



The Truth About Textiles

December 3, 2019

- ECO CULTURE MANUFACTURING
- ECOSUSTINERI-TECH
- TEXTILE RECAPTURE PROGRAM



ECOSUSTINERI TECHNOLOGIES

Efforts
Challenges
Successes

PURPOSE

TO COMBINE FASHION, SUSTAINABILITY AND TECNOLOGY

GOVERNMENT

Data Statistics
Carbon Tax
Carbon Policy
Grants for Economic
Development
Regulations



ACADEMIA

White Papers
Research
Innovation
Science



Garment/Accessory
Factories



1) Carbon Footprint: Quantified for each garment/accessory

Factory Emissions (Cut & Sew)
Logistics (Fleet)
Air Travel
Employee Commute(s)
Textiles

2) Carbon Offsets

Renewable Energy Certificates (RECs) - U.S.
Carbon Offsets - U.S., Improved Forest Management,
International REDD+, Water Restoration, Commuter
Offset Bundle, Employee Water Bundle

3) Customer/Brand Profiles

Account Number
Brands Purchased / Promotions
Carbon Footprint / Carbon Offsets

4) Retailer Analytics

Carbon Footprint of each brand
Styles
Seasons
Promotions – Offered by each brand







INPUTS : sourcing, materials, labor, carbon-imprint, carbon offsets, who made the product

“Digital Birth Certificate”

Authentication: Establish a unique identity or digital birth certificate for each individual product to guarantee authenticity from manufacture through distribution to the end consumer. (IDoT):

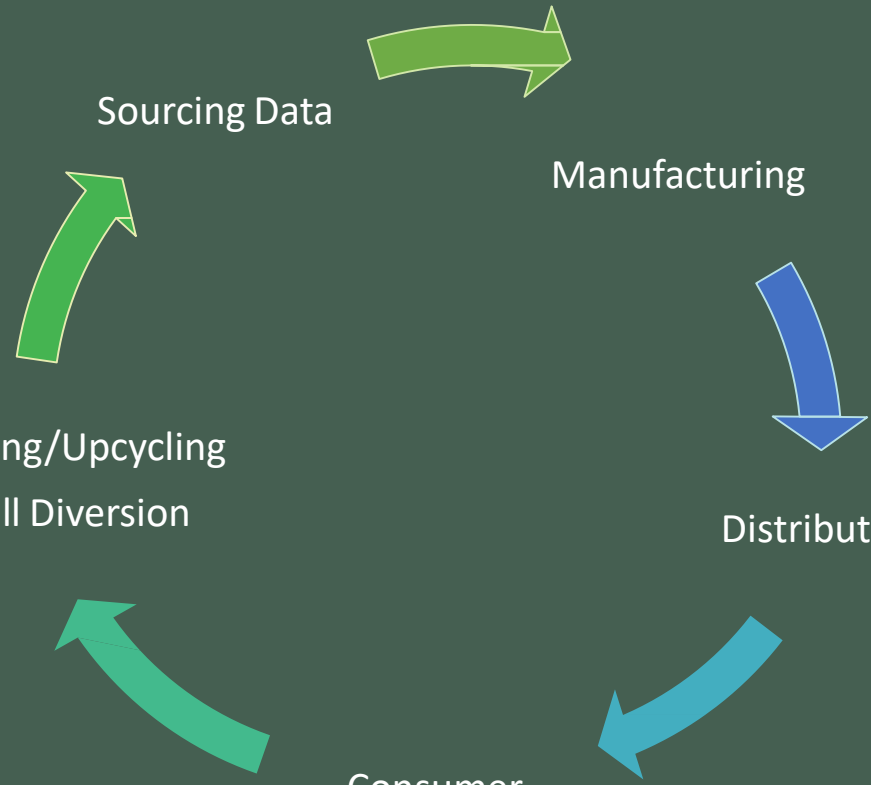
Risk Management

Fast Pass Transportation

Digital Tracking: RFID technology allows for efficient tracking of each individual product from source to retailer. Rapid RFID scanning available to reduce “touching” of individual products. Block Chain based fulfillment/payment.

Inventory Management

Loss Prevention



Sourcing Data

Manufacturing

Distribution

Consumer Purchase

Carbon / Tax Credits

Regulatory Compliance

Recycling/Upcycling

Landfill Diversion

Landfill Diversion: In coordination with State and local government agencies products will utilize RFID technology to more effectively divert from landfill to recycle or upcycle at end of life.

Warranty

Lifecycle Management

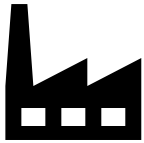
Retail: Extends existing in-store technologies for inventory management, anti-theft and enhanced customer interaction.



ECOSUSTINERI TECHNOLOGIES

LIFECYCLE OF ECM FASHION – 1st GENERATION

Sourcing
Garment Factory
SmarThread is born



Inputs At Factory:
Carbon Footprint
Carbon Offsets
Who made garment
Textiles

Verification
Customer Purchases
New Garment



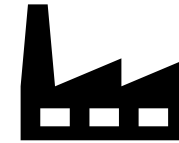
Customer Registers:
By email through an app, website,
retailer.
Customer can authenticate.
View carbon footprint & carbon
offsets.

Landfill Diversion:
Customer Returns
Used Garment



Customer Returns:
Access account via app, website.
Choose shipping method.
Return to brand triggers a
coupon, loyalty credit for their
next purchase.

Recycled, Upcycled:
Brand Recycles, Upcycles
Used Garments: Textile
Recapture Program



Inputs From The Brand:
Returned Garment Info
Recycled – S.M.A.R.T.
Upcycled – Resold,
Donated.
Carbon Footprint

LIFECYCLE OF ECM FASHION – 2ND GENERATION

Brand Resells -
Creating a
Secondary Market



Brand Donates –
Charities,
Developing
Countries
Organizations



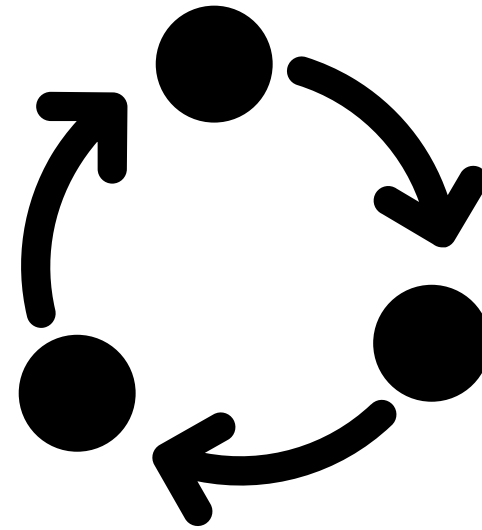
Brand Creates
Foundation (Tax
Benefit),
Environmental Profit
and Loss Reporting

All Inputs From 1st Generation
Carbon Footprint and Life Cycle
Information.

HOW DOES IT WORK?

Customers:

- 1) Register through email, app, website
- 2) Access is granted through fashion brand phone/tablet app, or fashion brand website.
- 3) Customers access their portals to send back their used garments/accessories to fashion brand that are then donated upcycled or recycled into money, green insulation, industrial cloth.
- 4) Customers are then given a discount, or pre-offerings on their next purchase. Loyalty Programs.
- 5) Customers can verify that their garments are sustainably made, authenticated as well as diverted from landfill.



Challenges

WHY IS IT RELEVANT
TO PLACE A
MONETARY VALUE ON
ENVIRONMENTAL
FOOTPRINT?



It allows a company to compare their environmental performance



It allows a company to internalize the negative externalities of the second most toxic process in the world...Garment manufacturing



It's a sign of transparency and innovation.

Successes

Awards

California State Assembly – Coachella Valley Women Owned Small Business Award.

County of Riverside Coachella Valley Small Business Award.

Finalist – Global Climate Summit 2019

Congressional Recognition for a Woman Owned Business 20

Coachella Valley Small Business Award

REFERENCES

- Lozano, R. (2015). A Holistic Perspective on Corporate Sustainability Drivers. *Corporate Social Responsibility & Environmental Management*, 22(1), 32–44. <https://doi-org.contentproxy.phoenix.edu/10.1002/csr.1325>
- Nielson Research . (2015). The Sustainability Imperative. Retrieved from <https://www.nielson.com/content/dam/corporate/us/en/reports-downloads/2015-reports/global-sustainability-report-oct-2015.pdf>