

RECEIC Awards on Resources Efficiency & Circular Economy



Sulochana Cotton Spinning Mills

“A Sustainable Textile value Chain”

Award Category - Circular Business Models Matured

Sulochana Cotton Spinning Mills P Ltd

(8 Decades of Sustainable Legacy)

- Converting 7Millions of pet bottles into 135 tons of dope dyed polyester fibres everyday
- Shredding 8 tons of pre-consumer cotton every day
- Spinning 65Mt of Melange yarns every day
- Producing 20 tons of kittted fabrics every day
- Making 18,000 pieces of Knitted garments everyday



ORGANIC COTTON



Sulochana's Sustainability Journey

1938

N Murugan Chettiyar started with Cotton Trade, sourcing cotton from diiferent parts of TN and distributing to Gujarat

1954

N Shanmugam Chettiyar joined and the business became major traders of cotton and cotton seed

1990

MD Krishnakumar took charge and spinning mill with a capacity of 6000 spindles was started to produce melange yarns,

1995

Expanded to 12000 spindles

1996

Entered renewable energy generation for our facilities by establishing our first wind mill farm

2000

Thudiyalur spinning mill acquired with 25000 spindles

2006

Chithambalam spinning mill with 50000 spindles installed and came into operation

2010

One of a kind polyester staple manufactured from PET bottles introduced. Sulochana's first step towards greener manufacturing practices

Dope dyeing technology tthat consumes very less water compared to conventional dyeing adopted

2013

Acquired Kallipayam facility with 15000 spindles

2014

Solar plant installation

2018

Dindugal Spinning unit with 40000 spindles established.

Investments on ring spun cotton recycling infrastructures made which was a first in the industry initiative.

ETI(Ethical Trade Initiative) Certification for facilities

2019

Became a member of Textile Exchange and actively started implementing sustainability initiatives

2020

Carbon Footprint assessment performed

2021

- Accounted our Scope 3 emission for 9 categories

- Published our first Sustainability report

- Renewable Energy capacity of 31.5 MW

2022

- LCA study for our yarn based on a cradle-to-gate approach.

- Implemented SAAS based software for capturing the environmental, social and governance data

- Started production of recycled polyester filament yarn

2023

- Avoided emission accounting

- Publishing ESG report based on international reporting frameworks

- 92 % energy comes from renewable source for production.

Problem Statement :

Energy Crisis, is a situation where a country or region cannot produce or access enough energy to meet its needs. This can affect:

- Households (power cuts)
- Industries (reduced production)
- Transportation (fuel shortages)

The main cause anyone generally say is overdependence of fossil fuel but, Sulochana say it is because ignorance and Poor Energy Management.

Solution :

Renewable Energy is not a fancy term but is basic sustainable practice anyone should adapt.

Our Chithambalam Plant houses more than 1400 people in the Hostel and we were generating lots of sewage everyday. In 2016, we installed sewage Treatment Plant, where the sewage water gets recycled and used to irrigate more than 20,000 trees. The Solid waste after generating Bio-gas is used as manure for the trees. Our Hostel canteen for 1400 people operates 100% on Bio-gas, totally eliminating our dependency on LPG or any other Fossil fuel in our Canteen. Sulochana Stands out an example for using sustainable fuels and even in the crucial times, our menu is not changed due to the scarcity of LPG, ensuring reduction of Carbon foot print.



'SULOCHANA: LEADING IN SUSTAINABLE INNOVATION'

CHITHAMBALAM PLANT'S CIRCULAR ECONOMY MODEL



A CLOSED-LOOP SUSTAINABILITY SYSTEM FOR A GREENER FUTURE

Solution Circular Economy strategy & Approach & Methodology

1. Circular Product Design with durability, modularity & recyclability in mind
2. Materials & Resource Management
3. Recycling & Reuse Initiatives
4. Waste Reduction & Zero Waste Targets
5. Circular Supply Chain
6. Customer Engagement
7. Innovation and Research
8. Stakeholder Engagement
9. Future Goals & Commitments

Our sustainability approach is underpinned by the following key pillars:



Sulochana's Innovation & disruptive technologies to enable your circular economy strategy.

Every bottle which is recycled comes with a cap, made of PP (Poly Propylene) and a label which is made of PVC (Poly Vinyl Chloride). both these materials can't be used in recycling. Daily 7 Million Bottle caps & Labels will be end up in landfill if its not responsibly recycled. We convert PP caps into pellets which is raw material for Plastic industry and PVC labels are send to cement industry to generate energy

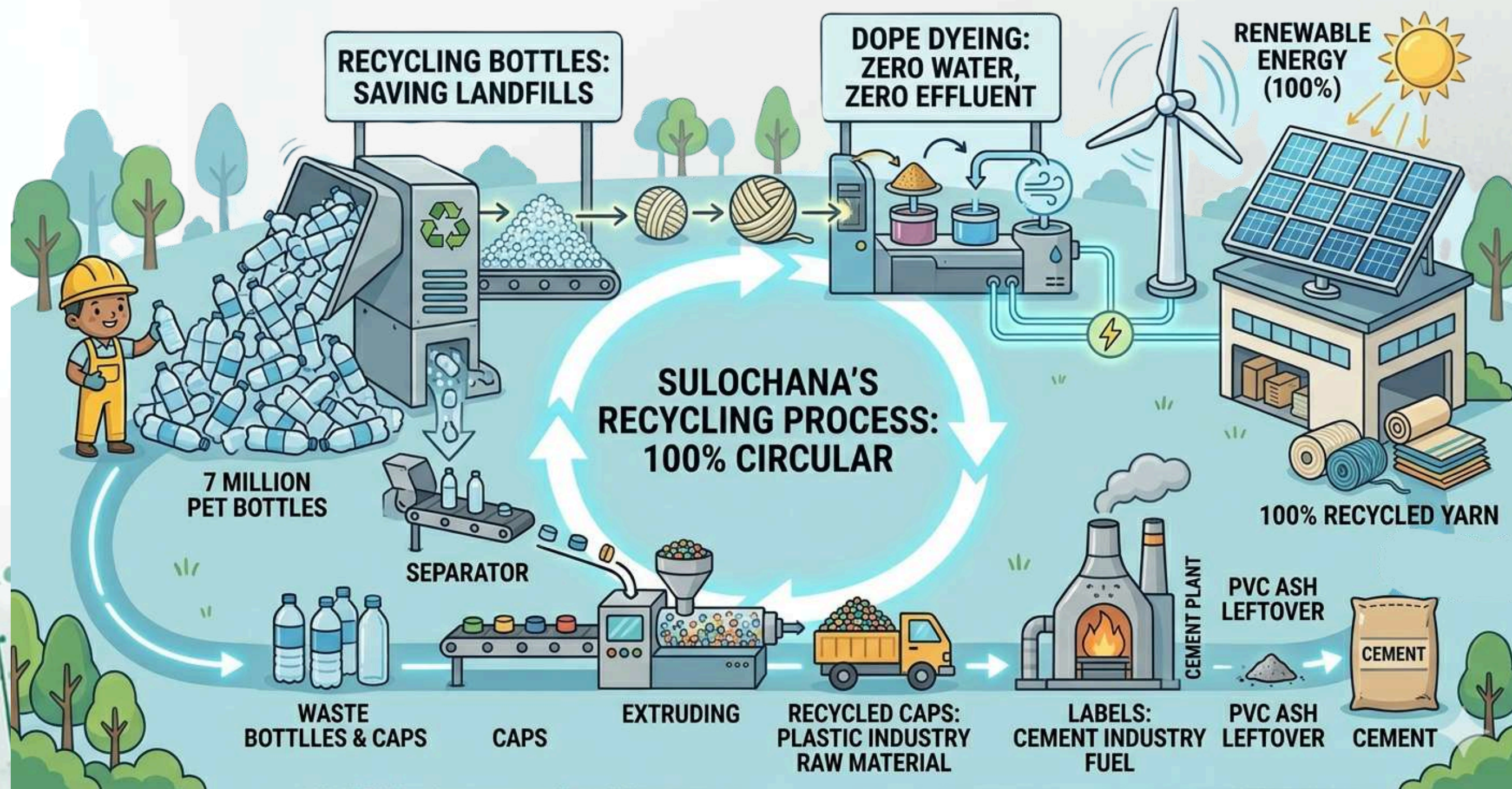
We don't just manage waste; we provide alternative to petroleum-based polyester. Transforming PET / textile scraps into fiber, reduces dependency on virgin material and avoids landfill

Disruptive Technologies

Water Saving: With Dope dye technology every day 9 million liters of water saved.

Carbon Avoidance: Carbon footprint is lower due to renewable energy and non-fossil fuel raw material

Landfill diversion: Every year almost 2.1 Billion Post consumer PET bottles are avoided from landfill



Solutions- Stake Holders Involved & Investment made

Sulochana operates at 100% Renewable energy 94% Wind & 6% Solar.

In 2019, Based on **GHG Audit** conducted by **South Pole** of Switzerland, we have already **neutralized 94.85%** of GHG Emission. Which motivates us to work on target to achieve **100% carbon neutral by 2027.**

Almost 150 crores has been invested on land, plant and machinery and this generates revenue of more than Rs. 200 crores. . Further investment of to the tune of Rs. 75 crores is being planned for installation of Thermo-mechanical recycling of Polyester Post Industrial Textile waste into fibre and filaments

Status Dashboard - ESG Report 2023

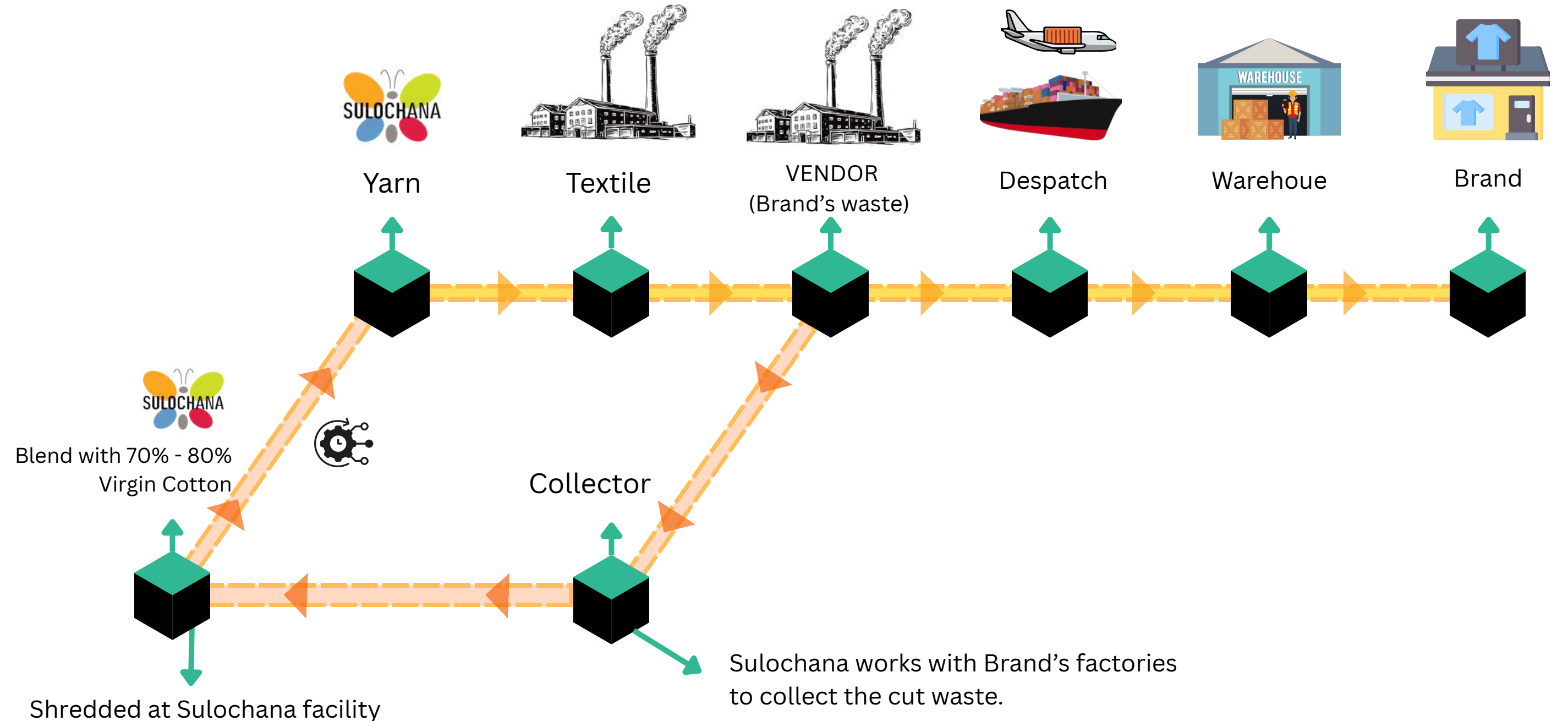
Mission	Target	FY 22-23 status
Energy	100% Renewable Energy	92%
Water	Water Positive	38% of total water is recycled back into process 95% of total water discharged is used for Irrigation
Climate strategy	Net zero emissions from Scope 1 and Scope 2	85% scope 1& 2 emissions avoided.
Circular Economy	Zero waste to land Fill	More than 95% waste generated diverted from landfill
Sustainable products	Higg Assessment for own factories 100% percentage of product has atleast 1 sustainable attribute	FEM assessment for Spinning, Polyester and Garment divisions 100% percentage of product has atleast 1 sustainable attribute



Circularity-Recycling cotton waste into fibre and yarn

Everyday, we are recycling 10 tons of fabric cut waste. This cutwaste materials collected from Brand's and brought back to their supply chain as brand new product.

Recycled Cotton+ Virgin Cotton - Overview



Pillar 2: Circular Economy & Resource Efficiency

2.1 Innovation & Circularity

- Our Research and Development division is dedicated to creating innovative, sustainable blends:
- A recent breakthrough is our biodegradable polyester, which has been shown to biodegrade by 94% in just 20 months—a stark contrast to conventional polyester, which takes centuries.

2.3 Environmental Performance

Our recent LCA of recycled polyester staple fibre vs. virgin polyester shows:

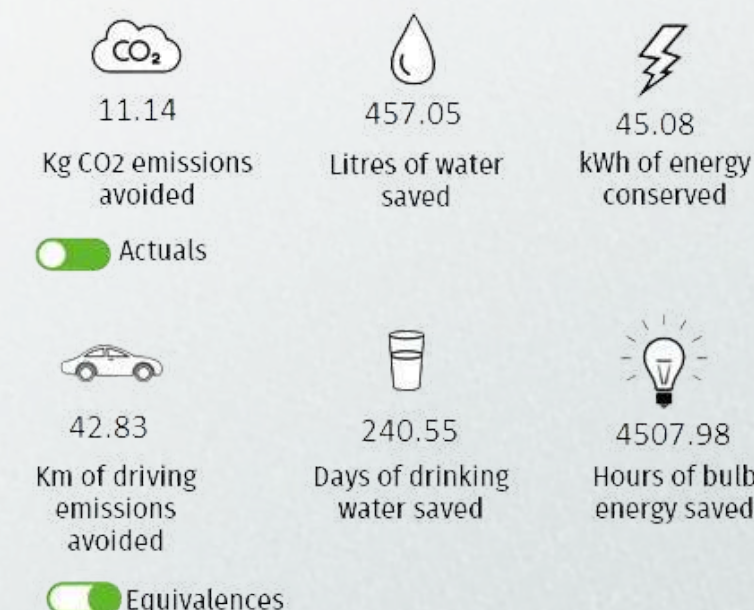
- GHG emissions reduced by 95%
- Energy usage reduced by 78%
- Blue water usage reduced by 99%

2.2 Efficiency in Operations

- Our energy needs are met entirely through renewable sources, including wind and solar
- We are actively reducing our carbon footprint by implementing green initiatives and decarbonizing electricity use
- Goats grazing in factory is saving energy used of electric grasscutter and eliminate use of harmful pesticides



Climate+ Advantage
See the positive impact of choosing this product

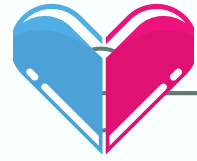




CSR (Corporate Social Responsibility)

Animal Welfare Shelter

Green Initiative



Sulochana Pharmacy



Sulochana Diagnostic centre



Aligning

With

SDG

GOALS



Awards & Recognition



Thank you!



**“Leave Greener Footprints
for Future Generation”**