

ECO INNOVATIONS FOR A NEW ERA

THE GREENING OF PRODUCT LIFE CYCLES

By Michael Sudmeier

In an industry built on marketing, the focus on more environmentally friendly products and processes in action sports could translate to a great comic. Picture a tale chronicling the top athletes battling environmental impacts, where brand-clad heroes' spins extinguish fires from trash piles, or surf to save wounded dolphins. While we've got the patent on this pending, the true story behind the scenes is much more complex, but nevertheless involves heroes of a different sort. Rather than engaging in climactic battles with evil, its characters are more likely to wrestle with spreadsheets of data and experiment with new materials. It features people like Joey Santley, who does his part with a broom and dustpan.

Santley created an opportunity where others saw nothing more than trash. Through the years, he encountered countless piles of foam dust accumulating beneath the flip-flops of surfboard shapers. In 2008, he founded Green Foam blanks to give new life to this dust. As Santley explains, "We can take both the foam dust and cuttings from shaping previous boards and mix them into the original parent chemicals to produce a new high-quality blank." In addition to keeping this dust out of landfills, Green Foam's approach reduces the amount of parent chemicals required to produce new blanks.

Green Foam is one of many companies using innovative methods to reduce the industry's footprint and help leverage its cache of cool in order to reach up the supply chain and down to consumers. Their efforts take numerous forms, yet can be best understood through the lens of the product life cycle. From the raw materials used to make products to initiatives for recycling these goods, the industry is redefining how it does business.

MATERIALS

The ingredients used to make products are constantly evolving as companies look for ways to minimize their impacts on the planet. Increasing innovation and incorporation of new technologies is reducing costs and the barriers to entry in the "green" products space. Some companies have developed their entire product lines around renewable resources. KLeN Laundry, for example, offers underwear, shirts, and socks made from bamboo and organic cotton. Similarly, IPath and Ocean Minded have built their reputations on making footwear from materials with reduced impacts, like hemp, organic cork, and recycled post-industrial content.

Many companies are also reassessing how once-discarded materials can be reintroduced into the supply chain. Each year, more and more products are made from polyesters derived from PET, the plastic commonly used in bottles. In 2007, Billabong began offering select boardshorts made from such a fabric. The company estimates it has since repurposed fourteen million plastic bottles. Patagonia, Quiksilver, Planet Earth, Bond, Lib Tech, O'Neill, and Homeschool use fabrics made from recycled PET in select outerwear, as does Dakine in its Re-Gen line of packs and bags. Other brands, like Sector 9 and Arbor, are using natural materials such as bamboo to lighten the environmental load of hardgoods.

Historically made from a magical blend of toxic substances, even skate wheels are increasingly going green. In addition to using vegetable oils in its EcoThane series, Satori offers a line of wheels that repurposes old ones. As founder Craig Nejedly explains, "Basically, we are retreading wheels in the simplest description. We collect old used wheels, clean them, cut them to consistent sizes, and then these old wheels serve as cores in the new Relife wheels. The bearings on our new Relife wheels sit in the bearing seat of the old wheels."

MANUFACTURING AND ASSEMBLY

Efforts to streamline preexisting manufacturing processes and develop new approaches provide another mechanism for reducing environmental impacts. Lisa Branner and her husband Klem founded Venture Snowboards in 1999 with a commitment to making snowboards with a reduced environmental impact. Branner states, "Initially it was about using more environmentally friendly materials, but now our thinking focuses largely on efficiency and making our operation as lean as



possible." As an example, she notes that "rather than using a single colorway for the bases, ours are random color combinations so we can swap the spare parts from one base with those from another and all the base materials get used."

As Satori and Green Foam demonstrate, new approaches to manufacturing often stem from imagining how materials can be repurposed. Yet it also takes other forms. Ocean Minded, IPath, and Sole Technology (the parent company of brands such as etnies and ThirtyTwo), for example, use water-based adhesives in the construction of most or all of their footwear. Sole Technologies recently revealed its STI Fusion technology, an alternative to traditional vulcanized construction. By fusing together the upper, midsole, and outsole of a shoe, they can reduce the use of adhesives, energy input, and their associated carbon emissions. Arbor's

snowboards use plant-based glues, and its skateboards use water-based sanding sealers. Companies like Lib Tech and Niche use basalt in place of fiberglass in their snowboards.

PACKAGING

Although reducing the impact of packaging is less sexy than touting goods made of bamboo or recycling skate wheels, it plays a key—and often overlooked—role in helping companies tread lightly. Packaging has often been left in the hands of factories, which tend to use low-density polyethylene bags. Increasingly, however, companies are exploring alternatives, be they recycled, recyclable, or biodegradable. Many companies are also turning to recycled paper and cardboard, as well as solvent-free inks to meet packaging needs. Additionally, reducing packaging, the easiest way to decrease its impact, leads to lower shipping and storage costs for brands and retailers alike.

TRANSPORT AND DISTRIBUTION

When it comes to getting goods to retailers and consumers, innovation and efficiency are essential. To transport its products from the Los Angeles and Long Beach ports, Quiksilver uses a supplier with trucks fueled by liquefied natural gas rather than diesel. Jeff Wilson, Quiksilver's vice president of sustainability, notes that the company is "fully engaged now with [business software provider] SAP on design and rollout of an ERP [enterprise research planning] platform, a portion of which will streamline our order and shipping system, resulting in fewer and more efficient shipments of product to retail." Many companies are also addressing transport in early stages of the supply chain, sourcing materials as close as possible to their factories. Colorado-based Venture uses Forest Stewardship Council certified ash and poplar from Mississippi, plastics and base material from Ohio, and epoxy from California.

USE AND SERVICE

Whether it's how long a product lasts or the methods used to wash, repair, or upgrade it, manufacturers are considering the impact of their products long after they leave the store. In addition to avoiding petroleum-based neoprene by opting for an alternative derived from limestone, Matuse aims to reduce the company's impacts by focusing on the durability of its wetsuits. "As far as minimizing our ecological impact," states Matuse President and CEO John Campbell, "the best way to make Mother Nature happy is to make the customer happy. If we make a product that the customer can wear two to three times longer than a normal suit, then the environment wins as well."

END OF LIFE

Although manufacturers are working to extend the life span of products, they are also taking steps to plan for the afterlife. Patagonia, long considered a model for environmental stewardship, launched its Common Threads Initiative in 2005. Through this program, customers can recycle se-

lect Patagonia garments by taking them to retailers or mailing them to the company. By this fall, all of Patagonia's clothes will be recyclable.

SnowSports Industries America (SIA) has also developed a project for addressing products at the end of their life. In 2008, SIA launched a pilot program, now known as Snow Sports Recycling Program, to recycle skis, poles, snowboards, ski and snowboard boots, and helmets. Colorado retailers collect these items, which are then repurposed into landscaping products, including synthetic rocks and retaining-wall blocks. According to Project Manager Greg Schneider, this program aims to "ultimately create a sustainable design model" in which the materials go back into the supply chain for the ski and snowboard industries. This year, SIA will expand the program throughout the mountain region.

THINKING BIG

Companies are also looking beyond the product life cycle to minimize their impact. Since 2005, Billabong has measured its global carbon footprint. With a belief in the importance of both transparency and independently auditable standards, the company works to reduce its carbon emissions by reporting them through the third-party Carbon Disclosure Project. Sole Technology also tracks emissions, aiming to be carbon neutral by 2020. According to Manager of Environmental Affairs Roian Atwood, the company was able to reduce carbon emissions by 14 percent from 2007 to 2010, largely because of tracking and metrics that provide "close to real time factory environmental performance" data. Oakley, like other companies, has created a coalition of employees tasked with ensuring sustainability practices are implemented company-wide.

THE ROAD AHEAD

Again and again, companies echo that the greatest challenge to minimizing their impact is effecting change in the supply chain. Wilson states, "In the manufacturing space, including apparel and footwear, it will take the collaboration of many working to drive this back up the supply chain." This revelation led Wilson to partner with Atwood and Volcom Director of Sustainability and Corporate Responsibility

Derek Sabori to form The Sustainability Collective (TSC+), an independent advisory and resource organization. Founded in 2010, TSC+ aims to "Empower the action sports industry to be sustainability leaders and to forge a clear path to truly sustainable and responsible business."

Retailers and consumers also play essential roles in effecting change. Hobie Surf, like a growing number of shops, features a range of products with reduced impacts. One of the company's San Clemente locations exclusively features such products. Jake Schwaner, partner with Hobie, explains that "as more vendors started making their push into sustainable products, it just made sense for us to create an environment in which to showcase 'products with a purpose,' and it's just the right thing to do."

Vicki Redding, La Jolla Group's senior vice president of design and merchandising, provides a reminder of the final partner in collective efforts: "The end consumer is ultimately the one who votes with his purchases."

And more and more consumers are voting for the environment. According to Arbor Co-founder and CEO Bob Carlson, "Today's kids have more awareness of the need to protect the environment than any generation that came before. But they are still very much into the image, style, and performance aspects of the brands they support."

"Making a commitment to the environment is not a one-shot deal," Branner asserts, "but an ongoing process. We're never really going to be done with it. There will always be more that we can do to improve. You have to be willing to continually question and evolve." Emphasizing that this evolution is shaped by the sum of our efforts, Sabori states, "We know that if we want to get to that new future, we get there based on the decisions we make every single day."

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ENVIRONMENTAL & COMMUNITY OUTREACH

Action sports companies are working to be better stewards of the environment through outreach efforts. Since 1996, Ocean Minded has organized community watershed cleanups. Some companies have partnered with organizations such as Surfrider Foundation, Protect Our Winters, and the Conservation Alliance. Others affirm their commitment to the environment by joining forces with 1% For The Planet, a consortium of companies that donate at least one percent of their profits to environmental organizations. Arbor takes this commitment even further, donating five percent of its annual profits to such groups. Some companies also team with organizations for cause-driven marketing campaigns. Etnies, for instance, partnered with La Reserva Forest Foundation to create its "Buy A Shoe, Plant A Tree" program. For each pair of Jameson 2 Eco shoes sold, the company will plant a tree as part of restoration efforts in a Costa Rican rainforest. Chris Steinkamp, the executive director of Protect Our Winters, emphasizes that "regardless of their size, corporations have an incredible opportunity to positively leverage their influence on so many levels—and those companies that see nonprofits as partners who can amplify those efforts, see the highest success both in terms of brand perception and enacting positive environmental change."