

Call for Project Proposals

For the development of a National Textile Life Cycle Inventory (LCI) database for South Africa and Feasibility of an Extended Producer Responsibility scheme under the framework of the UNEP InTex Programme in South Africa

Objective of the Project Proposal	The United Nations Environment Programme (UNEP) is implementing the UNEP InTex Programme in South Africa, as part of the UNEP Textile Initiative, to promote the shift toward a circular textile value chain. Through this call for proposals, UNEP invites applications from organizations to identify one or multiple implementing partners ('Implementing Team') for the development of a National Textile Life Cycle Inventory (LCI) database for South Africa. The database will be publicly available (free of charge). The Implementing Team will conduct activities including data collection, datasets development, review and validation, as well as database design and operationalization (including having the data accessible online in a ready-to-read LCA data exchange format). Also, a feasibility study must be conducted of expanding the current Extended Producer Responsibility Regulations to also include Textiles. The selected organization will work closely with UNEP and collaborate with a broad range of private and public stakeholders as required, including the Department of Forestry, Fisheries and the Environment (DFFE), the Department of Trade, Industry and Competition (dtic), and the Localisation Support Fund .
Overall Project Information	
General InTex Programme Background	The InTex Programme, part of UNEP's Textile Initiative, supports governments and textiles SMEs to transition from linear production models to sustainable, circular systems. It promotes national policy reforms and helps businesses optimize resource use, reduce environmental impact, and improve competitiveness. By applying a life cycle approach and encouraging upstream actions, InTex drives industry transformation to meet local and export market standards. It also assists governments in developing or implementing circular textile policies to increase competitiveness and market readiness. The InTex Programme is active in South Africa, Kenya, Tunisia, Indonesia and India. South-South collaboration and exchanges among these countries are a value-add of the programme. InTex Africa (Phase II) is funded by the European Union (EU) and builds on the EU-funded InTex project (Sept 2020–Dec 2024) in Kenya, South Africa, and Tunisia, continuing efforts to scale circularity in

	the textile sector. A comprehensive overview of Phase I outcomes is available on the InTex Programme website. Specifically, the outputs of the InTex Programme include: • Output 1: Industry action. This includes working with SMEs (brands, retailers and manufacturers) to shift industry practices towards sustainability through circular business models and life cycle approaches; and • Output 2: Enabling Policy action. This includes development and/or implementation of enabling tools, policies, strategies, and legislations for a circular textile value chain, including the development of Life Cycle Inventory databases, as enablers for decision making. This call for proposal links to implementation of Output 2 in South Africa. Through the development of a National LCI database for textile in South Africa, InTex will enhance the availability, quality, and interoperability of life-cycle data to inform evidence-based policymaking, and enable circular product design and comparisons across the textile value chain.
Proposals Sought	
Description of Project and expected activities:	Through this Call for Proposals, UNEP is inviting applications from organizations to collaborate with UNEP towards: 1. The development of a national, open-access Life Cycle Inventory (LCI) database for textiles in South Africa, as well as the strategy for its future governance and maintenance. 2. The development of a White Paper assessing the feasibility of extending South Africa's Extended Producer Responsibility (EPR) Regulation to the textile sector, providing the Department of Forestry, Fisheries and Environment (DFFE) with research, policy analysis, and evidence-based recommendations.
Activity 1 – South Africa Textiles LCI Database	Objective of the LCI database The database will increase the availability of regionally representative LCI datasets, accurately reflecting the realities of textile production, use and disposal in South Africa. By providing open access to this data, producers will be supported to better understand the hotspots of their production and will be better positioned to respond to requests for data with representative secondary datasets tailored to the realities on the ground.

	The database will also support policymaking to better understand the material flows and hotspots related to priority materials and products produced in South Africa. Using this database, policymakers could, for example, tailor an EPR framework to the sustainability burden of a specific product rather than simply by weight or amount of material. For instance, this may increase stability of demand from buyers in the face of uncertainty and risk related to global tariffs. The database will be designed for international interoperability, aligning with the Global LCA Data Access (GLAD) network requirements (metadata descriptors; elementary flow nomenclature) to ensure South African textile data are visible / findable and recognized by international LCA experts as well as brands and retailers. UNEP has also commissioned national textile LCI Databases in India and Indonesia which will both be launched in 2027. It is expected that the LCI Database in South Africa Implementing Team will have access to resources from these other projects (e.g., questionnaires, project learnings, etc.). Materials & Processes in Scope The database shall focus on a minimum of three material types (cotton, polyester, and mohair). Should the proponent find it feasible within the available budget and project timeline, the scope of the proposed work may be expanded to include additional priority materials, such as wool, among others, in response to Government interest and stakeholder priorities. For some materials where there exists significant domestic consumption, the database shall cover all life cycle stages, from cradle-to-grave, (i.e., including the extraction of raw materials, their processing, finished product manufacturing, transportation, retail, product use, and end of life). For materials which are exported at intermediate stages (e.g., mohair), the Implementing Team will propose an appropriate boundary for this material in the database. The Implementing Team shall justify and propose priority products (at least one product per material type) to guide the processes and datasets to be developed. The products must be relevant and of prominence for the South African textile sector (domestic and export markets, or cultural heritage), align with national priorities for growth, be associated with significant environmental burdens, and areas where there may be outdated data or data gaps. The proposal should detail the process list for the nominated products (using the Unit Process Mapping tab in Annex I), and the sustainability interventions to be modelled. The Implementing Team will need to ensure the LCI database fills existing data gaps, ensure buy-in and support during the development process and provides valuable sector information without duplication. For example, the
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expectation is for the Implementing Team to draw upon existing and upcoming studies (e.g., Textile Exchange’s upcoming study on Mohair and on Wool).

To increase the ability to compare options, the Implementing Team shall define and develop distinct material and process scenarios to ensure that the Life Cycle Inventory (LCI) datasets that are developed accurately represent the variability of textile production systems in South Africa. These scenarios should capture difference(s) in input materials, production technologies, energy sources, and processing methods, as these factors significantly influence environmental and social impacts across the textile value chain.

In their submissions, the Implementing Team is required to:

- Define and model multiple scenarios for each priority material (e.g., cotton, polyester, mohair), reflecting real-world variations in production systems.
- Summarize how they will use the scenarios to guide primary data collection and to produce differentiated LCI process datasets for each product to reflect the diversity of South African textile production.

A non-exhaustive, illustrative example for Cotton T-Shirt is presented below. For this illustrative example for instance scenarios may include, but are not limited to:

- **Material Variations:** Conventional cotton, Organic cotton, Recycled cotton, and/or specific cotton programs.
- **Process Variations:** less impactful dyeing processes, caustic recovery systems, digital printing, etc.

It is expected that some scenarios may simultaneously include multiple sustainability interventions – enabling the LCI database to support in quantitatively demonstrating the impact savings potential.

Product	Main Material	Dataset Modelling Scenario	What the Scenario Represents
T-Shirt	Cotton	Typical production – conventional cotton (Baseline)	Typical production: conventional cotton cultivation, conventional wet processing and no special recovery systems. Serves as the reference scenario for comparisons.
T-Shirt	Cotton	Input Material – Organic Cotton	Same process as baseline but with organic cotton fiber (certified organic practices, no synthetic pesticides/fertilizers). Captures upstream agricultural differences (yields, inputs, soil emissions) vs conventional.

	T-Shirt	Cotton	Input Material – Recycled Cotton	Baseline process using mechanically (or chemically) recycled cotton feedstock. Captures circular material flows, pre/postconsumer collection, sorting, fiber recovery yields, and potential quality/processing adjustments.
	T-Shirt	Cotton	Caustic Recovery Plant (CRP)	Baseline materials and energy, but mercerization includes caustic soda (NaOH) recovery. Represents reduced virgin NaOH consumption, lower effluent load, etc.
	T-Shirt	Cotton	Less Impactful Dyeing	Baseline materials and weaving, but improved wet processing (e.g., low liquor ratio dyeing, optimized recipes, enzymes, better ETP operations). Represents reduced water, chemicals, energy, and wastewater impacts.
	T-Shirt	Cotton	Digital Printing	Baseline materials and processes, but with digital printing. Represents chemical and water savings.
	T-Shirt	Cotton	Handwash & Hang Dry	Baseline materials and processes, but with handwashing & hang-drying only.
	T-Shirt	Cotton	Textile Recycling	Baseline materials and processes, but product is input into a textile recycling process.
			Any other	
The final selected products to be covered and sustainability interventions are to be agreed between the Implementing Team and UNEP for relevance to the market. Indicators of the LCI Database The database shall include comprehensive inventory datasets covering key environmental pressure indicators, including but not limited to: material inputs (raw materials, auxiliaries), energy use (electricity, fuels, renewable and non-renewable sources), water use (withdrawal, consumption, discharge), chemicals used, emissions to air, emissions to water, waste generation and management pathways. In addition to environmental criteria, the LCI database shall also integrate social indicators, to be discussed and finalized at the inception of the activity. Relevant social criteria may include: working time requirements (e.g., typical duration of worker engagement per unit process), occupational health and safety, labor rights, human rights, and community indicators. Technical Requirements				

	The database will be a single, integrated database, with a clear modular structure that allows users to extract environmental or social layers independently, and to update or supplement the database in the future: • One database, with common process identifiers and metadata structure (same process UUIDs, process IDs, location tags), same boundaries, and functional units, to simplify matching environmental and social indicators. • Two linked layers: ○ Environmental LCI (flows, emissions, resources) ○ Social LCI (working conditions, community indicators, etc.) • Metadata must be clearly documented and comply with ISO 14048 and with GLAD Metadata Descriptor Guidance. • Ensuring integration into the Global LCA Data Access network (GLAD) and/or other relevant LCA software platforms and industry decision-making tools. • The data may be collected in the manner selected by the Implementing Team (e.g., web-based data collection platform like ODK or XLS), and datasets developed in XLS/CSV format. • The dataset and proposed database must be submitted in multiple formats and/or enable exporting in multiple formats (XLS/CSV, ILCD EF 3.1 or 4.0 once available, J-SON LD, etc.), and be designed for interoperability and integration with other leading industry LCA databases and software tools. • The database should be made publicly available through GLAD and should be disseminated to other leading industry databases. Project Approach: The Implementing Team will work closely with UNEP, the South African Government, and key stakeholders to set-up a national, textile-specific LCA database following key steps, in line with the UNEP Global Guidance Principles for Life Cycle Assessment Databases (UNEP 2011) and the Roadmap for National LCA Database Development (UNEP 2020): 1. Initiation, finalization of approach and awareness raising 2. Data collection, database creation, review and quality assurance 3. Database distribution and operationalization These steps are an adaptation of the UNEP Guidelines and aim at ensuring long-term sustainability of the database. The resources available in the Life Cycle Initiative LCA Database Helpdesk can be used as a reference throughout these stages and adapted or complemented as necessary. Expected Activities:
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	The following are the key steps and decisions required for the development of the database. The Implementing Team must document their proposed approach to the points below in their proposal: 1. Initiation, finalization of approach and awareness raising - In consultation with key stakeholders, the Implementing Team must define and validate the scope for the National LCA database, including: a. Defining user-bases, user-needs and use-cases for the database (for the environmental and social layers): i. It is expected that there will be a variety of users – this will likely include LCA professionals as well as non-LCA professionals (e.g., policymakers, producers, local brands, international brands, retailers). ii. Develop documentation related to the users and specific needs that the database will help address (use-cases for the database and value proposition). b. Stakeholder Engagement & Awareness Raising: i. Develop a high-level stakeholder engagement plan for soliciting feedback from the sector, identifying the proposed approach to stakeholder engagement and the shortlisted stakeholders to engage for the necessary feedback. ii. Develop content for the awareness raising sessions, to demonstrate the LCI database provides value-add to the industry, minimizes duplication, fills in existing data gaps, and fulfills specific user needs. c. Exact datasets to be developed (primary and secondary) i. Together with UNEP, the Implementing Team shall finalize the unique datasets, indicate the geographic representativeness of the identified datasets, as well as clearly document the how these datasets reflect production processes from South African textile production regions. d. Data strategy i. Finalize the data collection process, data collection partners, locations & geographic representativeness, timeline, and the sampling method. e. Data quality and review process i. Develop a data quality and review process (identifying external reviewers, possibly also from other InTex countries) to ensure that high-quality and accurate data are used and reviewed, including proposed methods of triangulating reported primary data.
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	ii. All documentation and data must be provided in English and the original language in which they are collected. f. Document agreed data formats and how to ensure interoperability i. The data will need to be available in multiple formats (ILCD EF 3.1 or 4.0 once available, J-SON LD, and XLS/CSV). ii. The database must be submitted as a node on GLAD and should be designed for interoperability and integration with other leading industry LCA databases and software tools. This includes documentation of metadata, nomenclature flows and format. iii. The database should be disseminated to other leading industry databases. g. Propose a governance and management structure for the database. i. Propose options for the governance and management structure of the database, including hosting options to be discussed with stakeholders, to ensure accessibility and updates of the data over time as needed. Consider how additional datasets may be submitted for review and potential inclusion. ii. One possibility may be for the database to be hosted by UNEP on GLAD. In that instance users may need to register prior to being able to directly download the database or receive it via email. 2. Data collection, database creation, review and quality assurance a. Conduct primary and secondary data collection for the environmental and social datasets, in line with the data strategy developed. b. Develop a guidance document for the identified external reviewers and a system to ensure a harmonized review and quality assurance process. c. Datasets must be processed through the agreed data quality and external review process (including triangulation of primary data), as well all data being available in English. d. Build and test the LCI datasets. e. Development of all metadata and documentation that accompanies the datasets/database. f. Developing the system to store and manage the database. 3. Database distribution and operationalization a. Document the processes for the regular update, maintenance, and governance of the LCI database, including:
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	i. The process for database routine maintenance and further development ii. Protocols for data quality assurance and stakeholder involvement iii. Procedures for data handling and storage selection or development IT infrastructure iv. Database access criteria (e.g., a user registration form) v. List the agreements and commitments that would need to be formalized to maintain the database beyond the duration of the project. b. Provide a business strategy for the database maintenance and updates for 5 years following the launch, including the identification of resource needs and possible funding sources and requirements. c. Ensure integration of the database in GLAD and possibly into other relevant LCA or industry impact data software platforms to ensure interoperability and broader accessibility. d. Disseminate and maximize the awareness and widespread information of the availability of the national textile LCI database, with stakeholders through dissemination events, workshops (national and international) e. Develop material that can be subsequently used to promote the use of the LCI database and life-cycle approaches in policy making and industry practices and develop a paper/summary report to draw conclusions from the database and scenarios to inform non-LCA experts (policymakers, brands, etc.).
Activity 2 – Feasibility Study of Mandatory EPR for Textiles in South Africa	The Implementing Team will develop a White Paper to provide recommendations to the Department of Forestry, Fisheries and Environment (DFFE) regarding the potential challenges and opportunities for extending the Extended Producer Responsibility (EPR) Regulations to include textiles, coordinating with ongoing activities and work around a voluntary EPR for textiles in South Africa (e.g. work being conducted by Greencape). These recommendations will be based on: • Challenges and lessons learned from the 5 years of implementation of mandatory EPR in a number of other sectors (paper, packaging, electronics, lighting) • Voluntary collection and recycling initiatives in the South African Textile landscape • Implementation of EPR for textiles in other countries (e.g. France, Netherlands, California, etc.) • The vision of the dtic Retail-Clothing Textile Footwear Leather Master Plan 2030

	The deliverable of Activity 2 will be a White Paper covering the above main points and lessons learnt to date; and operational recommendations for textile EPR design in South Africa.
Requirements and additional information for applicants	
Requirements for applicants for all countries:	The Submission template is available in Annex I. Proposals/applications will be reviewed based on the responses and approach proposed and submitted through Annex I. General requirements: • The organization leading the Implementation Team must submit proof of registration or legal presence (not for profit status), in the country of interest (e.g., not-for-profit/NGO, international non-profit association, government agency, inter-governmental organization, and university (not-for-profit)). If not based in the country of interest, the not-for-profit applicant must demonstrate experience and local network in South Africa. • Other organizations of the Implementation Team can be other not-for-profit/NGO, international non-profit association, government agencies, inter-governmental organization, and university (not-for-profit) but not private enterprises. Additional experts may be included as part of the Implementation Team, but in their individual expert capacity (e.g., as consultants to be added under the staff and personnel line of the budget). • Proven experience in implementing projects of similar scale and nature in South Africa and sufficient local language skills. • Quality of the application. • Technical expertise and ability to deliver timely. Expertise requirements • Verifiable experience working in the textile or manufacturing sector • Experience in life cycle inventory (LCI) datasets, LCA and database development • Experience in disseminating LCI/LCA outcomes to multiple audiences and through multiple channels • Proven experience in implementing environmental sustainability projects, particularly those involving circular economy, life cycle assessments (LCAs), or eco-innovation • Experience supporting industry compliance with national and/or international sustainability legislations

	- Established networks with relevant stakeholders in the project country textile sector, including government departments, knowledge of national textile policies and ability to facilitate multi-stakeholder dialogues - Experience in policy recommendations development and implementation - Experience in Extended Producer Responsibility scheme development and roll-out Team Composition A multidisciplinary team with expertise in: - Circular economy and sustainability in the textiles sector - Life cycle assessment (LCA) and Life Cycle Inventory (LCI) in the textiles sector - Industry engagement (including SMEs) for data collection - Industry and government capacity building for the use of the database - Policy and EPR
Language:	Applicants should submit project proposals in English using the application template provided.
Who can apply:	Registered non-profit organizations can apply to this call for proposals (e.g., not-for-profit/NGO, international non-profit association, government agency, inter-governmental organization, and university (not-for-profit)). Applications from the private sector as lead implementing partner of the Implementing Team will not be considered. Only the lead implementing partner will be signing the agreement with UNEP.
Timeline for application & notification of selection:	- Deadline for submission of proposals: 4 September 2026 - Evaluation of written application & selection of short-list: mid-September - Online interviews with shortlisted entities: End of September - Notification of selection: Early October 2026 - Start of activities: End of October 2026, or as soon as the small-scale funding agreement (SSFA) with UNEP is signed.
Project budget	The implementing team will prepare a proposed budget using Annex I and submit this as part of the proposal. UNEP has allocated a maximum of 120,000 USD for this activity and the amount will be divided proportionally should one or multiple Implementing partners be identified to deliver the database and/or the White Paper.

Project duration and further aspects:	The Implementing Team will prepare a proposed timeline and submit this as part of the proposal in Annex I. The project implementation period must conclude by end of April 2028 to ensure successful delivery and communication prior to InTex South Africa concluding June 2028.
How to apply:	Applicants must be registered on the UN Partner Portal before submitting their proposal. Registered entities must complete Annexes I and III, as well as prepare a folder of documents in response to Annex II, and prepare a folder of CVs to be named Annex IV. Applications submitted without all necessary documents will not be considered. Once finalized, please and submit the application documents via email to Stefanie Maurice (Stefanie.Maurice@un.org).
Annexes to this call for proposal document	Annex I – Excel Proposal Template Annex II – List of documents required for UNEP due diligence process Annex III – Partners Declaration