

A Circular Approach to Design

What are the barriers to US adoption of curbside industrial composting? Are there companies you know of investing in proliferating industrial compost facility sites?

I believe there are some California, but not many. There is not enough industrially compostable material to make these types of collections viable. PLA is the main plastic that can break down in this type of facility and it does not break down in the ocean, so more development is happening in materials that can backyard compost and also degrade in marine environments. Biodegradable additives to plastics can create industrial composting timelines, but most people do not know what these products are. It's a challenge for sure.

Are NGOs, such as Ellen McCarthur Foundation, taking product / material miles into their analysis for a circular economy? If algae is harvested in the US for biomaterial, but then sent to Asia for manufacturing, only to return to the US as a product - is this a sustainable model?

No it isn't at present. We need to be careful to reduce the transport footprint in this type of process. This will show up in any quantitative analysis of the sustainability of a material being used to manufacture a product.

Closing the loop can easily become a marketing term rather than a real attempt to improve sustainability. If a company takes the product back after its end of life and put it into a new product application (rather than the same product), can it still be called circular economy?

Sort of. It is at least a step in the right direction and so long as the material is being reused, it can be claimed to be circular. Circular does not require that it go back into the same system, just that remains in use.

Are we really going to adopt this type of system? It seems so far from where we are now.

Bit by bit. It is tough and we are taking baby steps, but it is the only way we can truly make sustainable products, so we have to.

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L'Oréal, for example, charges a significant premium for their professional salon products. Consumers should have the option to return to the salon to have the bottle refilled. Interested to hear your thoughts on this potential initiative?

It's a great initiative, and one that has been tried a lot with some success. I love the leasing model. We do it for cars and some furniture, why not for packaging too?

Repair and re-use has gone out of style! There must be a cultural shift to make a circular economy a large scale reality.

Very true. But there are some areas where it is still viable.

What are your thoughts on Interface's initiative for "closing the loop" in the 90's?

[A little history for those unfamiliar.](#)

It was a great idea and it worked - except they had no second life for the carpet. So, they brought back a whole bunch of carpet with the intention of recycling, and recycled a little bit of it. As we found with so many other different products, there isn't enough of a market for that recycled material, so that was the challenge.

It worked in theory, and certainly they were good on their promises, but then they had whole warehouses full of carpets that they weren't sure what to do with.

We're much better at recycling carpet now, but again the increased amount of carpet usage has meant that it's still tough to keep up with demand.

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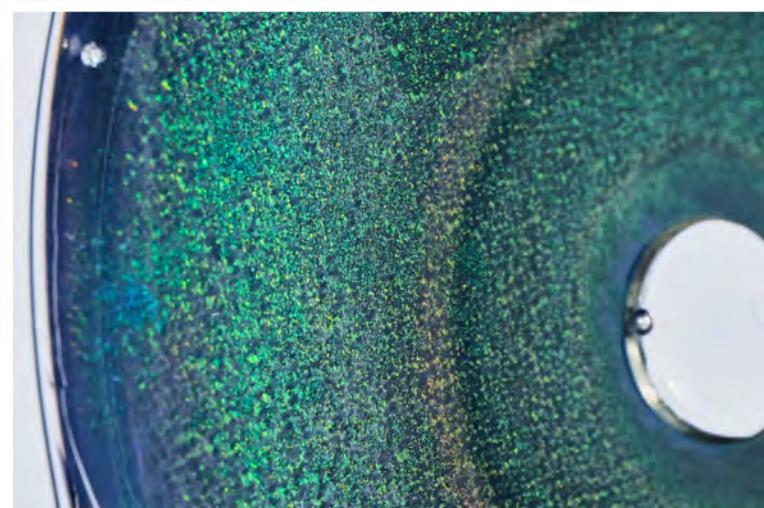
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With 25+ years of experience, our material experts provide clients with a cross-industry perspective on material selection, product development, sustainability, and innovation.

Who We Work With

Our international network of material specialists partner with brands looking to develop a product, packaging, or new retail location but need help finding the right materials to support their specific needs.

Some of our clients include...



Material Connection

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Material Library

Company-wide access to the world's most robust online database of innovative and sustainable materials.

Material Landscape

A customized collection of materials expertly curated to provide your team with implementable solutions and cross-industry information centered around a specific material problem.

Material Advisory

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- 1 Expedite the material selection process by connecting brands with innovative, sustainable materials that bridge the gap between design and performance.
- 2 Leverage our experience across 75+ industries to provide unexpected material solutions.
- 3 Provide customized support and expertise from initial material selection to targeted, in-depth research and manufacturer outreach.



Accelerate Timelines

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Let's Plan for the Future

We're looking forward to partnering with you.



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