



Approaches for Circular Textiles and Apparel Industry in India



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VISION

Economic Leadership:

Strengthen India's textiles and apparel industry's competitiveness through circular practices.

Environmental Responsibility:

Reduce the sector's ecological footprint by adopting innovative, sustainable approaches.

Social Equity:

Promote livelihoods and well-being through fair labor practices and community engagement.



REDESIGN FOR CIRCULARITY

Circularity starts with rethinking how textiles and apparel are conceived, manufactured, and used.

- **Design for Disassembly:** Create products that can be easily separated into reusable or recyclable components.
- **Use Mono-Materials and Recycled Fibers:** Ensure that products are made with single-material compositions or recycled content to facilitate recycling.
- **Incorporate Biodegradable Materials:** Opt for natural fibers and eco-friendly dyes to minimize post-consumer waste impacts.
- **Promote Functional Durability:** Design long-lasting garments that maintain quality over time, reducing the need for frequent replacement.
- **Preserve Cultural Heritage:** Collaborate with artisans to embed sustainable traditional crafts into modern circular design.



REDUCE RESOURCE CONSUMPTION

- Conserving resources is essential to ensure sustainability.
 - **Energy Efficiency:** Transition to renewable energy sources such as solar or wind and adopt energy-efficient machinery to lower production emissions.
 - **Water Conservation:** Implement closed-loop water systems in dyeing and finishing processes, reducing water withdrawal and enhancing recycling.
 - **Chemical Management:** Replace harmful substances with green chemistry solutions, ensuring minimal environmental impact.
 - **Lean Manufacturing:** Optimize processes to minimize fabric offcuts, yarn waste, and other production inefficiencies.



REUSE TO EXTEND PRODUCT LIFE

- Extending the life of products helps reduce demand for virgin resources and waste.
- **Consumer Take-Back Programs:** Establish systems to collect and repair used garments, offering incentives for returns.
- **Second-Life Products:** Facilitate resale or donation platforms for pre-owned apparel to make sustainable fashion accessible to all.
- **Repair and Refurbishment:** Provide repair services or DIY kits to extend the functional life of garments.
- **Circular Retail Models:** Promote rental, leasing, and swapping platforms for clothing, encouraging shared ownership.

REMANUFACTURE FOR RETAINED VALUE

- Remanufacturing ensures materials and components are kept in use.
Commitments:
- **Innovative Upcycling:** Convert industrial scraps and post-consumer waste into new, value-added products such as bags or accessories.
- **Product-as-a-Service Models:** Enable reverse leasing systems where garments can be leased, returned, and refurbished for reuse.
- **Material Reclamation:** Invest in technologies to recover high-value materials from discarded textiles for remanufacturing.



RECYCLE TO CLOSE THE LOOP

- Recycling transforms waste into resources, creating a closed-loop system.
Commitments:
- **Advanced Recycling Technologies:** Deploy textile-to-textile recycling technologies such as chemical recycling to regenerate fibers.
- **Sorting and Processing Infrastructure:** Build state-of-the-art Material Recovery Facilities (MRFs) for effective sorting of textile waste.
- **Traceability Systems:** Ensure transparency in the recycling chain through digital tracking of recycled content.



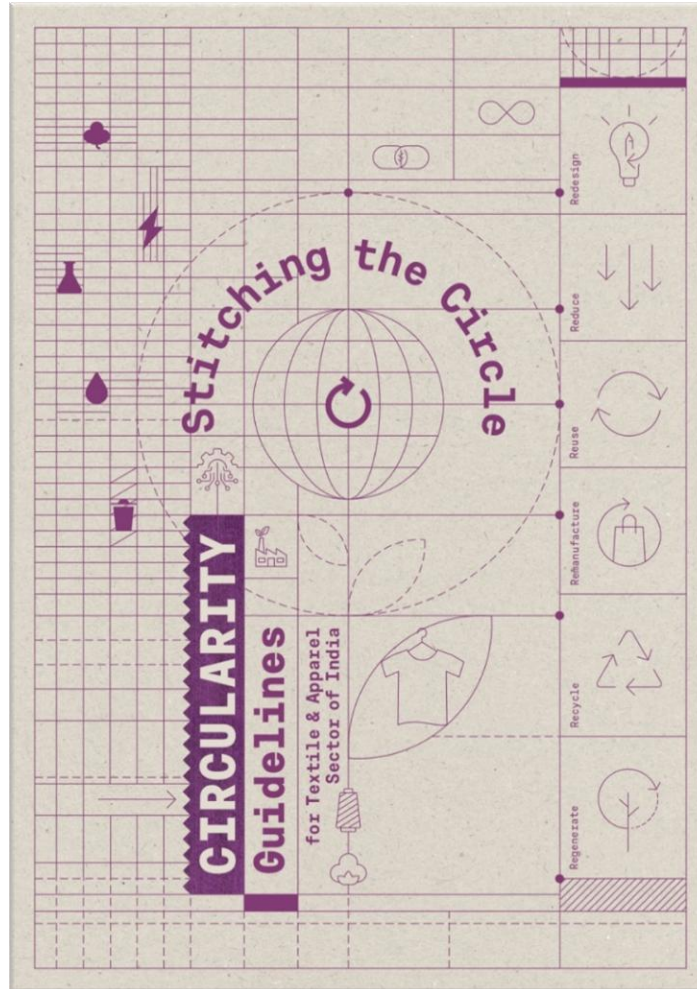
REGENERATE FOR A SUSTAINABLE FUTURE

- Regeneration ensures that production processes give back to the environment.

Commitments:

- **Soil and Water Restoration:** Use agricultural residues for fiber production, promoting regenerative agricultural practices.
- **Community-Driven Sustainability:** Partner with local communities to implement circular initiatives like composting and natural dye cultivation.





Thank You

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