissemination of alternatives for post-consumer uses of materials, products and waste from the construction and textile chains.

Women and young people are key to this child project, as they can influence behavioral changes and change consumption patterns. The child project will aim to include their views and concerns on the greening of value chains as an integral part of the design, implementation, monitoring and evaluation of policies and programmes, considering that women and men are exposed to the same risks caused by hazardous chemicals. It is necessary to achieve environmentally sound management of products and processes to achieve gender equality.

It is necessary to achieve environmentally sound management of products and processes to accomplish gender equality. Line of action #3 of the Gender Action Plan in Annex 10, will develop actions such as workshops with children, young people and women who work in the both supply chains and who are exposed to dangerous chemicals, to understand their needs and concerns for the development of a strategy that improves working conditions and reduces discrimination, gender violence. gender and workplace harassment.

The following outcome and two outputs are proposed to trigger the desired change in the current paradigm for both supply chains:

Outcome E of Component 5 is: *"Reverse logistics processes are implemented which return products and materials back to manufacturers to reuse or recycle".*

The implementation of eco-design principles, clean production and sustainable consumption will be promoted for the reduction and reuse of waste with a focus on circular economy, integrating economic well-being and job creation with a gender approach. The reduction of consumption of non-renewable resources will be also promoted by transitioning from a linear economy to an inclusive circular economy.

This Outcome will focus on:

- Definition of the responsibilities of all stakeholders in the textile and construction supply chains.

- Articulation and coordination among the public, private and popular and solidarity economy sectors with the inclusive circular economy.

- Propose public policies and financing mechanisms to strengthen the productive activities of farmers, artisanal producers, and vulnerable groups in the textile and construction chains.

- Promote the comprehensive management of waste and hazardous waste generated in the construction and textile supply chains, with a comprehensive approach to circularity.

- Analyze the working conditions of women and men, especially farmers, artisanal producers and vulnerable groups in order to promote, through associativity programs, improvement of their quality of life.

- Develop communication and awareness-raising campaigns aimed at workers in both sectors as part of the child project's communication outreach strategy.

Output E.1 Awareness of project stakeholders raised on the management of industrial chemicals (POPs), related waste and safer alternatives.

Under this Output, the child project will aim to:

- Implement a gender strategy t- invert the labor pyramid that keeps women in the base of the working-class and promote opportunities for a better quality of life in both value chains, promoting a social, economic and political structure of equal opportunities based on a circular economy and a sustainable model.

- Apply the principle of Extended Producer Responsibility (EPR), through the issuance of a public policy on at least one product in the textile and construction sectors.

- Introduce technical circularity criteria in the implementation of BAT/BET for the construction and textile sectors.

- Generate a national certification for sustainable buildings that apply innovative and eco-efficient materials.

The following incremental activities will be carried out to achieve Output E.1:

i. **Designing and implementing a strategy for the integration of gender and child labor in the construction industry (production of bricks, tiles and bamboo) and textiles (cotton and abaca).**

In terms of gender focus activities, as per the child project's Gender Action Plan, the PMU will carry out a deep analysis of the socio-economic and environmental context with primary and secondary information sources, for the assessment of the work environment that affects women and vulnerable groups in the construction and textile sectors.

This activity will make possible to deploy inter-institutional actions to address the needs of working women in alignment with the objectives of the National Plan 2021-2025. This public policy states the national goals for the eradication of violence, different forms of discrimination and strengthening the empowerment and economic leadership of female/household heads in both sectors.

Based on the cooperative and associative driven economy of Ecuador, most likely interventions to create strategic alliances include:

- Construction sector: cooperatives of women heads of household as well as associations of women engaged in brick production and marketing, in close collaboration with municipal authorities.
- Fashion sector: cooperatives of sewing women, primarily composed of single mothers.

ii. **Enhancing regulations to apply the principle of Extended Producer Responsibility (EPR) for at least one chemical product or waste in the textile and construction sectors.**

To contribute to sustainable development in Ecuador, general policies for the management of waste have been established in environmental regulations, including the application of the principle of Extended Producer Responsibility.

Through the Child project, the following actions will enhance this context:

- Baseline survey of products whose waste is subject to recovery or use in the construction and textile sectors.
- Analysis and selection of products for the application of the EPR's principle.
- Preparation of the Ministerial Agreement for the application of the principles of EPR for at least one product in the construction and textile sectors.
- Baseline survey of hazardous waste generated in the construction and textile sectors, which may be subject to recovery or use.
- Preparation of technical guidelines for the environmentally sound management of hazardous wastes that may be subject to recovery or use.

iii. **Promoting technical and financial criteria of circular economy in the implementation of BAT/BEP for the construction and textile sectors.**

An inclusive transition towards circularity requires greater participation of women across the entire spectrum of the circular economy. This activity also aims at enhancing participation in activities associated with the informal sector with low levels of productivity and limited use of technology, integrating suitable financial mechanisms to promote best practices in production processes.

This activity will be carried out through the following actions:

- Technical-economic and social feasibility studies to determine the scope and opportunities of the level of conversion towards a circular model, allowing the reduction or elimination of hazardous chemical substances in the production processes of these value chains.
- Development of an action plan for the incorporation of circularity criteria in the application of BAT/BET environmental practices in the textile and construction sectors.
- Development of business cases and financial mechanisms for the sustainability of the implementation of BAT/BET of the textile and construction sectors.

iv. **Establishing the *National Certification of Sustainable Buildings* and the eco-labeling of innovative and sustainable materials in the textile and construction sectors.**

The child project will support a national certification of sustainable buildings, in line with the current actions promoted by CEES and MIDUVI. The PMU will facilitate a partnership between CEES, MIDUVI, MAATE and other relevant public entities such as SAE, INEN, ARCSA, MUTUALISTA PICHINCHA and the Academia.

For this activity, criteria of existing international certification standards will be considered as a basis, including parameters to reduce and when feasible eliminate hazardous chemicals in construction materials and ensure better traceability. Validation of this scheme will be undertaken in the pilot interventions, according to Activity E.1.ii of Component 5.

The following actions will be carried out:

- Alliances or technical cooperation agreements with academia and other research centers, to carry out case studies on innovative materials based on vegetable fibers (bamboo, abaca and rice husks) to develop and implement this scheme for the housing sector, encourage eco-efficient and sustainable buildings that implement the use of these eco-labeled materials free of hazardous chemical substances.

- Create the scheme of the *National Certification of Sustainable Buildings* that will provide incentives and economic subsidies to constructions that demonstrate the use of sustainable materials free of hazardous chemicals, as well as the reuse of waste and the environmentally appropriate management of waste containing hazardous chemicals such as POPs, among others[3][3]., in addition to generating opportunities for access to green financing.

- Develop regulations to promote, through the National Certification of Sustainable Buildings, environmental benefits, tax and urban incentives for building construction at the national level.

- The certification of buildings that fulfill criteria of energy efficiency, efficient use and management of non-renewable resources, the increase of interior comfort and innovative design, will be promoted.

The child project will promote the eco-labelling of innovative and sustainable materials in the textile and construction sector, based on:

- Alliances or technical cooperation agreements with academia and other research centers, t- carry out case studies on innovative materials for the textile and construction sectors based on vegetable fibers (bamboo, abaca, rice husks and cotton), t- encourage responsible national consumption.

- Development of policies for the commercialization of innovative and sustainable materials in the textile and construction sector.

- Elaboration of a technical regulation in which the following principles of circular economy are considered: apply eco-design, durability (preserve what already exists in use) and capacity t- close the cycle in a range of recyclability according t- the Material Circularity Index.

- Selection of companies whose products meet the requirements of eco-labelling for sustainable materials.

- Application of eco-labelling t- at least one of the products in the textile and construction sector value chains that meets the environmental and technical requirements established under current regulations.

- Positioning in the textile and construction market of the material or product with an eco-label.

Output E.2 Knowledge management system for best practices and communications at national and global levels established.

This output aims to implement a Knowledge Management System through a digital communication platform to promote training and the exchange of information and experiences among stakeholders. Also, invited partners and associates of the child project will actively participate in international meetings, forums and technical workshops and will ensure that the flow of information between international conventions, donor agencies and stakeholders and decision-makers at the regional, national and local levels is critical; this will strengthen the continuity of actions on the use of innovative and eco-sustainable materials, as well as the reduction and, where feasible, elimination of hazardous chemicals in Ecuador.

The following incremental activities will be carried out to achieve Output E.2:

i. Designing and implementing an information and communication outreach strategy for multi-stakeholder dialogues and partnerships.

This activity provides support for capacity building across the different components, knowledge sharing and communication, particularly on the topics of formalization of SMEs, market access and technology transfer to adopt hazardous chemical-free recovery technologies. It includes the design of an awareness raising campaign and information strategy and a programmatic monitoring of FSP global environmental indicators, together with dissemination of on-going activities to ensure successful project implementation in accordance with UNDP and GEF procedures. Awareness raising and gender sensitive training materials will be developed and made widely available in relevant indigenous languages.

ii. Promoting (or creating) national networks of producers, public sector, academia and research centers – both in the construction and textile sectors –open to replicate best agricultural practices, BAT/BEP and implement innovations in their value chains.

This child project will create and/or enhance national networks of producers in both the construction and fashion sectors that are open to replicate best practices (BAT/BEP) and to implement innovations in their value chains, by designing and implementing an information and communication outreach strategy for multi-stakeholder dialogues and partnerships. This will aim at promoting the creation of a national network of responsible producers in the textile and construction sectors that will not only include producers and public sector but also academic institutions and research centers to enhance further investigation with proven results in the harmful reduction of chemicals.

iii. Participating in the Supply Chains Integrated Programme coordinating global events to share results, lessons-learned and best practices captured in knowledge products, in both sectors.

This activity will be executed through the following actions:

- Lessons learned on an annual basis: the child project will identify and systematize the experiences resulting from the implementation of the project activities, obtaining lessons learned, integrating all the knowledge accumulated over the years, testimonies and life stories, as well as from the development and implementation of policies, best environmental practices, best available techniques, certification of products and eco-labeling.

- For the international context, knowledge products and lessons learned will be shared with the Global Programme, including the Secretariat of the Stockholm Convention and the Global Chemicals Framework, in accordance with the child project's communication strategy, the Stakeholder Engagement Plan (Annex 8) and the Gender Action Plan (Annex 10).

Operations will be coordinated t- motivate other countries t- participate in the construction of a regional space for the exchange of knowledge and experiences of the activities carried out in the supply chains in the construction and textile sectors, t- integrate the lessons learned and results of other child projects that are part of the Global Programme.

- The child project will actively participate in international meetings and events and ensure the flow of information between international conventions, donor agencies and key actors and decision-makers at regional, national and local levels, through:

a) Annual Innovation Forums by Project Manager and other key PMU's personnel.

b) Participation in events, campaigns, competitions and stakeholder dialogues organized by the UNEP-led Child Global Project.

c) In-country meetings and webinars.

Component 6. Monitoring and Evaluation

Monitoring and evaluation of this country-level child project is based on a monitoring strategy with S.M.A.R.T. indicators that incorporate the gender approach, Gender-based Violence (GBV), Global Environmental Benefits as well as co-benefits. This component was developed to measure project progress on a regular basis. Lessons learned on GBV risk management and related best practices can be incorporated into child project monitoring reports and Terminal Evaluation.

Outcome F *"Accountability and adaptive management is ensured to track and maximize program results".*

As a standard practice for every UNDP project, continuous monitoring of FSP results and achievements will be ensured, while the application of adaptive management of the project after conclusion of the Mid-Term Review (MTR) will be warranted. The Project Management Unit will design the project´s M&E system and be responsible for its implementation.

Output F.1: "Monitoring and Evaluation (M&E) and adaptive management applied".

The child project results as outlined in the Project Results Framework, will be monitored periodically during implementation to ensure the project effectively achieves these results; these will be reported in the Mid-term Review and the Terminal Evaluation reports. Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the UNDP POPP and UNDP's Evaluation Policy.

For M&E, technical and institutional capacity, and information will be needed to address climate vulnerability and enhance project and place-based resilience. This Output will develop a Monitoring, Evaluation and Learning (MEL) strategy, implementing and evaluating the selected climate vulnerability management options in the chosen project pilot locations over the project lifetime and evaluating the projected impact uncertainties beyond that period.

Implementation and monitoring of identified risks and mitigation measures are required throughout the life cycle of the project. During project implementation, certain circumstances require the revision of the completed design-stage screening. These include but are not limited to: (a) where new information becomes available such as through a social and environmental assessment, (b) where there are substantive changes to the project (e.g., changes in design, additional components), or (c) where changes in the project context might alter the project's risk profile. If the revised screening results in a higher risk category, then the revised SESP needs to be reviewed by the Project Board or a subsequent PAC process (and where relevant by the GEF). The UNDP Risk Register of the UNDP ProDoc (Annex 6) should be updated accordingly.

The objective of this output will also be to ensure overall coordination, monitoring and evaluation with the GEF Supply Chains Integrated Program as a whole. The following incremental activities will be carried out to achieve Output F.1:

i. Carrying out the Project's Inception Workshop (IW).

This activity, that will take place during the first three months after the project implementation takes off, will be organized by the Project Management Unit (PMU) in a very participatory manner allowing the inclusion of multiple stakeholders involved during the PPG phase and those committed to the FSP´s execution phase.

In case a significant amount of time elapses between the time of the CEO Endorsement and the child project initiation; by the time of the IW, it is highly recommended the PMU will also review and update the SESP (Annex 5) to ensure the assessment reflects the current social and environmental risk profile of the project. If needed, the PMU will strengthen the Stakeholder Engagement Plan (Annex 8) to reexamine up-to-date stakeholders' context, proposed pilot projects, and intervention site-specific targeted beneficiaries and promote their effective engagement throughout the implementation of the child project.

ii. Carrying out the "Mid-term Review" (MTR).

The MTR will be carried out after the second submission of the Project Implementation Report (PIR); it will assess the progress of each project activity and attainment of the project's indicators presented in the Project Results Framework (Section VI) and the Multiyear Workplan (Annex 4), of the UNDP ProDoc.

This review will also consider one Gender Assessment of project impact completed as part of MTR and the disbursement of financial resources, co-financing provided by project partners, reporting of GEBs and co-benefits, and it will monitor and assess administrative aspects for the execution of the project. The MTR will also inform the adaptive management of the project and improve its implementation for the remainder of the child project's duration.

iii. Monitoring and Reporting to the Supply Chains Integrated Program.

This child project will provide **narrative reporting quarterly** to the Supply Chains Integrated Program on key activities and areas of progress toward achieving the program and project-specific indicators, using a template provided by the Global Coordination Child Project, carried out by UNEP.

The Project Management Unit will also ensure that the Global Child Project will support the online community of practitioners in Ecuador that will be established by promoting and maintaining channels of communication among all child project teams, as well as other important external related initiatives on the fashion and construction sectors, to develop information designed to address highly diverse local knowledge and context-specific needs, in order to share project results and lessons learned from this UNDP/GEF initiative.

Under this activity, monitoring and reporting will include the Project Results Framework with outcome indicators, GEF Core Indicators, baseline, and annual target indicators and ProDoc annexes. The monitoring will capture and track progress regarding attainment of the child project's results, adherence to the results framework, program functioning as an integrated effort, how well this child project is working together with the other child projects and whether they complement each other.

The project will also actively participate in various internal program-wide coordination events, to enhance ongoing communication and knowledge sharing among the other child projects using templates and guides on knowledge management, provided by the Global Child Project carried out by UNEP, to monitor and evaluate global environmental impacts achieved by this in-country child project, including gender, indigenous peoples and youth concerns.

On this matter, the child project will monitor -during implementation- differences related to vulnerable groups in key aspects that have been identified in research and scientific literature, including potential differences in access to finance, businesses, employment, impacts and exposure, awareness and knowledge of chemical, climate, and biodiversity risks, and the resulting behavioral differences to ensure effective mainstreaming and the full participation and benefit of vulnerable groups from the Suppply Chains Integrated Programme. The outcomes of this analysis will be consolidated by the Global Child Project.

iv. Reporting of Global Environmental Benefits and Co-benefits.

This child project is meant to achieve multiple environmental benefits through an integrated approach. Under this activity the child project will submit data of the Global Environmental Benefits (GEBs) to the Integrated Programme using the five core indicators, eleven sub-indicators and related co-benefits. The calculations carried out during the PPG stage will be updated, accordingly, for the MTR Report and for the Terminal Evaluation at the end of the project, in accordance with Annex 17 "GEF Core indicators" of UNDP/GEF ProDoc.

Measuring and tracking Global Environmental Benefits from the project

To provide inputs into monitoring and evaluation of the Integrated Program as a whole, this child project will provide regular reporting to the UNEP Global Child Project on GEBs key indicators, activities and areas of progress. Under this activity this child project will submit data of the Global Environmental Benefits (GEBs) **once per year** to the Global Integrated Programme using the four core indicators for the GEBs.

Measuring and tracking co-benefits from the project

The project will also deliver local environmental, social and economic benefits that improve people's lives, in addition to delivering GEBs. In this regard, the PMU will meet the GEF's requirements for measuring and tracking the co-benefits -where the planned pilot projects will be implemented- as per the GEF/STAP/C.64/Inf.03 Guideline "Incorporating Co/benefits in the Design of GEF Projects". These measurements will consider not only the duration of the FSP but also lifetime of the expected GEBs.

Likewise, under this activity the project will submit a related co-benefits data report **once per year** to the Global Integrated Program. The following co-benefits will be tracked and measured under this child project:

Environmental co-benefits: reduce air pollution / reduce freshwater pollution / reduce pollution caused by chemicals outside the mandate of GEF-supported MEAs / reduce waste and wastewater pollution.

Social co-benefits: reduce poverty / promote better human health by avoiding the exposure of humans to chemical substances of concern in the fields of construction and textile/ enhance participation, equality, and inclusion / improve education, skills, capacity and technology for sustainable development.

Economic co-benefits: create job opportunities / improve income and jobs / mobilize new finance sources.

Regular reporting is also important for tracking the quality of co-benefits and for ensuring that planned co-benefits accrue, in accordance with the GEF-8 Results Measurement Framework (RMF).

v. Carrying out the Terminal Evaluation (TE).

This activity aims to evaluate whether all planned child project activities have been developed, and that resources granted by the GEF have been disbursed and spent in line with GEF and UNDP policies and rules, and in accordance with the activities as set out in this Project Document. The Terminal Evaluation will also extract and identify lessons-learned, how to disseminate them most efficiently, and make recommendations to ensure that the child project results become sustainable.

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[1] A *standard* is set by an official authority as a point of reference.

[2] *Certification* is a procedure that is issued for an authorized person to validate whether a product or process complies with the provisions of an official quality reference.

[3] Especially the use of products with short-chain chlorinated paraffin, POPs, flame retardants and open uses of PCBs.

Institutional Arrangement and Coordination with Ongoing Initiatives and Project.

Please describe the Institutional Arrangements for the execution of this child project, including framework and mechanisms for coordination, governance, financial management and procurement. This should include consideration for linking with other relevant initiatives at country-level (if a country child project) or regional/global level (for coordination platform child project). If possible, please summarize the flow of funds (diagram), accountabilities for project management and financial reporting (organogram), including audit, and staffing plans. (max. 500 words, approximately 1 page)

The Executing Agency for this child project on behalf of the GoE is the Ministry of Environment, Water and Ecological Transition (MAATE) with the following specific tasks:
- Project planning, coordination, management, monitoring, evaluation and reporting. This includes providing all required information and data necessary for timely, comprehensive and evidence-based project reporting, including results and financial data, as necessary. The Implementing Partner will strive to ensure project-level M&E is undertaken by national institutes and is aligned with national systems so that the data used and generated by the project supports national systems.
- Overseeing the management of project risks as included in this project document and new risks that may emerge during project implementation.
- Procurement of goods and services, including human resources.
- Financial management, including overseeing financial expenditures against project budgets.
- Approving and signing the multiyear workplan.
- Approving and signing the combined delivery report at the end of the year; and,
- Signing the financial report or the funding authorization and certificate of expenditures.

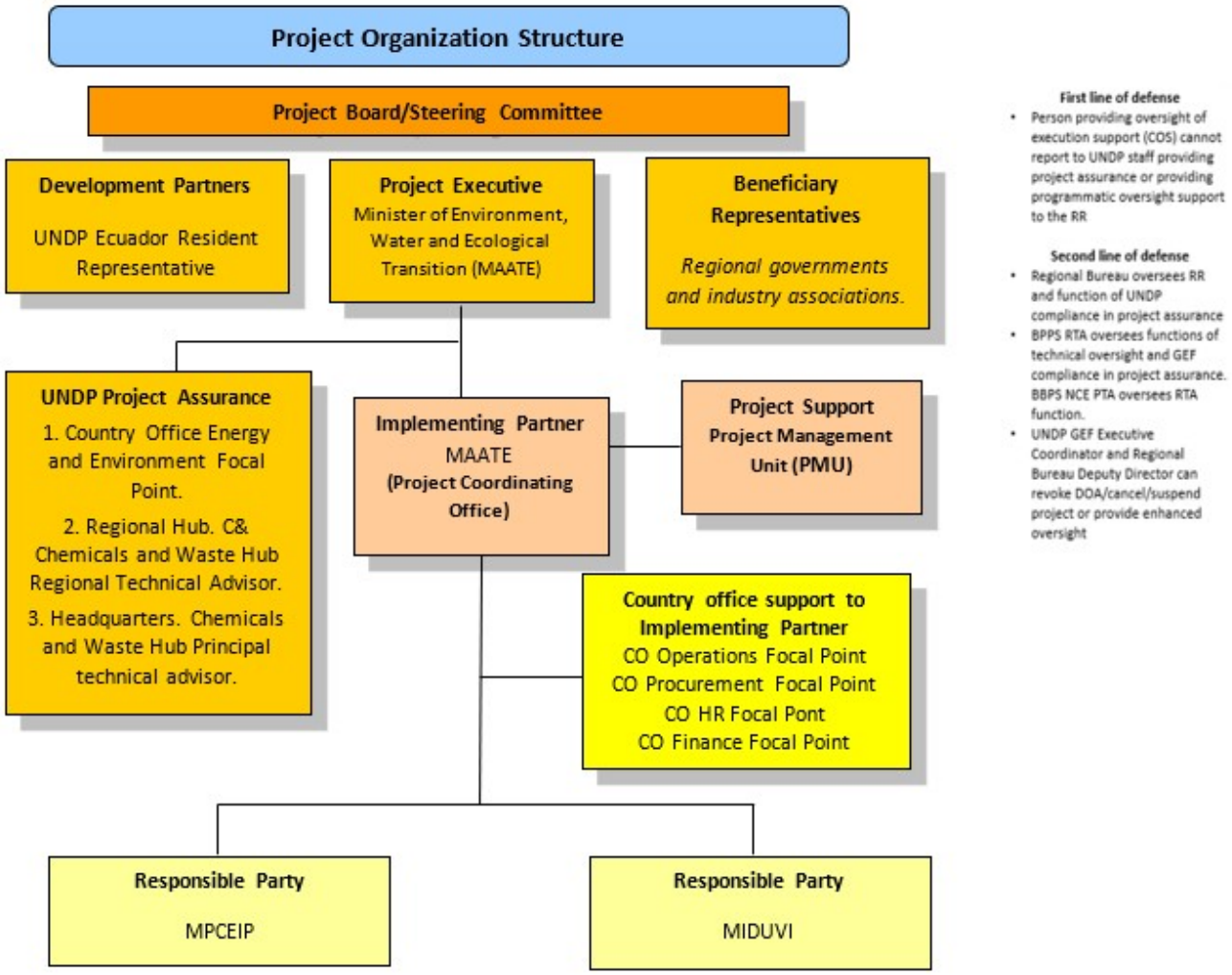
In addition, there are two responsible parties.
The Ministry of Production, Foreign Trade, Investment and Fisheries (MPCEIP) that is the lead public partner responsible for the coordination and implementation of the national policies on production. MPCEIP is a member of the Project Steering Committee, Specific tasks include:
- Support the elimination of hazardous chemicals in the construction and textile supply chains during the project's life from the lens of environment.
- Support the development, validation and dissemination of best practices, training and awareness raising materials for both supply chains.
- Support the training of child project partners for both supply chains.

The other one is the Ministry of Urban Development and Housing (MIDUVI). This Ministry is the lead public partner responsible for the coordination and implementation of national policies for the construction sector in Ecuador, and more specifically, for the housing sector. MIDUVI is a member of the Project Steering Committee. Specific tasks for MIDUVI include:

- Support the elimination of hazardous chemicals in the target products of the construction supply chains during the project's life from the lens of environment.
- Support the development, validation and dissemination of best practices, training and awareness raising materials on bamboo, abaca and other key construction materials, under the scope of this child project.
- Support overall training activities under the different components of child project partners.

As the Implementing Agency for this child projects, UNDP is accountable to the GEF for the implementation of this project. This includes overseeing project execution undertaken by the Implementing Partner to ensure that the project is being carried out in accordance with UNDP and GEF policies and procedures and the standards and provisions outlined in the Delegation of Authority (DOA) letter for this project.

The following diagram outlines the proposed structure of the child project governance structure:



The stakeholders of the child project correspond to a diversity of entities including the Government of Ecuador, local stakeholders, private sector and CSOs. Partnerships of the FSP include private producers, universities, financial intermediaries, and research centers who can engage with the methodologies of the child project, having similar approach and goals for the elimination of hazardous chemicals, community health, sustainability, and financing.

Will the GEF Agency play an execution role on this child project? Yes

If so, please describe that role here and the justification.

UNDP is accountable to the GEF for the implementation of this project. This includes overseeing project execution undertaken by the Implementing Partner to ensure that the project is being carried out in accordance with UNDP and GEF policies and procedures and the standards and provisions outlined in the Delegation of Authority (DOA) letter for this project. The UNDP GEF Executive Coordinator, in consultation with UNDP Bureaus and the Implementing Partner, retains the right to revoke the project DOA, and/or suspend or cancel this GEF project. UNDP is responsible for the Project Assurance function in the project governance structure and reports to the Project Board and attends Project Board meetings as a non-voting member.

Also, please add a short explanation to describe cooperation with ongoing initiatives and projects, including potential for co-location and/or sharing of expertise/staffing (max. 500 words, approximately 1 page)

There are several ongoing initiatives and projects related to the development challenge this child project is also addressing. It is expected that the achievement of the outcomes for this FSP will be of mutual benefit. Specifically, this FSP will ensure coordination and count on the capacity built and knowledge gathered from the concurrent initiatives and projects that are already in progress such as the Multilateral Environmental Agreements (MEAs) Action Plans, i.e.: NDC, NBSAPs, NIP, SAICM, BURs. The design and implementation of this project´s activities are key to achieve Ecuador's global commitments and can also deliver immediate and direct health and economic benefits for the Ecuadorian people.

The child project will coordinate with global initiatives related to knowledge in fashion and construction. Cofinance partners will be engaged in the different roles in the project and enable the child project to build upon existing industry and sector initiatives.

Private-driven initiatives in the *construction* sector, such as GlobalABC, WorldGBC, Healthy Building Network, EDGE, UrbanShift, Green Chemistry and Buildings & Construction, Green Building Council: by working closely with these initiatives, this child project will seek to drive systemic changes by addressing CO2 emissions of existing and new buildings, enabling resilient, healthy, equitable and inclusive places and securing regenerative, resource efficient and waste-free infrastructure.

Global level initiatives related to the *fashion* sector, such as the Textile Exchange, the Fashion Pact, ZDHC, United Nations Alliance for Sustainable Fashion, SAC and the Global Fashion Agenda: these global initiatives and knowledge management systems will connect the child project in Ecuador with the fashion, textile, and apparel industry for sustainable chemical management and share best practices which can be replicated across different contexts.

Table On Core Indicators

Core Indicators

Indicate expected results in each relevant indicator using methodologies indicated in the GEF-8 Results Measurement Framework Guidelines. There is no need to complete this table for climate adaptation projects financed solely through LDCF and SCCF.

Indicator 4 Area of landscapes under improved practices (hectares; excluding protected areas)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
80000	85902	0	0

Indicator 4.1 Area of landscapes under improved management to benefit biodiversity (hectares, qualitative assessment, non-certified)

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4.2 Area of landscapes under third-party certification incorporating biodiversity considerations

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Type/Name of Third Party Certification

Indicator 4.3 Area of landscapes under sustainable land management in production systems

Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)
80,000.00	85,902.00		

Indicator 4.4 Area of High Conservation Value or other forest loss avoided

Disaggregation Type	Ha (Expected at PIF)	Ha (Expected at CEO Endorsement)	Ha (Achieved at MTR)	Ha (Achieved at TE)

Indicator 4.5 Terrestrial OECMs supported

Name of the OECMs	WDPA-ID	Total Ha (Expected at PIF)	Total Ha (Expected at CEO Endorsement)	Total Ha (Achieved at MTR)	Total Ha (Achieved at TE)

Documents (Document(s) that justifies the HCVF)

Title

Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO_2e (direct)	1000000	1017209	0	0
Expected metric tons of CO_2e (indirect)	4000000	6120000	0	0

Indicator 6.1 Carbon Sequestered or Emissions Avoided in the AFOLU (Agriculture, Forestry and Other Land Use) sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO_2e (direct)				
Expected metric tons of CO_2e (indirect)				
Anticipated start year of accounting				

Duration of accounting				

Indicator 6.2 Emissions Avoided Outside AFOLU (Agriculture, Forestry and Other Land Use) Sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO_2e (direct)	1,000,000	1,017,209		
Expected metric tons of CO_2e (indirect)	4,000,000	6,120,000		
Anticipated start year of accounting		2025		
Duration of accounting		20		

Indicator 6.3 Energy Saved (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Total Target Benefit	Energy (MJ) (At PIF)	Energy (MJ) (At CEO Endorsement)	Energy (MJ) (Achieved at MTR)	Energy (MJ) (Achieved at TE)
Target Energy Saved (MJ)				

Indicator 6.4 Increase in Installed Renewable Energy Capacity per Technology (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Technology	Capacity (MW) (Expected at PIF)	Capacity (MW) (Expected at CEO Endorsement)	Capacity (MW) (Achieved at MTR)	Capacity (MW) (Achieved at TE)

Indicator 9 Chemicals of global concern and their waste reduced

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
2,000.00	2,000.00	0.00	0.00

Indicator 9.1 Solid and liquid Persistent Organic Pollutants (POPs) removed or disposed (POPs type)

POPs type	Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
Perfluorooctanoic acid (PFOA)		1,146.00		
Decabromodiphenyl ether (commercial mixture, c-decaBDE)	240.00	454.00		
Perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride	1,300.00			
Short-chain chlorinated paraffins (SCCPs)	240.00			
Hexabromocyclododecane (HBCDD)	20.00	200.00		

Indicator 9.2 Quantity of mercury reduced (metric tons)

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 9.3 Hydrochloroflurocarbons (HCFC) Reduced/Phased out (metric tons)

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 9.4 Number of countries with legislation and policy implemented to control chemicals and waste (Use this sub-indicator in addition to one of the sub-indicators 9.1, 9.2 and 9.3 if applicable)

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
1			

Indicator 9.5 Number of low-chemical/non-chemical systems implemented, particularly in food production, manufacturing and cities (Use this sub-indicator in addition to one of the sub-indicators 9.1, 9.2 and 9.3 if applicable)

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
1			

Indicator 9.6 POPs/Mercury containing materials and products directly avoided

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 9.7 Highly Hazardous Pesticides eliminated

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)
200.00	200.00		

Indicator 9.8 Avoided residual plastic waste

Metric Tons (Expected at PIF)	Metric Tons (Expected at CEO Endorsement)	Metric Tons (Achieved at MTR)	Metric Tons (Achieved at TE)

Indicator 10 Persistent organic pollutants to air reduced

Grams of toxic equivalent gTEQ (Expected at PIF)	Grams of toxic equivalent gTEQ (Expected at CEO Endorsement)	Grams of toxic equivalent gTEQ (Achieved at MTR)	Grams of toxic equivalent gTEQ (Achieved at TE)
20.00	31.52		

Indicator 10.1 Number of countries with legislation and policy implemented to control emissions of POPs to air (Use this sub-indicator in addition to Core Indicator 10 if applicable)

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)

Indicator 10.2 Number of emission control technologies/practices implemented (Use this sub-indicator in addition to Core Indicator 10 if applicable)

Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)

Indicator 11 People benefiting from GEF-financed investments

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
Female	50,024	35,750		
Male	61,976	91,518		
Total	**112,000**	**127,268**	0	**0**

Explain the methodological approach and underlying logic to justify target levels for Core and Sub-Indicators (max. 250 words, approximately 1/2 page)

CI #4: From the universe (baseline) of the four crops involved in textiles and construction, a predetermined percentual target of improved practices, for each crop was established based on pilots' budgets: abaca (60% of 14,831 ha), cotton (800% of 100 ha), bamboo (11% of 600,026 ha) and rice husks (3% of 340,028 ha).

CI #6: From CI #4 intervention areas, the capture factors of GHG of tons/ha for each crop was introduced: 23, 0.22, 12 and 1.8 t CO2/t, respectively; in addition to the total production of abaca sacks over a 5-year using a captured factor of 23.20 tCO2/ton was also added.

For CI #9: 1800t of POPs containing products (9.1) including: 1,140t of Perfluorooctanoic acid (PFOA) containing products, 454t of Decabromodiphenyl ether (commercial mixture, c-decaBDE) containing products, 200t of Hexabromocyclododecane (HBCDD) containing products, and 200t of HHP (9.7). From the universe (baseline) of the four construction and textile's materials, a predetermined percentual target of improved practices, for each material was established based also on pilots' budgets: paints and pigments (20% substitution of 238 tons), leaded tiles (0.269% substitution of 86,606 tons), protection clothing (6% elimination of 2,387 tons) and asbestos roof (75% substitution of 142 tons)

For CI #10: Over the total hectares intervened by the child project, under the ug/ta of PCBB-Group 6, Category a. the calculation has considered a factor of 30, and an emission factor (HCB) of 32 ug/ta Group 4. Category b. for tiles and bricks, together with an increase in thermal efficiency of 5%, plus a similar analysis of post-consumption for the whole value chain in the construction sector.

For CI #5: The calculation is based on the number of workers, disaggregated by gender, who will directly benefit from the pilot interventions in both sectors.

For the sub-indicators: Calculations were mostly based on communications with the stakeholders engaged throughout the execution of the PPG phase and validated with the national authorities who will be responsible for the execution of the child project.

Key Risks

	Rating	Explanation of risk and mitigation measures
CONTEXT		
Climate	Moderate	Risk 7: Natural disasters could eventually affect the locations and operations where the planned pilot project interventions are carried out. Within the framework of this child project, it is planned to build capacity with the involved stakeholders, especially for artisanal producers, as well as with the child project staff, for the immediate response to manage this climate change-related risk, primarily in the surroundings of the facilities of the pilot projects and in the camelid grazing territories, including vulnerability factors to natural events and climate change.
Environmental and Social	Moderate	Risk 1: Small or medium-sized enterprises may not be involved in decision-making including the introduction of legislation that may affect them. Standards and regulations will be developed in consultation with key stakeholders in the construction and textile industries, to reflect their needs and expectations. The project has developed a Stakeholder Engagement Plan (SEP) that ensures participation of all stakeholders in project activities. It will also put in place a Grievance Redress Mechanism (GRM) to provide meaningful means for local communities and affected populations to raise concerns and/or grievances when activities may adversely impact them. Risk 2: Potential loss of income for artisanal producers. The project is designed to increase the income of the artisanal producers through improved circularity designs and best producing practices, leverage finance and the enhancement of responsible supply chains from the lens of chemicals, alongside the adoption of resource efficient inputs, processing methods and pollution control measures. Therefore, this impact is not expected to be significant. Risk 3: Gender discrimination reproduced through limiting women's ability to contribute to decision-making and to benefit from the project. The project is designed to increase the income of the A Gender Action Plan (GAP) has been prepared to mitigate the identified risks and propose measures that ensure that women are represented in decision-making on project activities and are included in capacity building activities. Risk 4: Pollution of natural resources and exposure to local community from implementation of pilot projects in the construction, abaca and cotton value chains. No civil works are expected to take place as the pilot

		projects will be implemented in existing facilities. Nevertheless, the pilot projects will undergo a targeted assessment prior to commencement of each of the pilot interventions. Based on the targeted assessment, an Environment and Social Management Plan (ESMP) will be developed that will include mitigation measures for the identified risks, as well as a Pollution Prevention and Management Plan. Risk 5: Pollution or damage to sites of biodiversity or natural resources due to pilot projects for waste generated in the construction and textile industries and building pilot houses The pilot projects will undergo an environmental and social screening to determine if a targeted assessment is needed. Based on the targeted assessment, an ESMP will be developed that will include mitigation measures for the identified risks, as well as a Pollution Prevention and Management Plan. Risk 6: Risks on community health and wellbeing, natural resources or workers as a result of activities funded by the Financial Mechanism. For some pilot projects in the construction, abaca and cotton value chains (Output A.2-ii and iii), a targeted assessment will be conducted prior to commencement of each of the pilot interventions. In addition, pilot projects for the waste generated in the construction and textile industries (Output E.1-ii, v) as well as building two pilot houses for sustainable construction (Output E.1- iv) will undergo an environmental and social screening to determine if a targeted assessment is needed. The targeted assessment for all the pilots will assess the vulnerability of the facilities to natural disasters and propose mitigation measures to safeguard them in the resulting site-specific ESMPs. Risk 8: Working conditions within project demonstration activities in contravention to principles and standards of ILO fundamental conventions. For pilot projects (Output A.2-ii and iii), a targeted assessment will be conducted prior to commencement of each of the pilot interventions. The targeted assessment will include a due diligence of all the enterprises participating in the pilots to ensure they align with ILO principles. The resulting site-specific ESMPs will include proper mitigation measures including an Occupational Health and Safety Plan.
Political and Governance	Moderate	Risk 10: Stressful national economic context and political instability discourages clients and investors. For FSP expenses, UNDP monitors expenditure on a regular basis. Further UNDP HQ provides global oversight of project delivery minimizing the risk due to economic unrest. For cofinanciers along the supply chains, the FSP will coordinate among the owners to obtain the lowest possible disposal cost through economies of scale and strengthening of both supply chains.
INNOVATION		
Institutional and Policy	Moderate	Risk 12. Limited capacity development and unforeseen changes of national and regional FSP partners as well as limited availability of cofounding sources to accomplish the proposed outputs. Low policy implementation and enforcement will weaken the incentive structure for all stakeholders to take actions and political support is needed to drive private sector engagement. During the implementation of the FSP, awareness-raising, research and technical training programs will be developed and implemented, as well as

		capacity building in national and rural authorities and other public parties who are working on issues related to the use of hazardous chemicals in both sectors, to ensure generating the knowledge and experience needed to carry out their tasks properly (Output E.2).
Technological		
Financial and Business Model		
EXECUTION		
Capacity	Moderate	Risk 13: Limited capacity in project monitoring and stemming from co-financed activities. The project foresees in its Component 6, Output 6.1, a series of activities aimed at a periodic monitoring and follow-up on the overall development of this child project and comprehensive reporting during the MTR, where possible deviations from the programmed actions can be identified early, as well as compliance with the proposed objectives.
Fiduciary		
Stakeholder	Low	Risk 11: Poor information outreach throughout the project implementation. As part of the implementation of the Stakeholder Engagement Plan (Annex 8), briefings with a wide variety of stakeholders were organized during the PPG phase and will continue during the full implementation of the FSP under Output E.2.
Other	Moderate	Risk 14: Unsustainable materials often cost less than sustainable alternatives. The project will work on identified financial partners and schemes for substituting unsustainable processes and materials and accompanied the implementing partners to take action in its effort towards policy compliance. Risk 9: Uncompetitive pricing for sustainable practices and alternative products and materials. The project, as in Component 4, will increase consumer information on the cost of externalities and explore the impact of subsidies on the market to reverse potential adverse effects. In addition, the project will work on identified financial partners and schemes for substituting unsustainable processes and materials and accompanied the implementing partners to act in its effort towards policy compliance.
Overall Risk Rating	Moderate	An evaluation of the likelihood of a risk and the potential impact on the objectives of each individual risk identified, the overall risk rating remains moderate. It is important to note that, if required, the risk analysis will be adjusted when more information becomes available during project implementation.

C. ALIGNMENT WITH GEF-8 PROGRAMMING STRATEGIES AND COUNTRY/REGIONAL PRIORITIES

Explain how the proposed interventions are aligned with GEF- 8 programming strategies, including the specific integrated program priorities, and country and regional priorities, Describe how these country strategies and plans relate to the multilateral environmental agreements, such as through NDCs, NBSAPs, etc.

For projects aiming to generate biodiversity benefits (regardless of what the source of the resources is - i.e., BD, CC or LD), please identify which of the 23 targets of the Kunming-Montreal Global Biodiversity Framework the project contributes to and explain how.

(max. 500 words, approximately 1 page)

The project *"Eliminating Hazardous Chemicals from Supply Chains in Ecuador"* is fully aligned with the GEF-8 Supply Chains Integrated Program, as one of the eight country child projects. It is directly aligned with the issues raised in the Chemicals and Waste Focal Area, which seeks to eliminate or significantly reduce man-made harmful chemicals that are used in both sectors including agriculture, housing, and clothing, among others. The child project is designed to explicitly address the four transformation levers identified by the GEF and STAP by adopting a sector-wide approach in both, the construction and fashion sectors, rather than taking a chemical-by-chemical approach and through this will be able to engage targeted and diverse stakeholders and audiences more effectively.

This child project will coordinate closely with the Global Coordination Project carried out by UNEP. It has been designed to support the widespread rollout of low and non-chemical development strategies, the promotion of best practices, circular business models, green and sustainable chemistry principles and sustainable procurement which are all prioritized in the GEF 8 programming direction. The global child project will receive information from activities of this country child project, as per Output E.2 *"Knowledge management system for best practices and communications at national and global levels established"*. It will generate a knowledge platform by the implementation of innovative circular and sustainable production business models in both value chains, as well as information outreach gathered up and downstream in the fashion and construction industries.

The Ecuador child project will establish partnerships with the private sector, financiers, academia, NGOs. In the construction sector, it will also create interaction with the Costa Rica child project implemented by UNIDO on the construction supply chain to foster BAT and BEP. Both countries, through their PMUs, will coordinate their operations to motivate other countries to participate in building a regional space for knowledge sharing, expertise and experiences to reflect integration of the global construction supply chain. in the textile sector, the Ecuador child project will coordinate efforts with the Peru child project to ensure opportunities for learning and collaboration across the two countries, specifically in the two common supply chains.

It will also gather information in relation to the MEAs' obligations across all focal areas. Through this, the child project will contribute to the commitments under the MEAs signed by Ecuador. It will also help the Government to advance towards the achievement of the Sustainable Development Goals (SDGs). The project activities will support the stakeholders in the implementation of behavioral changes required to fulfill those commitments, and in the development of circular and sustainable construction and fashion products and business models.

D. POLICY REQUIREMENTS

Gender Equality and Women's Empowerment:

We confirm that gender dimensions relevant to the project have been addressed during Project Preparation as per GEF Policy and are clearly articulated in the child Project Description (Section B).

Yes

1) Does the project expect to include any gender-responsive-measures to address gender gaps or promote gender equality and women's empowerment?

Yes

If the child project expects to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment, please indicate in which results area(s) the project is expected to contribute to gender equality:

Closing gender gaps in access to and control over natural resources;

Yes

Improving women's participation and decision-making; and/or

Yes

Generating socio-economic benefits or services for women.

Yes

2) Does the child project's results framework or logical framework include gender-sensitive indicators?

Yes

Stakeholder Engagement

We confirm that key stakeholders were consulted during Project Preparation as required per GEF policy, their relevant roles to project outcomes has been clearly articulated in the Child Project Description (Section B) and that a Stakeholder Engagement Plan has been developed before CEO endorsement**.**

Yes

Select what role civil society will play in the Project:

Consulted only; Yes

Member of Advisory Body; Contractor; Yes

Co-financier; Yes

Member of project steering committee or equivalent decision-making body ; No

Executor or co-executor; No

Other (Please explain) No

Private Sector

Will there be private sector engagement in the Child project?

Yes

And if so, has its role been described and justified in section B "Child project description"?

Yes

Environmental and Social Safeguards

We confirm that we have provided information regarding Environmental and Social risks associated with the proposed child project or program, including risk screenings/ assessments and, if applicable, management plans or other measures to address identified risks and impacts (this information should be presented in Annex E).

Yes

Please provide overall Project/Program Risk Classification

Overall Project/Program Risk Classification

PIF	CEO Endorsement/Approval	MTR	TE
	Medium/Moderate		

E. OTHER REQUIREMENTS

Knowledge management

We confirm that an approach to Knowledge Management and Learning has been clearly described during Project Preparation in the Project Description and that these activities have been budgeted and an anticipated timeline for delivery of relevant outputs has been provided. This includes budget for linking with and participation in knowledge exchange activities organized through the coordination platform.

Yes

Socio-economic Benefits

We confirm that the child project design has considered socio-economic benefits to be delivered by the project and these have been clearly described in the Project Description and will be monitored and reported on during project implementation (at MTR and TER).

Under Output F.1: "Monitoring and Evaluation (M&E) and adaptive management applied", in addition to delivering Global Environmental Benefits (GEBs), this child project will deliver local environmental, social, and economic benefits that improve people's lives. In this regard, the PMU will meet the GEF's requirements for measuring and tracking the co-benefits -where the planned pilot projects will be implemented- as per the GEF/STAP/C.64/Inf.03 Guideline "Incorporating Co/benefits in the Design of GEF Projects". These measurements will consider not only the duration of the FSP but also the lifetime of the expected GEBs.

The following co-benefits will be tracked and measured under each child project:

Environmental co-benefits: reduce air pollution / reduce freshwater pollution / reduce pollution caused by chemicals outside the mandate of GEF-supported MEAs / reduce waste and wastewater pollution.

Social co-benefits: reduce poverty / promote better human health, by avoiding the exposure of humans to chemical substances of concern in the textile sectors/ enhance participation, equality, and inclusion / improve education, skills, capacity and technology for sustainable development.

Economic co-benefits: create job opportunities / improve income and jobs / mobilize new finance sources.

ANNEX A: FINANCING TABLES

GEF Financing Table

Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	Grant / Non-Grant	GEF Project Grant($)	Agency Fee($)	Total GEF Financing ($)
UNDP	GET	Ecuador	Chemicals and Waste	CW IP Contributions	Grant	3,840,261.00	345,624.00	4,185,885.00
UNDP	GET	Ecuador	International Waters	International Waters: IW IP Contributions	Grant	1,725,335.00	155,280.00	1,880,615.00
Total GEF Resources ($)						**5,565,596.00**	**500,904.00**	**6,066,500.00**

Project Preparation Grant (PPG)

Was a Project Preparation Grant requested? true

PPG Amount ($) 150000

PPG Agency Fee ($) 13500

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	PPG($)	Agency Fee($)	Total PPG Funding($)
UNDP	GET	Ecuador	Chemicals and Waste	CW IP Contributions	103,500.00	9,315.00	112,815.00
UNDP	GET	Ecuador	International Waters	International Waters: IW IP Contributions	46,500.00	4,185.00	50,685.00
Total PPG Amount ($)					**150,000.00**	**13,500.00**	**163,500.00**

Please provide Justification

Sources of Funds for Country Star Allocation

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Sources of Funds	Total($)

Total GEF Resources	**0.00**

Focal Area Elements

Programming Directions	Trust Fund	GEF Project Financing($)	Co-financing($)
Hazardous Chemicals IP	GET	5,565,596.00	46598759
Total Project Cost		**5,565,596.00**	**46,598,759.00**

Confirmed Co-financing for the project, by name and type

Please include evidence for each co-financing source for this project in the tab of the portal

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount($)
Recipient Country Government	AGROCALIDAD	In-kind	Recurrent expenditures	3820968
Private Sector	ANGUA	Grant	Investment mobilized	3913000
Civil Society Organization	Colegio de Arquitectos del Ecuador (CAE) - Pichincha	In-kind	Recurrent expenditures	418463
Civil Society Organization	Consejo Ecuatoriano de Edificación Sustentable (CEES)	In-kind	Recurrent expenditures	1204095
Recipient Country Government	Alcaldía de Cuenca (CGA)	In-kind	Recurrent expenditures	1000000
Private Sector	ENKADOR	In-kind	Recurrent expenditures	500000
Others	Escuela Superior Politécnica Agropecuaria de Manabí - Manuel Félix López (ESPAM)	In-kind	Recurrent expenditures	3194082
Civil Society Organization	Organización Internacional del Bambú y el Ratán (IMBAR)	In-kind	Recurrent expenditures	1000000
Recipient Country Government	Instituto Nacional de Investigación Agropecuarias (INIAP)	Grant	Investment mobilized	2002704
Civil Society Organization	Cámara de la Industria de la Innovación y Tecnología Agrícola (INNOVAGRO)	In-kind	Recurrent expenditures	1422843

Recipient Country Government	Ministerio del Ambiente, Agua y Transición Ecológica (MAATE)	In-kind	Recurrent expenditures	8938206
Private Sector	Mentefactura	Grant	Investment mobilized	1083600
Private Sector	Mentefactura	In-kind	Recurrent expenditures	150569
Recipient Country Government	Ministerio de Desarrollo Urbano y Vivienda (MIDUVI)	In-kind	Recurrent expenditures	7000000
Recipient Country Government	Prefectura de Pichincha	In-kind	Recurrent expenditures	4930694
Others	Universidad Técnica de Manabí (UTM)	In-kind	Recurrent expenditures	4150055
Others	Universidad Técnica del Norte (UTN)	In-kind	Recurrent expenditures	1869480
Total Co-financing				**46,598,759.00**

Please describe the investment mobilized portion of the co-financing

The investment mobilized refers to investments that will be done in the future and does not include any past investments.

Activities involve the reduction of releases of POPs and other Hazardous Chemicals from the Construction and Fashion supply chains that are aimed to be eliminated during the Project's implementation Period.

ANNEX B: ENDORSEMENT

GEF Agency(ies) Certification

GEF Agency Coordinator	Date	Project Contact Person	Telephone	Email
GEF Agency Coordinator	6/10/2024	Nancy Bennet	2129065044	nancy.bennet@undp.org
Project Coordinator	6/10/2024	Xiaofang Zhou	2129065782	xiaofang.zhou@undp.org

Record of Endorsement of GEF Operational Focal Point (s) on Behalf of the Government(s):

Please attach the Operational Focal Point endorsement letter(s) with this template.

Name of GEF OFP	Position	Ministry	Date (MM/DD/YYYY)
José Luis Naula	GEF Operational Focal Point	Ministry of Environment, Water and Ecological Transition	4/11/2023

ANNEX C: PROJECT RESULTS FRAMEWORK

Please indicate the page number in the Project Document where the project results and M&E frameworks can be found. Please also paste below the Project Results Framework from the Agency document. For the Integrated Programs' global/regional coordination child project, please include the program-wide results framework, inclusive of results specific to the coordination child project. For any country child project, please ensure that relevant program level indicators are included.

Contribution to the Sustainable Development Goal (s): SDG 1 / SDG 2 / SDG 3 / SDG 5 / SDG 6 / SDG 7 / SDG 8 / SDG 9 / SDG 10 / SDG 11 / SDG123 / SDG 13 / SDG 14 / SDG 15						
Intended Outcome as stated in the UNSDCF/Country Programme Results and Resource Framework: **UNSDCF 2022-2026 Effect 2**: In 2026, the State and society advance towards the ecological transition and a sustainable and inclusive, decarbonized and resilient economy to the effects of climate change, conserving biodiversity, avoiding land degradation and the pollution of ecosystems, with a focus on gender, inclusion and diversities.						
Applicable Output(s) from the UNDP Strategic Plan: **CPD output 2.1** Public, private and civil society actors have strengthened capacities and regulatory frameworks and gender-sensitive public policy instruments generated at the national and local levels to respond effectively to the challenges posed by the triple planetary crisis: climate change, loss of biodiversity and landscape, and pollution. **CPD output 2.2**. Public, private, and civil society actors have adopted actions that promote sustainable production and consumption models, focused on a green, inclusive, and resilient recovery, resulting in the contribution and participation of women and diverse populations.						
Project title and Quantum Project Number: Eliminating hazardous chemicals from supply chains in Ecuador						
Objective and Outcome Indicators[1] [2]	**Data Source**	**Baseline[3]**	**Mid-term Target[4]**	**End of Project Target**	**Data Collection Methods[5]**	**Risks/Assumptions**
Project Objective:	Promote transformation change in construction (bricks, bamboo, and other construction materials and waste) and fashion (cotton and abaca natural fibers) supply chains by replacing resource-intensive chemical processes and materials with sustainable alternatives and by creating circular and transparent supply chains by eliminating/reducing these negative chemical impacts into the environment in Ecuador.					
Mandatory Indicator 1: **Number of direct project beneficiaries disaggregated by gender (individual people)[6]**	Data obtained from official sources and records of public entities at the national level	0	26,893 Female 26,347 Male 53,240	67,993 Female 59,275 Male 127,268	The PMU will define the number of direct beneficiaries based on sectoral and segment-by-segment data. The percentage of gender applied is defined by each type of activity, whether in agriculture, manufacturing, or services.	Risk: Gender discrimination is reproduced through the limitation of women from benefiting from the project. Assumption: The implementation of the Gender Action Plan will promote the equal and fair participation of women and men in the design of innovative alternatives, benefits, and opportunities in each of its components.

	Mandatory GEF Core Indicator 4: **Hectares of land landscape and ecosystems under restoration (hectares)**	Studies and databases from government entities, associations, and private companies	Abaca: 200 Ha Cotton 100 Ha Bamboo 15,000 Ha Rice (husks) N.A.	Abaca 3,550 Ha Cotton 320 Ha Bamboo 26,400 Ha Rice (husks) 4,080 Ha Total 34,350	Abaca: 8,899 ha Cotton 800 Ha Bamboo 66,002 Ha Rice (husks) 10,201 Ha Total 85,902	The PMU will collect data from official record sources of public and private entities. In the implementation stage, will be in charge of the executed training records.	Risk: Low commitment from the direct beneficiaries to apply the knowledge imparted in the training to meet the goals. Assumption: There is a direct relationship between the number of trained workers and crop improvement.
	Mandatory GEF Core Indicator 6: **GHG emissions mitigated (tCO2e)**	Emission and capture factors obtained from bibliographic sources. The percentage of intervention was determined by budget estimate	184,620	406,065	1,020,000	For crops, the PMU will update the total hectares improved to estimate the capture of tCO2. For brick and tile production kilns, the PMU will verify the number of brick kilns intervened, and thermal efficiency assessments in the adapted kilns.	Risk: Low commitment from producers to apply good manufacturing practices. Inadequate implementation of the technological solution in brick kilns. Assumption: There is a commitment not to substitute crops and types of planting, and to prevent inappropriate practices such as the burning of productive areas and waste. For brick kilns, the commitment to improved proper furnace use and efficiency measurement.
	Mandatory GEF Core Indicator 9: **Chemicals of global concern and their**	Studies, reports, and databases from government entities, unions, associations,	50 tons	815 tons	2,036 tons	The PMU will carry out an inventory survey and record the elimination of hazardous chemicals in the	Risk: Limited capacity of government and stakeholders to enable a favorable environment for

	waste reduced (tons)	and private companies. Systematized data on imports and national production.					replacement pilots: asbestos roofs, disposal of disused PPE, prohibition of the use of lead in glazing processes, and restriction of imports.	the substitution of materials with hazardous chemicals (POPs, lead, asbestos, among others). <u>Assumption:</u> The PMU is committed to promoting coordination between the competent authorities for the creation and implementation of policies that allow the substitution and, when possible, the elimination of hazardous chemicals/products (POPs, Asbestos, Lead, among others).
	<u>Mandatory GEF Core Indicator 10</u>: **Reduction, avoidance of emissions of POPs to air from point and non-point sources (gTEQ)**	Data obtained from official sources of state institutions at the national level.	0	12.60 **gTEQ**	31.52 gTEQ	The PMU will implement the technological improvement, BAT/BET and monitor the emissions of the intervened furnaces. You will also need to monitor the reduction of open burning of scale residues.		<u>Risks:</u> Limited capacity of national stakeholders to adopt and implement BAT/BET as well as to encourage technological repurposing. <u>Assumptions:</u> Key stakeholders are willing to participate and receive training in use on the implementation of BAT/BET and technological conversion.
Project component 1	**1. Regenerative design and circular business models**							
Project Outcome[7] A Innovative, regenerative products are available and designed	**Indicator 6: Policy alignments by different ministries and with non-state actors.** *(In accordance with Indicator 3.a. of the IP Indicators)*	Technical standards published in the "Official Register of the Republic of Ecuador".	*0*	*3*	*8*	Technical standards published in the official newspaper "Official Register of the Republic of Ecuador" related to sustainability		<u>Risk:</u> Small or medium-sized enterprises may not be involved in decision-making including the introduction

using circular business models.						, clean production and/or circularity in product design, prepared with multi-stakeholder participation during the project execution period.	of legislation that may affect them. Associated to Risk 1 (of SESP). Assumption: A collaborative approach to policy making that is sustained and continuously improves, integrating gender related issues across the implementation of the proposed activities.
	Indicator 7: Number of innovations. *(In accordance with Indicator 2.c. of the IP Indicators)*	Official records in the National Service of Intellectual Rights (SENA DI) of product innovations related to sustainability, clean production, and circularity.	0	*2*	5	The PMU will keep track of the number of innovations and will inform on an annual basis in the child project reports.	Risk: Potential loss of income for artisanal producers. Associated to Risk 2. Assumption: A proactive engagement of the Project Management Unit (PMU) with the textile stakeholders along the supply chain on the ground will be sustained through the child project implementation to guarantee relevant producers are engaged and willing to adopt the proposed alternatives.
Outputs to achieve Outcome A	A.1 Policy environment enabled for design sustainability and circularity. A.2 Strengthened capacity of public planners, corporations, producers, and academia using circular business models.						
Project component 2	**2. Innovative materials**						
Outcome B Sustainably sourced, innovative, responsibly	**Indicator 8: Production and uptake of new materials into supply chains.**	Official database of MAATE in metric tons of recycled, recyclable	0	*2*	5	The PMU will keep track of the number and volume of new	Risk: Potential loss of income for

managed, recycled and recyclable materials, regenerative or nature-based where possible, are used in products (substituting non-renewable materials).	*(In accordance with Indicator 2.a. of the IP Indicators)*	and/or renewable/natural sources materials incorporated into the production processes and/or finished products of companies.				materials and will inform on an annual basis in the child project's reports.	artisanal producers. Associated to Risk 2. Assumption: A proactive engagement of the Project Management Unit (PMU) with the textile stakeholders along the supply chain on the ground will be sustained through the child project implementation to guarantee relevant producers are engaged and willing to adopt the proposed alternatives.
	Indicator 9: Number of financial resources unlocked for sustainable supply chains or financial flows influenced. *(In accordance with Indicator 1.a. of the IP Indicators)*	Official reports on green credits granted by the National Corporation of Popular Financing (CONAFIPS) and BanEcuador, intended for the textile industry to promote circular operations and/or the use of innovative materials in its production.	0 In the selected project pilot's intervention areas, none of the interested stakeholders have been trained on how to access financing.	USD2 million made available to SMEs through financial mechanisms (disaggregated by gender and indigenous people). 500 loan applications developed (with technical support of the child project), of which at least 30% will be submitted by women. 50 % loan applications (developed with technical support of the child	USD6 million made available to SMEs through financial mechanisms (disaggregated by gender and indigenous people). 2,000 loan applications developed (with technical support of the child project), of which at least 30% will be submitted by women. 50 % loan applications (developed with technical support of	The PMU will facilitate access to investment financing and will report, on an annual basis, the number of loans allocated by the financial intermediaries.	Risk: Risks on community health and wellbeing, natural resources or workers as a result of activities funded by the Financial Mechanism. Associated to Risk 6. Assumption: Participating SMEs can overcome existing barriers in access to finance.

				project) approved, of which at least 30% will be submitted by women.	the child project) approved, of which at least 30% will be submitted by women. These values will be calculated with accuracy once the child project is implemented		
Output B.1 to achieve Outcome B	B.1 A more favorable environment is enabled for innovative materials to substitute non-renewable materials.						
Project component 3	**3. Cleaner production**						
Outcome C Production and manufacturing processes are transformed to require less water, energy and no hazardous chemicals; produce less pollution and waste; and design for zero waste.	**Indicator 10: Number of pilot projects implemented.** *(In accordance with Indicator 3.b. of the IP Indicators)*	Number of agreements signed with interested parties actively participating in the child project.	0	*2*	*6*	Progress and final reports from organizations declaring and demonstrating the reduction and/or elimination of hazardous chemicals and their waste, and water and energy efficiency, and the reduction in the use of non-renewable materials.	Risk: Natural disasters could eventually affect the locations and operations where the planned pilot project interventions are carried out. Associated to Risk 7. Assumption: This child project seeks to promote adoption of technologies, processes, alternatives to harmful chemicals that are accessible (financially, geographically and culturally) and where possible, procured, locally.
	Indicator 11: Number of private sector and NGO stakeholders participating and adopting INTEGRRATED PROGRAMME IP	Number of agreements signed with interested parties from the private sector participating in	0	2	6	Progress and final reports from private sector parties and NGOs declaring and demonstrating the	Risk: Potential loss of income for artisanal producers.

	solutions; and proportion of market volume they represent. *(In accordance with Indicator 3.b. of the IP Indicators)*	the child project.				reduction and/or elimination of hazardous chemicals and their waste, and water and energy efficiency, and the reduction in the use of non-renewable materials.	Associated to Risk 2. Assumption: A proactive engagement of the Project Management Unit (PMU) with the textile producers stakeholders along the supply chains on the ground will be sustained through the child project's implementation to guarantee relevant stakeholders are engaged and willing to adopt the proposed alternatives and best available technologies.
Output to achieve Outcome C	C.1 National stakeholders strengthened to support sustainable reductions along the targeted supply chains.						
Project component 4	**4. Sustainable consumption**						
Outcome D Markets for innovative products are created and behaviour shifts favour longevity over unnecessary consumption.	**Indicator 12: Number of jobs created in sustainable and alternative supply chains.** *(In accordance with Indicator 2.b. of the IP Indicators)*	Technical and social reports with results of the implementations carried out by private companies related to the proposed pilot interventions.	0 To date, none of the producers of the proposed child project's interventions sites have been made aware of the dangers of the use of hazardous chemicals and means to eliminate/avoid their use.	200 By supporting initiatives related to the use of innovative sustainable materials, of which at least 40% will be submitted by women.	800 By supporting initiatives related to the use of innovative sustainable materials, of which at least 40% will be submitted by women.	Final reports approved and endorsed by the Executing Partner and UNDP and uploaded in the Global Platform managed by UNEP.	Risks: Working conditions within project demonstration activities in contravention to principles and standards of ILO fundamental conventions. Associated to Risk 8. - Assumption: Success in the implementation of the co-financed planned activities, therefore, committed textile producers can easily access services.

	Indicator 13: Engagement of women, youth, vulnerable groups and indigenous groups – individuals and organizations- participating in FSP activities. *(In accordance with Indicator 4.b. of the IP Indicators)*	Record files of attendance at child project activities segregated by gender, age and ethnicity.	In the framework of the PPG phase workshops, 217 direct project beneficiaries have participated: Female: 110 Male: 107	3,000 direct project beneficiaries (those who will benefit from and be directly involved in the implementation of the child project) for which the risk of hazardous chemical exposure has been reduced. Female: 1,650 Male: 1,350	8,000 direct project beneficiaries (farmers, producers, constructors, entrepreneurs, public servants, and local community members) for which the risk of hazardous chemical exposure has been reduced. Female: 4,400 Male: 3,600	*PMU annual reports*	Risk: Gender discrimination reproduced through limiting women's ability to contribute to decision-making and to benefit from the project. Associated to Risk 3. - Assumption: Successful implementation of the Gender Action Plan will help strengthen gender equality and empower women by improving their working conditions when directly participating in the activities related to the environmentally sound management of hazardous chemicals, deployment of alternative technologies and best practices along the supply chains.
Output to achieve Outcome D	D.1 Promoted change in consumer behaviour towards better and less consumption.						
Project component 5	**5. Post-use and 9Rs**						
Outcome E Reverse logistics processes are implemented which return products and materials back to manufacturers to reuse or recycle.	**Indicator 14: Number of private sector stakeholders participating and adopting IP solutions.** *(In accordance with Indicator 4.a. of the IP Indicators)*	Technical and social reports with results of the implementations carried out by private companies related to the proposed pilot interventions.	0	1	5	Final reports approved and endorsed by the Executing Partner and UNDP and uploaded in the Global Platform managed by UNEP.	Risk: Working conditions within project demonstration activities in contravention to principles and standards of ILO fundamental conventions. Associated to Risk 8.

							- Assumptions: Effective synergies and communication created between the public authorities at the national and regional levels and private producers will enable a favorable environment to implement the project. This child project seeks to promote adoption of technologies, processes, alternatives to harmful chemicals that are accessible (financially, geographically and culturally) and where possible, procured, locally.
	Indicator 15: Knowledge created, disseminated, and applied. *(In accordance with Indicator 2.d. of the IP Indicators)*	Items produced and disseminated at the national and international levels such as audiovisual publications of success stories, technical manuals and/or best practices. Website tracking data, engagement analytics.	0 Knowledge on chemicals management in construction and textiles is not always readily available.	1 At least one item produced and disseminated at the national and international levels such as audiovisual publications of success stories, technical manuals and/or best practices publication of materials for the dissemination of information compilation of lessons learned and knowledge acquired.	5 At least five items produced and disseminated at the national and international levels such as audiovisual publications of success stories, technical manuals and/or best practices publication of materials for the dissemination of information compilation of lessons learned and knowledge acquired.	Systematization of physical and digital publications of success stories, findings, learning and results, through a knowledge platform (Activities of Output E.2). Record of interactions with information: comments, contacts, shares.	Risk: Stressful national economic context and political instability discourages clients and investors. Associated to Risk 15. - Assumptions: IP knowledge is relevant to and draws interest from target audiences in the textile sector. IP partners are able to freely access and share IP knowledge.

Output E.1 to achieve Outcome 5	E.1 Awareness of project stakeholders raised on the management of Industrial (POPs) Chemicals, related wastes and safer alternatives.						
Output E.2 to achieve Outcome 5	E.2 Knowledge management system for best practices and communications at national and global levels established.						
Project component 6	**Monitoring & Evaluation**						
Outcome F Accountability and adaptive management is ensured to track and maximize program outcomes.	**Indicator 16: Percentage of project expenditure spent on the FSP planned activities.**	*Annual implementation reports (PIRs) prepared the PMU.*	0%	35%	100%	Compliance with the ProDoc M&E Plan (Section VII).	Risk: Limited capacity development of national FSP partners and availability of cofounding sources to accomplish the proposed outputs. Associated to Risk 17. Assumption: A very proactive role of the PMU in accordance with the implementing partner, UNDP and GEF management procedures.
Outputs to achieve Outcome F	F.1 M&E and adaptive management applied.						

[1] *UNDP publishes its project information (indicators, baselines, targets and results) to meet the International Aid Transparency Initiative (IATI) standards. Make sure that indicators are S.M.A.R.T. (Specific, Measurable, Attainable, Relevant and Time-bound), provide accurate baselines and targets underpinned by reliable evidence and data, and avoid acronyms so that external audience clearly understand the results of the project.*

[2] In addition to the five GEF Mandatory Indicators, the FSP design has added 10 outcome indicators, in accordance with the IP Results Indicators proposed in the GEF-8 Project Framework Development (PFD), broadly following the transformation levers that are at the base of the IP theory of change. The correspondence between the IP Results Indicators and the adopted individual child Project outcome indicators to monitor and report on progress is the following:

- Indicator 6: Policy alignments by different ministries and with non-state actors. (In accordance with Indicator 3.a. of the IP Indicators)

- Indicator 7: Number of innovations. (In accordance with Indicator 2.c. of the IP Indicators)

- Indicator 8: Production and uptake of new materials into supply chains. (In accordance with Indicator 2.a. of the IP Indicators)

- Indicator 9: Number of financial resources unlocked for sustainable supply chains or financial flows influenced. (In accordance with Indicator 1.a. of the IP Indicators)

- Indicator 10: Number of pilot projects implemented. (In accordance with Indicator 3.b. of the IP Indicators)

- Indicator 11: Number of private sector and NGO stakeholders participating and adopting IP solutions; and proportion of market volume they represent. (In accordance with Indicator 3.b. of the IP Indicators)

- Indicator 12: Number of jobs created in sustainable and alternative supply chains. (In accordance with Indicator 2.b. of the IP Indicators)

- Indicator 13: Engagement of women, youth, vulnerable groups and indigenous groups –individuals and organizations- participating in FSP activities. (In accordance with Indicator 4.b. of the IP Indicators)

- Indicator 14: Number of private sector stakeholders participating and adopting IP solutions. (In accordance with Indicator 4.a. of the IP Indicators)

- Indicator 15: Knowledge created, disseminated, and applied. (In accordance with Indicator 2.d. of the IP Indicators)

[3] Baseline, mid-term and end of project target levels must be expressed in the same neutral unit of analysis as the corresponding indicator. Baseline is the current/original status or condition and needs to be quantified. The baseline can be zero when appropriate given the project has not started. The baseline must be established before the project document is submitted to the GEF for final approval. The baseline values will be used to measure the success of the project through implementation monitoring and evaluation.

[4] Target is the change in the baseline value that will be achieved by the mid-term review and then again by the terminal evaluation.

[5] Data collection methods should outline specific tools used to collect data and additional information as necessary to support monitoring. The PIR cannot be used as a source of verification.

[6]. This indicator captures the number of individual people who receive targeted support or assistance from a given GEF-financed project or program and/or who use the specific resources that the project maintains or enhances. Direct beneficiaries are all individuals receiving either: (a) Targeted support. This includes individuals whom can be identified as receiving direct support or assistance, can be counted individually and are aware they are receiving support in some sort and/or use the specific resources. This implies a high degree of attribution to the project; or (b) High intensity of support. This means receiving a high level of support/effort provided per person, assessed on a continuum with broad levels from Low to Medium and High, where only high intensity of support qualifies as direct beneficiary as per Table 1 (page 26) of the GEF's Guidelines on the Implementation of the GEF-8 Results Measurement Framework

[7]Outcomes are medium term results that the project makes a contribution towards, and that are designed to help achieve the longer-term objective. Achievement of outcomes will be influenced both by project outputs and additional factors that may be outside the direct control of the project.

ANNEX D: STATUS OF UTILIZATION OF PROJECT PREPARATION GRANT (PPG)

Provide detailed funding amount of the PPG activities financing status in the table below:

Project Preparation Activities Implemented	GETF/LDCF/SCCF Amount ($)		
	Budgeted Amount	Amount Spent To date	Amount Committed
International Project Development Specialist (PPG Team Leader)	29,300.00	19,300.00	10,000.00
International POPs Specialist	10,802.00	10,802.00	
International Gender Specialist	5,000.00	5,000.00	0.00
International Social and Environmental Safeguards Specialist	4,800.00	4,800.00	0.00
National PPG Coordinator, institutional and policy Expert.	19,540.00	14,816.00	4,724.00

National construction Value chain Specialist	10,000.00	9,072.00	928.00
National textile value chain specialist	15,000.00	9,513.00	5,487.00
Travel	36,400.00	7,682.00	28,718.00
Translation (Spanish - English)	8,000.00		8,000.00
Inception and validation workshops	11,158.00	5,612.00	5,546.00
Total	**150,000.00**	**5,612.00**	**53,403.00**

ANNEX E: PROJECT MAP AND COORDINATES

Please provide geo-referenced information and map where the project interventions will take place

Location Name	Latitude	Longitude	GeoName ID
Cuenca	-2.900852	-79.006499	

Location Description:

Sierra Region, Province of Azuay

Activity Description:

Production of roof tiles and artisanal bricks lead-free:

Implementation of better techniques, technology, and environmental practices in artisanal brick kilns to reduce COP-NIS, and GHG, and hazardous chemical substitution.

Location Name	Latitude	Longitude	GeoName ID
Pedro Vicente Maldonado	0.082372	-79.047885	

Location Description:

Sierra Region, Province of Pichincha

Activity Description:

Develop of sustainable building materials from bamboo:

Use of bamboo panels and rice husks chipboard panels, as an eco-innovative alternative in sustainable construction projects.

Location Name	Latitude	Longitude	GeoName ID
La Concordia	-0.261005	-79.198271	

Location Description:

Subtropic Region, Province of Santo Domingo de los Tsachilas

Activity Description:

Develop of Innovative sustainable building materials rice husks: Develop of sustainable textile materials Innova-abaca

fashion and

packaging:

1. Regenerative

Design

2. Innovative

Materials

3. Cleaner

production

Location Name	Latitude	Longitude	GeoName ID
Tosagua	-0.78393	-80.233582	

Location Description:

Coast

Region, Province of Manabí

Activity Description:

Assorted color Cotton: Repowering of cotton crops, and introduction of new plant species of colored cotton.

Location Name	Latitude	Longitude	GeoName ID
Puerto Ayora	-0.742491	-90.325291	

Location Description:

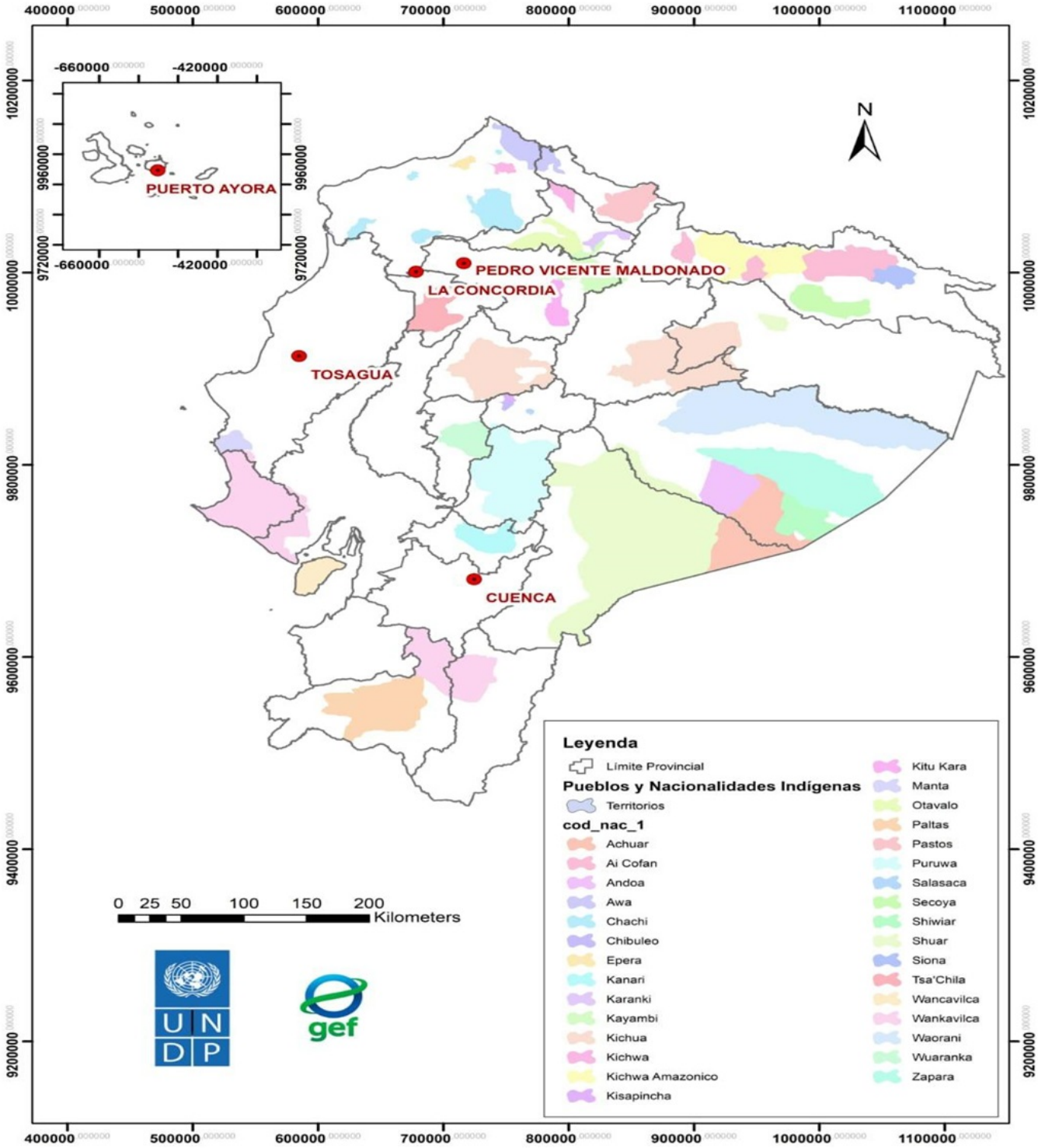
Galápagos Islands

Activity Description:

Galapagos, Free of Asbestos:

Replacing asbestos-cement roofs with sustainable construction materials made of bamboo or bamboo-based veneers.

Please provide any further geo-referenced information and map where project interventions are taking place as appropriate.



ANNEX F: ENVIRONMENTAL AND SOCIAL SAFEGUARDS DOCUMENTS INCLUDING RATING

Attach agency safeguard datasheet/assessment report(s), including ratings of risk types and overall project/program risk classification as well as any management plans or measures to address identified risks and impacts (as applicable).

Title

PIMS_9594_GEFID_11175_SupplyChainEcuador_PRODOC_Annex9_ESMF

PIMS_9594_GEFID_11175_SupplyChainEcuador_PRODOC_Annex5_SESP

ANNEX G: BUDGET TABLE

Please upload the budget table here.

Annex 1. GEF Budget Table

Expenditure Category	Detailed Description	Component (USDeq.)										Total (USDeq.)	Responsible Entity
		Component 1		*Component 2*	*Component 3*	*Component 4*	*Component 5*		*Sub-Total*	*M&E*	*PMC*		
		Outcome A		*Outcome B*	*Outcome C*	*Outcome D*	*Outcome E*			*Outcome F*	*PMC*		(Executing Entity receiving funds from the GEF Agency)[1]
		Output A.1	*Output A.2*	*Output B.1*	*Output C.1*	*Output D.1*	*Output E.1*	*Output E.2*		*Output F.1*	*PMC*		
Contractual services-Company	Organizations to carry out pilots: USD$100,000 for Pilot 1 (Asbesto-free Galápagos), USD$115,000 for pilot 3 (UPOP emission reduction on brick production), USD$415,000 for Pilot 4 (reduction of HHCh and Flame retardants from Apparel manufacturing), USD$85,000 for Pilot 5 (Chemical-free colored Cotton), and USD$85,000 for Pilot 6 (Abaca). See Pilots annex for additional details. Contracted Services for targeted assessments and site-specific ESMPs at USD$35,000. See PRODOC Annex 9 for additional details.				835,000				835,000			835,000	MAATE
Contractual services-Company	Organizations to carry out pilots: USD$20,000 for Pilot 1 (Asbesto-free Galápagos), USD$75,000 for Pilot 2 (Eco-building materials for construction), USD$90,000 for pilot 3 (UPOP emission reduction on brick production), USD$75,000 for Pilot						137,500	137,500	275,000			275,000	MAATE

	5 (Chemical-free colored Cotton), and USD$15,000 for Pilot 6 (Abaca). See Pilots annex for additional details												
Contractual services-Company	Organizations to carry out pilots: USD$24,000 for Pilot 2 (Eco-building materials for construction), USD$100,000 for pilot 3 (UPOP emission reduction on brick production), USD$50,000 for Pilot 4 (reduction of HHCh and Flame retardants from Apparel manufacturing), USD$16,000 for Pilot 5 (Chemical-free colored Cotton), and USD$35,000 for Pilot 6 (Abaca). See Pilots annex for additional details					225,000			225,000			225,000	MAATE
Contractual services-Company	Organizations to carry out pilots: USD$29,000 for Pilot 1 (Asbesto-free Galápagos), USD$132,000 for Pilot 2 (Eco-building materials for construction), USD$166,000 for pilot 3 (UPOP emission reduction on brick production), USD$105,000 for Pilot 5 (Chemical-free colored Cotton), and USD$ 120,000 for Pilot 6 (Abaca). See Pilots annex for additional details	276,000	276,000						552,000			552,000	MAATE
Contractual services-Company	Organizations to carry out pilots: USD$471,000 for Pilot 1 (Asbesto-free Galápagos), USD$47,000 for Pilot 2 (Eco-building materials for construction), USD$95,000 for pilot 3 (UPOP emission reduction on brick production), USD$85,000 for Pilot 5 (Chemical-free colored Cotton), and USD$445,000 for Pilot 6 (Abaca). See Pilots annex for additional details			1,143,000					1,143,000			1,143,000	MAATE
Contractual services-Individual	One Project Administrator at USD$17,000/yr for 5.5 years. See annex 7 for additional details										93,500	93,500	MAATE
Contractual services-Individual	5% of the Project Coordinator's costs for 5.5 years: they will undertake day-to-day project implementation of technical and management activities at USD$42,500 per year (USD$2,500 per year will be charged to PMC)										13,750	13,750	MAATE
Contractual services-Individual	One Project Monitoring & Evaluation Officer engaged for the coordination, implementation, oversight and follow-up of the Mandatory reports production at									115,500		115,500	MAATE

	USD$21,000/year for 5.5 years. Activities include M&E of GEF core indicators and project results framework, GEF Project Implementation Report (PIR), and Monitoring of Environmental Social and Management Framework and Plan. See M&E budget table on PRODOC section 7.1 for additional details												
Contractual services-Individual	19% of the Project Coordinator's costs for 5.5 years: they will undertake day-to-day project implementation of technical and management activities at USD$42,500 per year (USD$8,000 per year will be charged to this component), See annex 7 for additional details	22,000	22,000						44,000			44,000	MAATE
Contractual services-Individual	20% of the Project's Gender, Social and Environmental Safeguards Specialist costs for 5.5 years: they will support the implementation of the Gender Action Plan and perform day-to-day monitoring of Social and Environmental Risks at USD$32,500 per year (USD$6,500 per year will be charged to this output), See annex 7 for additional details	17,875	17,875						35,750			35,750	MAATE
Contractual services-Individual	19% of the Project Coordinator's costs for 5.5 years: they will undertake day-to-day project implementation of technical and management activities at USD$42,500 per year (USD$8,000 per year will be charged to this component), See annex 7 for additional details			44,000					44,000			44,000	MAATE
Contractual services-Individual	20% of the Project's Gender, Social and Environmental Safeguards Specialist costs for 5.5 years: they will support the implementation of the Gender Action Plan and perform day-to-day monitoring of Social and Environmental Risks at USD$32,500 per year (USD$6,500 per year will be charged to this output), See annex 7 for additional details			35,750					35,750			35,750	MAATE
Contractual services-Individual	19% of the Project Coordinator's costs for 5.5 years: they will undertake day-to-day project implementation of technical and management activities at USD$42,500 per year (USD$8,000 per year will be charged to this				44,000				44,000			44,000	MAATE

	component), See annex 7 for additional details												
Contractual services-Individual	20% of the Project's Gender, Social and Environmental Safeguards Specialist costs for 5.5 years: they will support the implementation of the Gender Action Plan and perform day-to-day monitoring of Social and Environmental Risks at USD$32,500 per year (USD$6,500 per year will be charged to this output), See annex 7 for additional details				35,750				35,750			35,750	MAATE
Contractual services-Individual	19% of the Project Coordinator's costs for 5.5 years: they will undertake day-to-day project implementation of technical and management activities at USD$42,500 per year (USD$8,000 per year will be charged to this component), See annex 7 for additional details					44,000			44,000			44,000	MAATE
Contractual services-Individual	20% of the Project's Gender, Social and Environmental Safeguards Specialist costs for 5.5 years: they will support the implementation of the Gender Action Plan and perform day-to-day monitoring of Social and Environmental Risks at USD$32,500 per year (USD$6,500 per year will be charged to this output), See annex 7 for additional details					35,750			35,750			35,750	MAATE
Contractual services-Individual	19% of the Project Coordinator's costs for 5.5 years: they will undertake day-to-day project implementation of technical and management activities at USD$42,500 per year (USD$8,000 per year will be charged to this component), See annex 7 for additional details						22,000	22,000	44,000			44,000	MAATE
Contractual services-Individual	20% of the Project's Gender, Social and Environmental Safeguards Specialist costs for 5.5 years: they will support the implementation of the Gender Action Plan and perform day-to-day monitoring of Social and Environmental Risks at USD$32,500 per year (USD$6,500 per year will be charged to this output), See annex 7 for additional details						17,875	17,875	35,750			35,750	MAATE

Contractual services-Individual	one Supply Chain Specialist at USD$26,000 for 5.5 years. See annex 7 for additional details										143,000	143,000	MAATE
Equipment	Standard IT equipment										9,450	9,450	MAATE
Equipment	Standard office equipment (Work desk and chair)										3,000	3,000	MAATE
International Consultants	International Consultant on cleaner production. See annex 7 for additional details				200,000				200,000			200,000	MAATE
International Consultants	International Consultant on Sustainable Production of Textiles and International Consultant on Sustainable Production of Construction Materials to support activities under this component. . See annex 7 for additional details					50,000	37,500	37,500	125,000			125,000	MAATE
International Consultants	International Consultant to support research on innovative materials.			14,080					14,080			14,080	MAATE
International Consultants	One International Consultant for the MTR $21,000 and One International Consultant for the TE $21,000. See M&E budget table on PRODOC section 7.1 Monitoring Plan									42,000		42,000	UNDP
International Consultants	Support from two international consultants, specialized on Textiles and Construction. See annex 7 for additional details	50,000	50,000						100,000			100,000	MAATE
Local Consultants	Local consultant (Legal Consultant to support enforcement of policies and regulation) to support activities under Component 1. See Annex 7 for additional details.	78,000	78,000						156,000			156,000	MAATE
Local Consultants	Local consultant (Legal Consultant to support enforcement of policies and regulations) to support activities under Component 2. See Annex 7 for additional details.			10,000					10,000			10,000	MAATE
Local Consultants	Local Consultant on Sustainable Production of Textiles and Local Consultant on Sustainable Production of Construction Materials to support activities under this component. . See annex 7 for additional details					25,000	25,000	25,000	75,000			75,000	MAATE
Local Consultants	Local consultants (Technical Advisors) to support activities under Component 3. See Annex 7 for additional details.				180,000				180,000			180,000	MAATE
Office Supplies	Basic office supplies for duration of project period										3,000	3,000	MAATE

Other Operating Costs	Audio Visual and Print Production Costs to support awareness-raising on Cleaner production				80,810				80,810			80,810	MAATE
Other Operating Costs	Audio Visual and Print Production Costs to support awareness-raising on Innovative materials			3,000					3,000			3,000	MAATE
Other Operating Costs	Audio Visual and Print Production Costs to support awareness-raising on Post use 9Rs						2,500	2,500	5,000			5,000	MAATE
Other Operating Costs	Audio Visual and Print Production Costs to support awareness-raising on Sustainable Consumption					5,000			5,000			5,000	MAATE
Other Operating Costs	Audio Visual and Print Production Cots to support activities under Component 1. Regenerative design and circular business models. This includes awareness-raising materials. Enhancement and full integration of gender-supportive policies for women will be included.	12,500	12,500						25,000			25,000	MAATE
Other Operating Costs	Audit Services (USD$2,000 per year for 5 years)										10,000	10,000	UNDP
Other Operating Costs	Translation services (English - Spanish) for the MTR and TE									2,000		2,000	MAATE
Training, Workshops, Meetings	Inception workshop. See M&E budget table on PRODOC section 7.1 for additional details									3,000		3,000	MAATE
Training, Workshops, Meetings	Training and Workshops aimed to raise awareness on Cleaner production				161,000				161,000			161,000	MAATE
Training, Workshops, Meetings	Training and Workshops aimed to raise awareness on Innovative materials			5,000					5,000			5,000	MAATE
Training, Workshops, Meetings	Training and Workshops aimed to raise awareness on Post use 9Rs						3,073	3,073	6,146			6,146	MAATE
Training, Workshops, Meetings	Training and Workshops aimed to raise awareness on Sustainable Consumption					5,000			5,000			5,000	MAATE
Training, Workshops, Meetings	Training to strengthen capacities at the national and sub-national levels on Regenerative Design and circular business models	15,000	15,000						30,000			30,000	MAATE
Training, Workshops, Meetings	Training workshops, seminars and meetings to strengthen project management capabilities										2,500	2,500	MAATE
Travel	Supervision missions. See M&E budget table on PRODOC section 7.1 for additional details									4,000		4,000	MAATE
Travel	Travel to support Output A.1 Policy environment enabled for design sustainability and circularity, and Output A.2 Strengthened capacity of public planners, corporations, producers, and academia using circular business models, as well as	37,375	37,375						74,750			74,750	MAATE

	participation on the Integrated Programme Global Meetings.												
Travel	Travel to support Output B.1 A more favorable environment is enabled for innovative materials and more sustainable inputs to substitute non-renewable materials., as well as participation on the Integrated Programme Global Meetings.			17,000					17,000			17,000	MAATE
Travel	Travel to support Output C.1 National stakeholders strengthened to support sustainable reductions along most significant supply chains in the textile industry, as well as participation on the Integrated Programme Global Meetings.				244,000				244,000			244,000	MAATE
Travel	Travel to support Output D.1 Sustained procurement processes between private suppliers and buyers for more sustainable products and circular business models, as well as participation on the Integrated Programme Global Meetings.					85,180			85,180			85,180	MAATE
Travel	Travel to support Output E.1 Awareness of project stakeholders raised on the management of Industrial (POPs) Chemicals, related wastes and safer alternatives, and Output E.2 Knowledge management system for best practices and communication platforms at national and global levels established, as well as participation on the Integrated Programme Global Meetings.						42,590	42,590	85,180			85,180	MAATE
Grand Total		**508,750**	**508,750**	**1,271,830**	**1,780,560**	**474,930**	**288,038**	**288,038**	**5,120,896**	**166,500**	**278,200**	**5,565,596**	

Please explain any aspects of the budget as needed here

ANNEX I: RESPONSES TO PROJECT REVIEWS

From GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF.

Comment	How these comments will be addressed during the PPG
Germany	
appreciates the foreseen transparency of material contents and awareness raising for workers on the health risks of the chemicals and products they work with.	Thank you.
Introducing more sustainable materials and processes is regarded as very challenging in both supply chains. The final proposal shall explain which activities can be targeted in an integrated manner and how actors in both sectors might learn from each other.	The three child projects which address both sectors (Ecuador, Cambodia, Global) will be the most integrated and explicitly address this. The global child project will be organized
The PFD states that the empowerment and inclusion of vulnerable groups will be prioritised and further specifies individual cooperation partners. The final proposal shall outline relevant factors and concrete objectives for successfully empowering women and indigenous groups throughout the project.	The IP-wide stakeholder engagement process to develop the stakeholder plan will be led by the global child project and ensure vulnerable groups are engaged. Inputs from all child projects will be consolidated to analyse the factors and objectives as requested.
Appreciates the planned establishment of a shared knowledge repository. The final proposal shall include a strategy for covering diverse local contexts and solutions, also considering knowledge by local and national governments as well as development agencies and NGOs beyond the UN system.	The KM strategy of the coordination child project will cover national and local knowledge and solutions. Child projects to actively share local solutions and knowledge with the coordination project.
Component 4 – behaviour change: The proposal explains that consumers for global textile supply chains are predominantly high-consumption markets largely in the Global North. We request a more detailed clarification on i) which the mechanisms deploying international consumer markets are, and ii) how the selected transformation levers may influence these consumer markets (refer as well to recent market trends such as the European due diligence act as well as the upcoming Carbon Border Adjustment Mechanism).	These issues will be addressed by the global child project, which will review both consumer communications/ marketing trends (e.g. UNEP's recent playbook on fashion communication) as well as regulations in importing regions. The specific European acts are duly noted.
Component 5 – reverse logistic: Post-consumer and post-production waste are either mixed up or used as synonyms. Clearly differentiate these two strategies and review, if post-consumer waste is correctly placed under component 5 or rather should be moved under component 3	*IAs to confirm what projects are planning on post-production vs post-consumer waste – to discuss*
✓ Japan Comments	
Country selection: While the construction industries exist in any country, textile industries are concentrated in certain countries. Justifications are not adequately provided in terms of country selection on textile supply chains.	The IP countries were selected based on a competitive EOI process, which included a criterion on the relative importance of the country's sector in the global value chains. Child projects will clearly justify the country selection in the Rationale section of the CEO ER.

Structure: While some private investments are envisaged, they are very vague, and all project components are technical assistance. Justifications are not adequately provided to achieve the project objective.	*IAs to confirm what investments are being targeted particularly in relation to scaling up impact – to discuss*
Components: Although 9Rs are mentioned, more enhanced resource efficiency and circularity along with value chains should be highlighted more from design to recycling, to reduce pollution, GHG emissions, and biodiversity loss.	Child projects will highlight the contribution of circularity and resource efficiency concepts in support of all five components from design to end of life.
GEBs: Given that the project structure is based on TA, the expected GEBs (direct) seem very ambitious. Better to explain the rationale more clearly that this program can achieve such outcome	See response above on TA/ investment and impact.
Switzerland Comments	
The theory of change, it is not understandable or logic how the program components are contributing to the goal of the program and how they are linked with each other. Activities planned are missing. Indicators and the predicted amount of savings are not really justified and plausible and the stakeholder analysis is missing/weak. Could you provide more information?	A revised ToC will be produced by each child project. This process will be coordinated by the Lead Agency. Activities are not usually included in TOC as it would crowd the diagram and be unreadable. They will be described in the Project Description & Workplan sections of each child project. The GEBs methodology will be robustly applied during PPG including through sampling and analysis of chemicals in products. Stakeholder analysis will be deepened in the PPG phase and be presented as an IP-wide stakeholder engagement plan with roles for each child project.
United Kingdom Comments	
While it is valuable to reference the triple planetary crises of climate change, pollution and biodiversity loss in reference to the IP on "Eliminating Hazardous Chemicals from Supply Chains", it is also helpful to underscore these interlinkages throughout the other Integrated Programmes (and indeed, focal areas). Adding a short line to that effect in the introduction to the work programme, or under the section on the IPs (paras 38 – 39) could be helpful in this regard	This comment on the work programme documentation will be considered by GEF Sec.
United States Comments	
India: We believe the Ministry of Chemicals and Fertilizers should be incorporated into this proposal.	To be considered by UNIDO.
STAP Comments (response already provided in the final PFD submission):	
1. Consider developing a narrative of plausible futures that considers the potential effects drivers of change and their associated uncertainties on achieving the project's goal, and use this to	During the PPG, it will be ensured that the rational section in each child project will include a narrative of plausible futures that considers the potential effects drivers of change and their

inform intervention options across the value chain and the different national child projects. See STAP's primer on future narratives for more guidance.	associated uncertainties on achieving the project's goal. Each child project will use this to inform intervention options across the value chain.
2. Ensure that all child projects address each aspect of the supply chain with appropriate actions toward achieving the transformational levers.	During the PPG, each child project will ensure action under each supply chain stage, targeting the transformational levers.
3. Recognize gender, Indigenous Peoples and Local Communities, and youths in the ToC, including in the overall project impacts and the example of activities. Pay extra attention to how to incorporate ILK [AB1] [LB2] into the child projects, where engagements take time and sensitivity.	Gender, Indigenous Peoples and Local Communities, and Youths aspects will be recognised in child project ToCs. The PPG will pay attention to the engagement of Indigenous Peoples so that Indigenous learning and knowledge can be adequately incorporated into relevant child projects.
4. We encourage all child projects to analyze policies across the various sector within their countries to understand where conflicting policies can hinder the achievement of the expected outcomes and ensure these are addressed appropriately. See STAP's paper on policy coherence for more guidance.	Each child project will analyse policies in its selected sector(s) to understand where conflicting policies can hinder the achievement of the expected outcomes and ensure that these are addressed appropriately in the project intervention. One of the selection criteria for the EoIs was the willingness of submitting country to address these conflicting and hindering policies
5. Undertake a detailed analysis of the innovation in the program. Also, consider how the child projects can demonstrate the many innovations highlighted in the PFD. Also, ensure that the global child project incorporates these innovations in its capacity building, technical assistance, knowledge management and learning aspects, awareness-raising, and advisor activities to help disseminate these solutions within the program and to countries outside the program. This will be essential for transformational change.	Each child project will actively identify innovations during PPG and engage partners relevant to ensure their demonstration during the project implementation. The global child project will actively liaise with the other child projects during PPG so that its proposed intervention will serve the child projects, their identified innovations, and disseminate these best practices and lessons learnt inside and outside the program.
6. We encourage the program to follow through in tracking the transformational change impact of the program using the selected indicators.	The monitoring and Evaluation activities to be developed for the program will utilise the program indicators designed to track transformational change.
7. Provide more information on how the GEBs across the IP were estimated, including the underlying assumptions.	During the PPG, the program GEB methodology will be further refined and applied uniformly among child projects. The child projects will provide a detailed description of their GEB calculations in their projects proposals, including underlying assumptions.
8. Recognize the local environmental benefits that can be generated through the project and put in place provisions to track, measure and report these and the socioeconomic co-benefits. Please see STAP's paper on incorporating co-benefits in GEF's investments for guidance.	The program and child projects will identify further co-benefits during the PPG and ensure provisions are put in place to track measure and report these and the socioeconomic co-benefits.

[AB1]What is ILK? [AB1]

we need to ask Sunday/Myriam [LB2] [LB2]