

Innovación para la sostenibilidad en la cadena de suministro textile

Innovating for sustainability in the textile supply chain

About Me

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My Background:

- ▶ Biochemistry (+ Systems) = Textiles
- ▶ Textiles (+ Consumer Behavior) = Product Development
- ▶ Product Development (+ Ethical Decision Making) = Sustainability

Sustainability

- ▶ Confrontation between environmentalists and social justice/global development
- ▶ Loosely defined
 - ▶ This is a benefit because it allows room for creativity and inclusiveness.
- ▶ Sustainability is a problem and a solution

Goals for Sustainability

Griggs, David, et al. "Policy: Sustainable development goals for people and planet." *Nature* 495.7441 (2013): 305-307.

- ▶ Goal 1: Thriving Lives and Livelihoods
 - ▶ Goal 2: Sustainable Food Security
 - ▶ Goal 3: Sustainable Water Security
 - ▶ Goal 4: Universal Clean Energy
 - ▶ Goal 5: Healthy and Productive Ecosystems
 - ▶ Goal 6: Governance for Sustainable Societies (working to make the other goals possible)
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- ▶ Textile engineers and production managers can use innovation to contribute to all 6 goals.

Innovation

- ▶ Innovation is the application of creativity
- ▶ Innovation requires:
 - ▶ Explore the challenge
 - ▶ Don't pick the wrong problem!
 - ▶ Who is in the best position to innovate for the textile supply chain?
 - ▶ Generate ideas
 - ▶ Again – Whose ideas?
 - ▶ Stay open to trans-industry ideas
 - ▶ Prepare for action
 - ▶ Develop solutions for roadblocks

Innovation for Sustainability

- ▶ Your industry partners are looking for innovations
- ▶ The current configuration of the industry cannot withstand too many shocks
 - ▶ Credit
 - ▶ Input prices
 - ▶ Disasters (natural and man-made)
 - ▶ Over production of devalued goods
- ▶ How do we “stop the madness” and build the industry we want?
- ▶ Innovation

Examples

- ▶ Innovating for water security

- ▶ Wet processes that result in water pollution reduce the quality and supply of water for both the industry and society.
- ▶ The industry needs to share the story of innovations that reduce water pollution with consumers
- ▶ Consumers in water rich regions also need help learning how to reduce water use.
 - ▶ Finishes that reduce soiling can reduce the amount of laundering.
 - ▶ This only works if the labeling communicates this to consumers

- ▶ Ask the brands/partners you work with how they share their water story.

Other innovation points

- ▶ Innovation for food security
 - ▶ Analyze where your fiber supplies compete with food production so that you can develop solutions before a crisis in food prices.
- ▶ Innovation for clean energy
 - ▶ Work with partners in other industries to capture the energy lost after hot water production (piping your waste water past systems that need heat).
- ▶ Innovation for thriving lives and livelihoods
 - ▶ Capture information on the entrepreneurial efforts of your workers and find ways to support the sharing of value.

Who is responsible for innovation?

- ▶ You are.
- ▶ My goal is to remind you that across the industry there are partners seeking your innovation and leadership.
- ▶ One example of this is the work of the Sustainable Apparel Coalition. There are other groups, but I am familiar with the work of this group.

The Sustainable Apparel Coalition

- ▶ The SAC is a coalition of an ever growing number of leading global apparel and footwear organizations.
- ▶ Focuses on an industry led, rather than government or regulation led, solutions
- ▶ Together they represent 30% of the global market share of apparel and footwear industries.
- ▶ The members include
 - ▶ Civil society (NGOs, Governmental, Academic)
 - ▶ Brands, retailers and suppliers

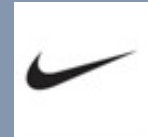
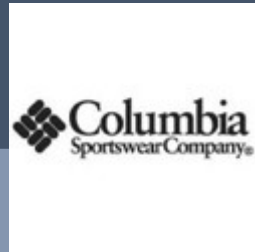
Brands

:

Current Members



BURBERRY



Retailers



Concept of Collaboration

- ▶ Addressing our industry's current social and environmental challenges is a **business imperative** and an **opportunity**.
- ▶ Through multi-stakeholder engagement, the Coalition seeks to lead the industry toward a shared vision of sustainability that will spotlight priorities for **action** and **opportunities** for efficiency and technological innovation.

Their Vision and Focus

▶ Their vision

- ▶ An apparel and footwear industry that produces **no unnecessary environmental harm**, and has a **positive impact on the people and communities** associated with its activities.

▶ Their focus

- ▶ The focus of the Sustainable Apparel Coalition is the development and support of the Higg Index: a self-assessment tool designed to measure the sustainability impacts of apparel and footwear products.

Higg Index

- ▶ Introduced in July 2011
- ▶ Created by the industry for the industry using existing tools
- ▶ Not a Life Cycle Analysis tool because LCA
 - ▶ Is often static (single point snapshot)
 - ▶ Lacks social impact
 - ▶ Lacks education element
- ▶ Formed from the:
 - ▶ Outdoor Industry Association (OIA) Eco Index
 - ▶ Nike Environmental Design Tool
 - ▶ Global Social Compliance Program (GSCP) Environmental Facilities Assessment (Levels 1-3)
- ▶ Expanded in 2013 to include social impact and Rapid Design Module

The Higg Index Allows:

- ▶ Scale sustainability efforts
- ▶ Facilitate continuous improvement
- ▶ Create a dialogue and engagement
- ▶ Advance performance and innovation
- ▶ Benchmark
- ▶ Collaborate
- ▶ Uncover common supply chain challenges
- ▶ Compare performance of facilities
- ▶ Improve supply chain transparency

Scoring of Inputs

The module scores are independent of one another.

Brand Module	Product Module	Facility Module
Sections (Equal Weight)	Sections (Equal Weight)	Sections (Equal Weight)
General	-	Environmental Management Systems
Materials	Materials	Energy Use & Greenhouse Gasses
Packaging	Packaging	Water Use
Manufacturing	Manufacturing	Wastewater
Transportation	-	Emissions to Air
Use & Service	Use & Service	Waste Management
End of Life	End of Life	Hazardous Substances

Educational Efforts

- ▶ Educators of brand and retail management students are asking students to learn skills such as:
 - ▶ Devise sustainable materials sourcing plan
 - ▶ Connect environmental and social impacts of the textile and apparel supply chain through risk mapping
 - ▶ Identify and compare/contrast tools/indices for measuring impacts to make sustainable choices
- ▶ Increasing transparency and engaging brands in discussion of sustainability will increase your shared value.
- ▶ Your competitors in other regions are already working hard on these issues.

Strengths in Connecting with Latin America

- ▶ Less supply chain complexity when working with fiber produced in North or South America.
- ▶ Better labor reputation
 - ▶ KEEP IT THAT WAY!
- ▶ Already looking at water and move to energy
- ▶ Strong civil society connections
 - ▶ Continue to engage workers as contributors to “shared value”

Examples of Areas to Innovate

- ▶ Fuel/energy/transport
 - ▶ Regional partners can be very valuable in this area
- ▶ Create transparency zones within free trade zones
 - ▶ Again, your partners will only increase their need for this information
- ▶ Wet processing with less to no water
 - ▶ Allows for ultimate flexibility in the location of processing and means investments are not as threatened by climate change
- ▶ Giving back
 - ▶ Continue to foster free trade
 - ▶ Expand your education systems to include innovation and entrepreneurship

Summary

- ▶ Sustainability is a problem and a solution.
- ▶ Innovation is the application of creativity to problems and includes evaluation of the effects of the solutions
- ▶ The textile industry must be integrally involved in providing innovation towards sustainability goals
- ▶ Your partners around the work are looking to YOU for the solutions
- ▶ You do not need to fear transparency if you are positioned to benefit from comparisons