

Measuring Sustainability



Cradle to Cradle: Example 1

by Alyssa Yatabe, Deann Garcia, Shanna Ruyle, Wai-Jing Man
(2014)

Note: This is a company-anonymized version of the file.

Comments:

Great job, team! Your recommendations were clearly listed & prioritized, the spreadsheet was clear and complete. Great thorough notes on assumptions / data. Two things that could be improved: First, there're a couple places where you flagged answers as being uncertain even though the pessimistic & optimistic score was the same (both "no" or both "yes"). If you're sure enough that the best-case and worst-case are the same, you don't need to flag it as uncertain. If you're really uncertain, make the worst case no and the best case yes. Second, the text in the spreadsheet is so small it's illegible without zooming. Overall, though, again great job.



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Cradle to Cradle Certification Checklist: Blue Jeans								
Alyssa Yatabe, Deann Garcia, Shanna Ruyle, Wai-Jing Man								
Criteria	Required?					Pessimistic Score (Yes = 1, No = 0)	Optimistic Score (Yes = 1, No = 0)	Assumptions
	Basic	Bronze	Silver	Gold	Platinum			
						Red bold answers are uncertain.		
1.0 Material Health								
All material ingredients identified (down to the 100 ppm level)	x	x	x	x	x	No	Yes	We do not currently have access to data for all material ingredients, but there is the possibility of acquiring it in the future
All material ingredients defined as biological nutrient (BN) or technical nutrient (TN)	x	x	x	x	x	No	No	Not currently certain of all materials used
Does not contain any Banned List substances	x	x	x	x	x	Yes	Yes	A list of wet-processing chemicals has been provided, however their chemical composition hasn't been provided
Materials assessed for their intended use and impact on Human/Environmental Health according to the following criteria: - Human Health: Carcinogenicity, Endocrine Disruption, Mutagenicity, Reproductive Toxicity, Teratogenicity, Acute Toxicity, Chronic Toxicity, Irritation, Sensitization - Environmental Health: Fish Toxicity, Algae Toxicity, Daphnia Toxicity, Persistence/Biodegradation, Bioaccumulation, Ozone Depletion/Climatic Relevance - Material Class Criteria: Content of Organohalogenes, Content of Heavy Metals	x	x	x	x	x	No	Yes	Assumed that this has been done because of [redacted] CSR report and auditing
100% "characterized" (i.e., all generic materials listed).	x	x	x	x	x	No	No	As manufacturer has not undergone a C2C assessment, we can assume this step has not been completed
Strategy developed to optimize all remaining problematic ingredients/materials		x	x	x	x	No	Yes	We are uncertain, but are optimistic because [redacted] has taken action to ban sandblasting due to OH&S reasons
At least 75% assessed by weight (100% for BN products).		x	x	x	x	No	Yes	We are uncertain, but are optimistic because [redacted] has taken action to ban sandblasting due to OH&S reasons
At least 95% assessed by weight (100% for BN products).			x	x	x	No	Yes	We are uncertain, but are optimistic because [redacted] has taken action to ban sandblasting due to OH&S reasons
Assessed materials do not contain any carcinogenic, mutagenic, or reproductively toxic (CMR) chemicals.			x	x	x	No	No	Chemical processing of denim requires many steps and different types of chemicals, and we can't assume that none are harmful
100% assessed by weight.				x	x	No	Yes	We are uncertain, but are optimistic because [redacted] has taken action to ban sandblasting due to OH&S reasons
Formulation optimized (i.e., all X-assessed chemicals replaced or phased out).				x	x	No	No	[redacted] has taken small steps toward this, but has not reached a meaningful level at this juncture
Meets Cradle to Cradle emission standards				x	x	No	Yes	Uncertain of processes occurring during production and manufacturing, but are optimistic because [redacted] has taken action to ban sandblasting
All process chemicals assessed and no X-assessed chemicals present.					x	No	No	Uncertain of whether this has been done
2.0 Material Reutilization/Design for Environment								
Defined the appropriate cycle (i.e., technical or biological) for the product and developing a plan for product recovery and reutilization	x	x	x	x	x	No	No	The product is a monstrous hybrid; end-of-life strategies have been considered though
Material Reutilization Score ≥ 35		x	x	x	x	No	No	[redacted] has informed us that no end-of-life strategy has been adopted
Material Reutilization Score ≥ 50			x	x	x	No	No	[redacted] has informed us that no end-of-life strategy has been adopted
Material Reutilization Score ≥ 65				x	x	No	No	[redacted] has informed us that no end-of-life strategy has been adopted
Material Reutilization Score = 100					x	No	No	[redacted] has informed us that no end-of-life strategy has been adopted
Have "nutrient management" strategy for the product including scope, timeline, and budget				x	x	No	No	The manufacturer indicated that end-of-life was not currently in scope for their initiatives and programs to date
Product is actively being recovered and cycled in a technical or biological metabolism					x	No	No	Manufacturer indicates that this has not been approached yet
3.0 Energy								
Quantified energy use and source(s) for final stage of product manufacture/assembly	x	x	x	x	x	No	Yes	Assume that they are taking actions on this because [redacted] (a LEED-certified factory with sustainability initiatives) was mentioned by the company
Developed strategy for using renewable energy & managing carbon		x	x	x	x	No	Yes	Assume that they are taking actions on this because [redacted] (a LEED-certified factory with sustainability initiatives) was mentioned by the company
≥ 5% of electricity for final mfg stage is renewably sourced or offset with Renewable Energy Credits, and ≥ 5% of direct on-site emissions are offset			x	x	x	No	Yes	Some factories in the supply chain follow LEED certification
≥ 50% of electricity for final mfg stage is renewably sourced or offset with Renewable Energy Credits, and ≥ 50% of direct on-site emissions are offset				x	x	No	No	Some factories in the supply chain follow LEED certification, but not enough to reach this level
> 100% of electricity for final mfg stage is renewably sourced or offset with Renewable Energy Credits, and > 100% of direct on-site emissions are offset					x	No	No	Some factories in the supply chain follow LEED certification, but not enough to reach this level
Embodied energy is quantified (amount & sources), and strategy developed to optimize					x	No	No	Not currently in use, but of interest in terms of consumer use education and behavior as indicated by [redacted] Rep.
≥ 5% of embodied energy covered by offsets or otherwise addressed					x	No	Yes	Possibly done at the LEED-certified factory



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	Basic	Bronze	Silver	Gold	Platinum								
4.0 Water													
Created or adopted water stewardship principles/guidelines	x	x	x	x	x	Yes	Yes	Company published CDP 2014 Water 2014 Information Report and states that water management is integrated into their business strategy.					
Haven't violated discharge permit in last 2 years	x	x	x	x	x	Yes	Yes	Documentation has not been made available to us, but based on statements from the rep, we can most likely assume that violations are not tolerated					
Determined if water scarcity or sensitive ecosystems are issues around their factories	x	x	x	x	x	Yes	Yes	Company states that the supply chain is exposed to water risks, either current and/or future, that could generate a substantive change in your business, operations, revenue or expenditure.					
Facility-wide water audit		x	x	x	x	No	Yes	Published water report does not specifically include total withdrawals by source, rainwater collection systems, water recycling and reclamation systems, quantification of effluent discharge into receiving water body, a flow diagram illustrating facility inputs and outputs, total consumption per year due to evaporation and/or incorporation into the product, or detail regarding use.					
Assessed all process chemicals in effluent OR Characterized ≥ 20% of Tier 1 suppliers' chemical effluent and water depletion. Strategy developed to optimize			x	x	x	No	Yes	Published water report does not specifically include total withdrawals by source, rainwater collection systems, water recycling and reclamation systems, quantification of effluent discharge into receiving water body, a flow diagram illustrating facility inputs and outputs, total consumption per year due to evaporation and/or incorporation into the product, or detail regarding use.					
No problematic process chemicals in effluent (either removed from process or recycled to not enter effluent) OR Demonstrated progress on Tier 1 suppliers strategy from "Silver" level				x	x	No	No	Published water report does not specifically include total withdrawals by source, rainwater collection systems, water recycling and reclamation systems, quantification of effluent discharge into receiving water body, a flow diagram illustrating facility inputs and outputs, total consumption per year due to evaporation and/or incorporation into the product, or detail regarding use.					
All water leaving manufacturing facility meets drinking water quality standards					x	No	No	Published water report does not specifically include total withdrawals by source, rainwater collection systems, water recycling and reclamation systems, quantification of effluent discharge into receiving water body, a flow diagram illustrating facility inputs and outputs, total consumption per year due to evaporation and/or incorporation into the product, or detail regarding use.					
5.0 Social Responsibility													
Streamlined self-audit performed to assess protection of fundamental human rights	x	x	x	x	x	Yes	Yes	prides itself on contracting with high-quality factories and ensuring standards are met and is currently leveraging the Higg Index and Clean By Design pilot					
Management procedures developed to fix any problems found in self-audit	x	x	x	x	x	Yes	Yes	completes 2000 unannounced audits each year					
Full social responsibility self-audit performed & positive-impact strategy developed		x	x	x	x	No	Yes	seems to be aware of social responsibility, but we are unsure of whether they have specifically undertaken an audit					
Performed material-specific and/or issue-related audit relevant to ≥ 25% of product material (by weight), e.g. FSC Certified, Fair Trade, etc. OR Supply chain social issues are fully investigated & positive-impact strategy developed. OR Company is actively conducting an innovative social project that positively impacts employee's lives, the local community, global community, social aspects of supply chain, or recycling/reuse.			x	x	x	Yes	Yes	participates in numerous charitable organizations and disaster relief organizations, both in the US and abroad					
2 of the 3 "Silver" requirements done				x	x	Yes	Yes	participates in numerous charitable organizations and disaster relief organizations, both in the US and abroad					
All 3 "Silver" requirements done					x	No	Yes	participates in numerous charitable organizations and disaster relief organizations, both in the US and abroad; we can assume more is being done					
Acceptable third party social responsibility assessment, accreditation, or certification					x	No	No	No third party certification has been undertaken					
Meets Certification Standard? (Optimistic score)						No	No	No	No	No	8	23	For sections 3.0-5.0 basic and bronze certification criteria is met, sections 1.0 and 2.0 do not meet criteria
Meets Certification Standard? (Pessimistic score)						No	No	No	No	No			
CONCLUSIONS:													
The product does not meet all prerequisites: is not eligible for any level of certification. Unmet criteria for easiest certification (TN/BN):													
- All material ingredients identified (down to the 100 ppm level)													
- All material ingredients defined as biological nutrient (BN) or technical nutrient (TN)													
- Defined the appropriate cycle (i.e., technical or biological) for the product and developing a plan for product recovery and reutilization													
- Quantified energy use and source(s) for final stage of product manufacture/assembly													
- 100% "characterized" (i.e., all generic materials listed).													
- Facility-wide water audit													
- Full social responsibility self-audit performed													
If all these criteria were met, the product would be eligible for both basic and bronze certification.													



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Criteria	Required?					Pessimistic Score (Yes = 1, No = 0)	Optimistic Score (Yes = 1, No = 0)	Assumptions	
	Basic	Bronze	Silver	Gold	Platinum				
Resources									
http://www.c2ccertified.org/images/uploads/C2CCertified_Product_Standard_V3_121112.pdf									
http://businesstimes.com.vn/dir/listings/saitex-international-dong-nai-vn-ltd/									
https://corporate.saitex.com/corporate-responsibility/responsible-sourcing									
http://www.sai-tex.com/									
https://corporate.saitex.com/cdp-water-disclosure-2014.pdf									
https://corporate.saitex.com/2013-corporate-responsibility-report.pdf									
Meeting and email correspondence with Representative 10-15-2014									