



The State of the Circular Economy in America



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This whitepaper was developed by the National Association of Women Business Owners (NAWBO) for our international affiliate partner Les Femmes Chefs d'Entreprises Mondiales (FCEM) to highlight the state of the Circular Economy in America, specifically related to U.S. women business owners. For the past 50 years, NAWBO has been proud to be the voice of America's women business owners, powering their entrepreneurial dreams through connections, education, inspiration and advocacy. Learn more at <u>www.nawbo.org</u>. Also, a very special thanks to Gina Lee, founder of Circular CoLab, who has done extensive research in the Circular Economy space here in the U.S. and contributed this research to NAWBO's whitepaper. Also, thanks to the other U.S. women business owners who shared their stories of innovation and impact.

Current U.S. Commitment:

According to the Harvard Law School Forum on Corporate Governance, "The importance of environmental, social and governance (ESG) matters proved to be even greater than many had expected, with ESG becoming a key area of focus for a range of stakeholders, particularly in the boardroom. The rise of ESG that we have seen over the past few years is likely to continue, as ESG remains a priority in the corporate sphere. But investing in ESG is still lagging behind Europe. This is primarily because of the notion that ESG investing stems from an outdated perception that embracing ESG comes at a cost of financial returns. Also, while there has been increasing investor interest in ESG, the political and regulatory environment is another story. U.S. regulation on ESG has gone back and forth a few times in the last couple of decades, fluctuating between a neutral stance to actively discouraging it. ESG investing is facing both political and regulatory hurdles. Despite the hurdles, interest in ESG investing is pushing more managers to include ESG factors. Some also see the coronavirus pandemic as a turning point for ESG as the crisis has highlighted the importance of corporate responsibility and other ESG factors. According to the International Comparative Legal Guide: "The chief concerns of proponents of ESG are (1) management of climate change risks, including adaptation to a low-carbon economy, (2) human capital management, particularly racial and gender diversity, and inclusion in the workplace, and (3) questions around corporate purpose and how companies are serving the interests of all their stakeholders."[1] Early ESG policy was focused primarily on the environment, but over the past few years, ESG has taken on a broader meaning. Social and governance policies encompass those factors which contribute to the creation of a business that does good instead of causing harm, including but not limited to worker health and safety, environmental protection, transparent administration, and accountability.

There is also work being done through the U.S. Government: National Institute of Standards and Technology/Department of Commerce. <u>https://www.nist.gov/circular-economy</u>. "Circular Economy Program supports the nation's need to transition away from a model in which materials are extracted from the environment, manufactured into products, used, then discarded (a so-called Linear Economy) toward one in which the atoms and molecules that make up those products repeatedly cycle within the economy and retain their values."

https://www.reuters.com/world/us/us-house-republicans-target-esg-investments-latest-culture-warsalvo-2023-02-28/

https://www.raconteur.net/global-business/usa/usa-esg-investing/

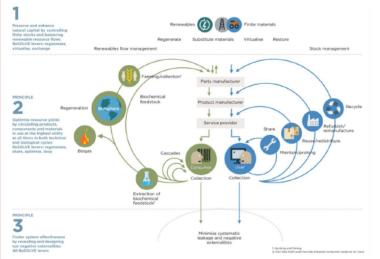
https://www.ascentys-esg.com/esg-policy-developments-in-the-united-states-march-2022/

In our exploration of the Circular Economy in America, we got in touch with Gina Lee, founder of Circular CoLab, who has done extensive research in the Circular Economy space here in the U.S. (The State of the Circular Economy in America and Closing the Material Loop make up the components of this document) Her findings unfold the multifaceted ecosystem of companies, partnerships, and case studies that are engaging in the Circular Economy space and paving the way for future generations. Of course, this is just the beginning in creating models of global sustainability.

Studies show the following (all copy below is taken directly from Gina's research (https://www.circularcolab.org/us-circular-economy-report/):

WHAT IS THE CIRCULAR ECONOMY?

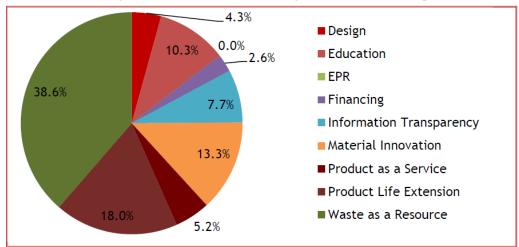
Our current economic growth is powered by a linear take, make, waste model that is unsustainable in a world of finite resources and ecosystem constraints. A circular economic model is the sustainable answer to decoupling continued economic growth from continued environmental degradation and pollution. This sustainable model would eliminate waste and increase productivity by focusing on the reuse and recycling of materials, the design of products to emphasize longevity and repair, and the creation of new business models including the sharing economy and the development of local closed loop systems.



Source: Circular Economy System Diagram, Ellen MacArthur Foundation, https://www.ellenmacarthurfoundation.org/circular-economy/interactive-diagram. Web. Accessed August 2018

Benefits of adopting the circular economy model include new business opportunities through product creation and improved resource efficiency, decreased reliance on rare materials and other commodities, and the creation of high skilled job growth. A 2015 McKinsey and Ellen MacArthur Foundation joint study, Growth Within: A Circular Economy Vision for a Competitive Europe, estimates that for just for the EU alone, transitioning to a circular economy could add \$1.8 trillion in value by 2030, decrease primary material consumption by 53% by 2050, and lower carbon dioxide emissions by 83% by 2050. The Circular Economy presents a truly win-win situation for the planet, people, and profit.

As outlined in the Ellen MacArthur Circular Economy diagram above, transitioning to a Circular Economy necessitates the alignment of every process within the economic system. These processes include energy production, resource utilization, manufacturing and production, sales, collection, reuse, repair, and environmental regeneration. If just one of these steps is missing—for example, collection—then the entire system will cease to be circular because material outputs can no longer be returned into the system for further use. This section groups each initiative by its theory of change and industry focus. The aim is to provide insight into the types of business models and innovations that are being pursued, what industries are being disrupted, as well as opportunities to address gaps in innovation.





N=233 (some organizations are focused on more than one Theory of Change)

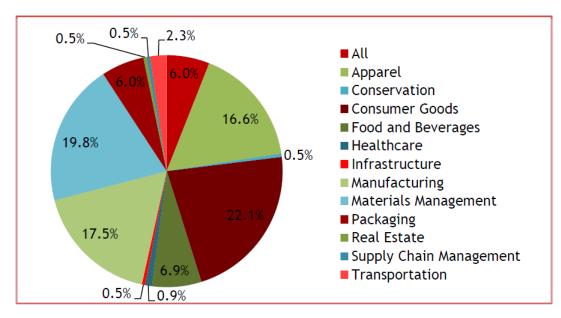


Chart 2. Circular Economy Initiatives: Breakdown by Industry Focus

N=217 (some organizations are focused on more than one industry)

WASTE AS A RESOURCE

Utilizing what is currently considered waste and upcycling this material into another good or product, Waste as a Resource was the most common intervention point with 39% of initiatives incorporating this approach into their business model. This is an area that is expected to receive more attention given macroeconomic factors, including China's recent ban on secondary material imports.

Materials Management

Materials Management was the sector that most frequently incorporated Waste as a Resource into their business models, making up 32% of Waste as a Resource initiatives. Organizations in this space include the development of innovations, including advanced technologies to tackle plastics recycling (BioCellection, Purecycle), preventing textile waste from going to landfill (FabScrap, CarpetCycle), and online platforms to support businesses in the exchange of excess material or byproduct (U.S. Materials Marketplace.)

Manufacturing

Manufacturing made up 26% of initiatives that incorporated Waste as a Resource as part of their business model. Many of these organizations were focused on the built environment with waste materials being incorporated into products, including walls, composite decking, interior surfaces, and tile (Building Product Ecosystems, ECOR, Ecostrate, Grenite, Icestone, Interface, Kohler, Trex.) Other solutions focused on the utilization of CO2 (Calera, Carbon Engineering) and the closed loop recycling of tires (Leigh Technologies.)

Apparel and Consumer Goods

Initiatives focused on the apparel and consumer goods sector also incorporated Waste as a Resource frequently into their business models, with these two sectors making up 32% of Waste as a Resource initiatives. Solutions trended toward ones focused on the creation of new products utilizing post-consumer materials (8hz, GreenToys, Indosole) while some organizations even engaged in the creation of economic development opportunities by employing the local workforce in the collection of feed stock (Bureo, Thread.)

Food and Beverage

Food and Beverage made up 9% of the total number of Waste as Resource initiatives in the database. About half of these initiatives are non-profits with a focus on providing food to low-income communities (CityHarvest, Commonwealth Kitchen.) Other organizations concentrated on the transformation of food byproduct or surplus into new edible goods (Regrained, Misfit Juicery) or into compost (LA Compost.) For those interested in learning more about the myriad of organizations addressing food waste in America, please view the ReFED Innovator Database at <u>https://www.refed.com/tools/innovatordatabase</u>.

Other

The remaining initiatives incorporating Waste as a Resource into their theory of change were focused primarily on packaging (Method, Ecologic Brands) along with solutions aimed at conservation (Rainforest Connection) and public infrastructure (Cheese Brine.)

PRODUCT LIFE EXTENSION

Creating methods to prolong the duration or use of a given product through activities, including donation, repair, reuse, remanufacturing, and the replacement of single use items with reusable products. Business models in this category have created a unique niche whereby they specialize in the reutilization of goods. This is the second most popular business model with 18% of initiatives incorporating this approach. This is not a new industry, as the reselling of secondhand goods has been in place since the Salvation Army was formed in the late 19th century. In addition, online secondhand markets have been available since 1995 with the founding of Craigslist and eBay. More recently, the growing popularity of e-commerce has enabled specialization in a greater variety of products as well as broader consumer reach. In addition, there is a growing repair movement as well as an already established remanufacturing industry in America that are both dedicated to prolonging product life. The secondary market sector that has developed for the sale of previously owned products is one that is expected to grow. One in three women shopped in secondhand outlets in 2017 and the resale market is projected to double in the next 5 years, reaching \$77 billion. A few years ago, the Real Real, a luxury consignment center, raised \$100 million in its Series Giv and Backmarket, a Paris-based technology repair and remanufacturing marketplace, raised \$47 million.

Consumer Goods

The most common sector focus for Product Life Extension was Consumer Goods, comprising 55% of Product Life Extension initiatives. Besides the resale of secondhand goods as mentioned above, Product Life Extension can also be achieved through the replacement of singe-use products such as razor blades (Albatross Razors) and packaging (Fillgood) with multi-use alternatives.

Apparel

The apparel industry is also a focus of Product Life Extension business models. 26% of organizations incorporating Product Life Extension concentrated on providing solutions to the textile and apparel space. Besides the traditional method of donating or exchanging secondhand apparel, product life extension in this sector can also take the form of repair or a new business model, recommerce. With recommerce, businesses ask existing customers for their used items and repair the secondhand clothing to as-good-as-new condition and sell them for a discount off the original retail price (Eileen Fisher, North Face, Patagonia.) While material production costs are removed, collection, reverse logistics, and repair costs are important elements in determining if recommerce can develop into a sustainable business model. Education and consumer awareness of this new product category will also be needed to drive greater demand.

Packaging

Packaging was another sector being disrupted by the product life extension model with 14% of initiatives addressing the packaging space. Most of the initiatives were focused on transitioning from single-use material or product, to multi-use options. As consumers become increasingly aware of the environmental issues caused by the longevity of many plastic-based single use items, we expect to see an increasing trend in the use of reusable and/or compostable material.

Manufacturing

For the manufacturing sector, which made up 12% of the Product Life Extension category, solutions were mostly concentrated on the built environment.

MATERIAL INNOVATION

The development of materials that have less environmental impact in their production, use, and/or end of life is Material Innovation. 13% of initiatives incorporated Material Innovation into their business model. Solutions in this category included the development of entirely new material categories such as bio-degradable plastics, the creation of less resource intensive processes in the creation of materials, and the replacement of material with a more environmentally friendly alternative. Material Innovation can be closely tied to Waste as a Resource whereby organizations incorporate waste material into their end product and/or material.

Manufacturing

39% of Material Innovation initiatives focused on disrupting the Manufacturing industry. Within manufacturing, solutions were concentrated primarily on finding plastics replacements as well as providing alternative materials for the Built Environment. Innovations include the utilization of GHG's in material creation (Natureworks, NewLight Technologies, US Concrete), creating composite panels from cartons (Rewall), and using a material found in shrimp shells to create a replacement for foam (Cruz Foam.)

Apparel

29% of Material Innovation initiatives were focused on the Apparel sector. Many of these initiatives also included Waste as a Resource business models. Examples included incorporating methane gas to create fiber (Mango Material), utilizing scrap to create fabric rolls (ZWD), developing textiles made from post-consumer cotton (EVERNU) and developing more sustainable processes in the creation of denim (Levi's Waterless Jeans.)

Food and Beverage and Packaging

Material Innovation solutions in Food and Beverage are closely tied to the creation of biodegradable and/or compostable materials as well edible materials for serving ware. Food and Beverage along with Packaging made up 19% of Material Innovation initiatives.

Consumer Goods

13% of Material Innovation initiatives addressed the Consumer Goods sector. The solutions included finding creative methods to utilizing waste such as transforming scrap textiles into business cards (Moo Cards) and providing solutions to enable better end-of-life recycling (Burton.)

EDUCATION, AWARENESS AND ADVOCACY

Organizations focused on creating more education, awareness and advocacy for the development of Circular Economy solutions made up 10% of all initiatives analyzed. These organizations can be broken into two groups: Higher Education Institutes such as Universities which provide teaching, research, and collaboration opportunities and non-profits or industry groups concentrating on one specific industry, behavior, or geographic location. It is important to note that the organizations included below represent

just a small sampling of the variety of Circular Economy-related industry groups in America. For example, within the Materials Management industry, which includes waste management and recycling, there are dozens of organizations. However, there is currently only one organization, the Circular Economy Industries Association, which is focused on addressing Circular Economy policy at the national legislative level.

INFORMATION TRANSPARENCY

Providing greater insight and transparency into current processes and/or systems 8% of initiatives in the database incorporated Information Transparency as part of their business model. This is an area that has seen rapid growth due to the arrival of cloud-based services and IoT supported by technologies including sensors, GPS and RFID. Almost all organizations developing Circular Economy solutions within this space are start-ups with the majority operating in the materials management sector.

Materials Management

Materials Management was the most popular sector being targeted for transformation by Information Transparency initiatives with 50% of information transparency solutions oriented toward this sector. The materials management space is ripe for disruption because the waste sector has been notoriously opaque as well as slow to adopt new technology. Better information transparency in this sector is very important as this is the first step in creating a baseline for improvement. Awareness and knowledge of material flows can result in higher diversion rates upstream as well as better strategies for managing revenues and costs in the collection and processing of secondary materials. Services have been developed for cities, haulers, commercial and multifamily units, and corporations. Solutions include providing logistics management for haulers (RecycleTrack, Recyclops), monitoring of waste levels, types of waste produced, and amount recycled (Trashtalk, Zerocycle) and even the geographic tracking and verification of waste shipments (BAN.)

Others

Increased information transparency has already brought exciting new innovations that target supply chain management (Dipole), reduce fixed costs for hospitals (Cohealo), and optimize pricing for fresh produce to encourage sales and decrease organic waste (Wasteless). As more awareness of Circular Economy needs and opportunities proliferates among the technology and investment community, there is expected to be further growth in information transparency-oriented solutions.

PRODUCT AS A SERVICE

Offering an alternative to ownership whereby the organization provides a service instead of selling a product. Product as a Service models make up 5% of the total number of Circular Economy initiatives in the database. These solutions are important to the development of the Circular Economy because they create higher utilization rates for goods and can create lower levels of resource use since consumers may no longer need to own a product. In some cases, they can also create the incentive for the manufacturer to invest in materials with higher durability as well as design for ease of repair.

Apparel and Consumer Goods

50% of Product as a Service initiatives were focused on the Apparel and Consumer Goods industry. Shifting from ownership to leasing or product as a service models could yield enormous environmental impact due to the need to offset a forecasted increase in consumption rates spurred by a growing global middle class. Instead of feeding this new demand with business-as-usual models of increased production and resource use, we could instead develop new business models that encourage more sharing, rental, and reuse.

Transportation

Providing solutions for transportation account for 41% of Product as a Service models. Product as a Service in this sector provides the service of mobility without the need for ownership of a car, bike, or scooter. The auto industry is ripe for disruption as the average car is parked 93.6% of the time, even during waking hours. Already, ride sharing has proved to reduce car purchasing among users. A 2017 Lyft study found that 250,000 of their ride-sharing passengers have sold their personal car or abandoned replacing their current car due to the availability of ridesharing services. However, these types of solutions also have the potential to reduce the utilization of public transportation. A survey conducted by the University of California, Davis found that ride-sharing services resulted in a 6 percent reduction in Americans' usage of bus systems.

Real Estate

Product as a Service models for Real Estate are manifested by co-working spaces. Instead of needing to own or lease a fixed office space, co-working spaces can ideally provide greater flexibility and lower costs to customers with better utilization of space.

DESIGN

Focusing on the design phase of products, systems, or materials to enable better reuse, repair, recycling, and/or incorporate less material usage. Design is an important component of every theory of change and this section looks specifically at those initiatives where design is the main focus. 4% of initiatives in the database had a specific focus on design. Consulting firms with a Circular Economy focus were also included in this category.

FINANCING

Providing funds and investor support, there are hundreds of social impact funds in the United States focusing on a broad range of issues, including economic inclusivity, clean energy, and providing access to basic needs. The ones below were selected based on their focus in funding Circular Economy-related solutions. Investment firms made up 3% of the initiatives in the database.

For companies focused on selling physical products, developing more product recirculation opportunities and/or better consumer education on proper end-of-life disposal for products presents both an economic and environmental opportunity. Of the companies in the database that sold physical products, less than 40% had information on their websites educating consumers on proper end-of-life disposal of their products; with less than 8% offering take back or disposal options. Even for organizations that had business models focused on the secondary market such as those that repurposed waste to create new consumer products, sold secondhand goods, or specialized in remanufacturing; providing recirculation opportunities for their products beyond the second life cycle was not a service that many organizations offered. If even these sustainability-minded businesses are not considering endof-life or recirculation options, this means the majority of consumer goods brands will have no awareness of the need for further product recirculation. From an economic perspective, including education around end-of -life disposal or reuse alternatives offers purposeful engagement opportunities with existing consumers that are increasingly concerned about their environmental footprint. There may also be untapped revenue generation potential for businesses that examine options for incorporating post-consumer material back into their product line. Even if revenue opportunities are not tremendous, creating take back or post-consumer waste programs as part of a sustainability mission can lead to better employee engagement and loyalty. From an environmental perspective, recirculating products presents a huge opportunity to magnify impact as virgin resources and many production processes can be conserved. Prolonging the recirculation of goods to the third or even fourth life cycle presents a significant step to drastically reduce environmental impact. This is because the amount of resource and energy use that goes into the production and manufacturing of materials and goods can be completely eliminated. The longer we can keep an item in circulation, the higher the lifetime utility of that product becomes. Thus, organizations that can develop business models to service more people with less resource use will see both revenue and social benefits.

For-profit social enterprises will lead the way. Of the 202 initiatives in the database, 56% were start-ups or SMEs. As consumers continue to place greater demands on corporations to act as good corporate citizens the number of these types of for-profit social enterprises is expected to increase. In addition, as demonstrated by the growing B-Corp movement, there is a trend among the entrepreneur community to build companies that incorporate environmental and social considerations into their business model.

The Case for Taking Action

If viewed from a societal perspective, the economic rationale to promote recovered resource use is clear. Material that is sent to landfills represents not only the lost financial value of the material itself, but also the lost revenue from potential economic opportunities that could have utilized this waste material as feedstock. For example, for just single-use packaging alone, in 2010 the United States threw away \$11.4 billion worth of recyclable containers and packaging material. This amount represents almost double the 2019 budget of the U.S. Environmental Protection Agency, which was \$6.1 billion. Furthermore, recycling and reuse are estimated to create between 9 to 30 times more jobs as compared with landfilling and incineration. Meanwhile, the potential environmental benefits of reducing both non-renewable virgin resource use and reliance on landfills are equally compelling. Landfills have long been known to cause soil and water contamination issues for the local communities in which they are located, lead to the loss of regional biodiversity, as well as emit methane, a gas that is 20-30 times more potent than carbon dioxide at causing climate change. Natural resource extraction is responsible for the loss of pristine habitat and biodiversity, creates soil erosion, pollution, and deforestation, and in some cases, leads to the loss of livelihood for the local community.

Lastly, as global consumer spending is projected to almost double to \$64 trillion by 2034, there is an urgency to create new methods of production that can fulfill projected consumer demand while staying within planetary resource constraints. Supporting the growth of recovered materials markets and products made from waste presents a clear path forward to building a more sustainable economy that can also support regional economic development.

The final database of 202 initiatives that were analyzed for this report can be found online at <u>www.circularcolab.org</u>. They welcome further submissions and hope the database is utilized as an ongoing resource for those interested in furthering the development of a U.S. Circular Economy. To be

included, please submit your information on this link: <u>https://www.circularcolab.org/usa-circular-</u> <u>economy-startup-survey/</u>. For those who would like to join the movement to promote the development of the Circular Economy in America, please visit the <u>www.circularcolab.org</u> for further information.

THE GOOD PRACTICES

Gina Lee's Closing The Material Gap shares best practices around Waste as a Resource. In the document, she shares findings from her research. NAWBO-specific key findings are noted with each interviewee in this report. Other interviews can be found in Lee's Closing the Material Gap as a part of the Upstart Network report:

ENTREPRENEURS

As issues around waste, environmental degradation, and resource constraints gain increasing public attention, entrepreneurs are creating businesses that are addressing all three issues simultaneously. These individuals and businesses are creating a paradigm shift around how our society understands and defines "what is waste" and how it can be utilized. They are driven by a mission to prove that waste is a resource as well as a financial opportunity.

The types of businesses highlighted in the study show that the utilization of technology and creativity within the point of collection are just as valuable as a focus on material or product innovation. Analyzing upstream opportunities to intercept materials before they become part of the traditional recycling stream though brand and retailer partnerships is one solution. Additionally, R&D efforts focused on what isn't currently considered recyclable or recoverable are just as necessary to create truly closed loop resource systems. Lastly, enabling more data transparency around material flows and creating marketplaces for materials are also critical in creating demand for recovered materials.

Key Findings

Inertia is Your #1 Enemy

By default, the nature of many of these solutions represents a new way of doing things. Even if the solution is arguably "better" from the standpoint of financial, performance, or environmental attributes, entrepreneurs must be prepared to encounter resistance. Reasons for resistance may include the perception that the proposed solution will require more work due to changes in current processes, a customer base with a culture that disincentives risk taking (as utilizing new solutions or products can be inherently risky for whomever makes the purchase), and the lack of interest in alternatives if the existing solution is "good enough".

Best Practices:

Tackle Inertia

Develop long-term relationships with potential customers, starting with a smaller-scale pilot project to build trust, and finding well-respected third parties to offer credibility to the material or business in the form of certifications or labeling. Moreover, engaging directly with those in the C-suite who may have a more strategic outlook as opposed to those within the Purchasing or Buying departments was also recommended.

Lead with Attributes, Not Sustainability

Not all share the same goals around global sustainability, so make sure you are in alignment with your potential client/government's commitment to this. Focus on solving pain points and what attributes or

solutions the product has to provide solutions to the pain points, style, or durability factors that make the product.

Scale with Partnerships and Collaborations

The need for more partnerships and industry collaborations to help scale sustainability efforts is well understood. Nowhere is this need more apparent than within the development of recovered materials supply chains. Very rarely does one organization have the expertise to act as the collector, processor, product manufacturer, and end-market retailer for a recovered material while doing so profitably at scale. However, fostering successful relationships and results-oriented programs among different organizations is not an easy task. Who are the right partners? What is the right incentive and cost structure?

Invest in Long-Term Relationships

Lee featured partnerships that were all initiated by companies that already had pre-existing relationships with one another. While some of the alliances grew to include new relationships, the founding teams of each program involved those that had already worked together on prior initiatives. These partners had already established a common understanding of how their respective organizations' missions were in alignment and had built a shared sense of trust from the results of past outcomes. Thus, they were ready to engage on much larger scale efforts. In addition, the nature of these partnerships was focused on long-term engagement as opposed to being one-off or transactional.

Work Toward Cost Parity

Cost parity was an important issue. The goal for each partnership was to create a truly financially sustainable program that would result in cost-savings in the long term. Within those parameters, there was the understanding that reaching true efficiency and scale would take time, especially in the case of the development of new materials and supply chains. These concerns were built into project timelines to allow for a realistic understanding that cost parity may not be achieved immediately.

Engage with Internal Stakeholders

While the sustainability department may be leading the program externally, for collaborations with external partners to succeed, engaging internal departments and employees was cited by interviewees as being a critical component of success. While the common focus for partnership success is on picking the right *external* partners, interviewees emphasized the need to have strong internal buy-in for the external collaboration to succeed. Assuaging internal departments' fears around material quality and costs were cited as ways to help build support for testing out new supply chains and material sources.

Advance a Culture of Sustainability

Tied into the need for internal engagement is the idea that there must already be a strong company-wide understanding that sustainability is an important priority. If this type of culture is not already widespread, interviewees recommended focusing on smaller-scale projects and building a track record of smaller wins. Tying in consumer expectations around sustainability as well as the need for resource securitization could also be useful motivations for employees to utilize in advancing a culture of sustainability,

Share Information Beyond the Partnership

Sharing information about partnerships and programs beyond their immediate network or partnerships was a priority for many interviewees. Keeping data about the partnership proprietary was viewed as having an adverse impact on building truly scalable new supply chains or material innovations that were cost effective.

Public Sector:

Make the Economic Argument

All of the interviewees spoke to the importance of framing "waste" in terms of economic value. This shift from materials management activities being traditionally seen as a cost center to positioning these activities in an economic development and revenue generation light has arguably helped these programs gain greater buy-in from both the community at large and within their respective municipalities or states.

Embrace Entrepreneurs and Local Experts

Several featured cities and states understood that existing solutions for the processing of "waste" and end-markets for recovered materials may not currently exist. Thus, they have and continue to pro-actively pitch their materials to the entrepreneurial, business, non-profit, and academic community. In some cases, cities are even developing start-up acceleration programs to foster scalable solutions. Encouraging inclusivity and diversity of program participants to include "non-traditional" business owners was also cited by some interviewees as a priority for their resource recovery program.

Break Down Silos

As programs are developed to support the utilization of recovered materials, proper communication and coordination between different city departments (namely Economic Development and Resource Recovery/Waste Management) is integral to ensuring there is no duplication of efforts as well as to lay a framework for strategic coordination. Some of the featured cities have even developed joint funding for a cross-departmental role or for the creation of an entirely new Circular Economy department. The Procurement, Building, and Workforce Development departments were also cited by interviewees as being important to include in the development of recovered materials strategies.

Set Realistic Expectations

Having a full understanding of a region's infrastructure, labor pool, and transportation options is important in crafting a materials management strategy that a region can realistically support. The scale and type of resource recovery and manufacturing businesses that a city or region should be focused on attracting will be dependent on these attributes. Energy and water needs, accessibility to a skilled workforce, and proximity to large populations were important factors that large scale manufacturers considered when deciding on potential sites.

Drive Change Without High Tipping Fees

Even in a regulatory environment that is unfavorable to high tipping fees, regions can still support resource recovery activities and the development of end-markets for those materials. Having regional leadership publicly commit to landfill diversion goals, seeking out local manufacturers who have zero waste mandates as part of their sustainability goals, and educating local residents about the lost financial potential of the material currently being currently landfilled were all strategies that

interviewees mentioned as helpful in the creation of resource recovery and end-use programs. Recognition, through awards or certification, for manufacturers that have achieved zero waste manufacturing and/or who have developed partnerships with other manufacturers to utilize their byproduct can also drive momentum for behavior change.

Seek More than Monetary Assistance

Look for financial assistance in the form of grants, low interest loans, or tax rebates as they are helpful for supporting businesses that utilize waste. Programs may also offer non-financial support, including the generation of media coverage, access to experts and city data, permitting assistance, and coordination among different departments, as important benefits that can help businesses develop and scale.

"Entrepreneurs need to be unwavering in their commitment to the bigger cause (ie, reduce waste, fight climate change) and be flexible and adaptable in how they will do this within their business structure." — Christina Johnson, Creative Director and Co-Founder <u>www.upcycleitnow.com</u>

NAWBO WOMEN BUSINESS OWNER SUCCESS STORIES

Elaine Birks-Mitchell, The Bra Recyclers, LLC



Elaine Birks-Mitchell is the CEO and Founder of The Bra Recyclers, LLC. Established in 2008, The Bra Recyclers is a social enterprise and a leader in the textile recycling industry focused on reusing and recycling bras and other women's lingerie products. In partnership with our Bra Recycling Ambassadors around the world, we have donated over 4 million bras to women and girls escaping domestic violence and human trafficking, which reduces the number of bras unnecessarily going to our landfills. We believe if you give a woman a bra and the necessary support, she will reshape her life and those around her.

The Bra Recyclers has been featured in several publications and media, highlighting its unique recycling initiative. Media highlights include Hallmark Channel, Huffington Post, Ladies' Home Journal, Earth 911, USA Today, Women's Day, Glamour, CNN, and The Today Show, just to name a few. The Bra Recyclers was also named by The Phoenix Magazine, as Best Alternative Recycling Program. Additionally, The Bra Recyclers received the honor of being a nominee for the Phoenix Women's Magazine Women of Excellence Award and received the NAACP Humanitarian Award.

Elaine received her Bachelor's degree from Purdue University in Financial Planning and her Masters from the University of St. Catherines in Organizational Leadership. She is an active member of her community, volunteering with organizations to do bra fittings for women in transition.

Q: Tell us about your business.

The Bra Recyclers is a social enterprise clothing recycling company, specializing in the recycling and reuse of pre-loved bras, new underwear and other lingerie. We bring together retailers, consumers and nonprofits to address the social and environmental impacts of extending the life of textiles that can support families in need around the world.

Since 2008, we have been advocates of the Circular Economy to help support our planet and the people who live on it. We offer a simple and scalable process to retailers and consumers, to extend the life of underwear while reducing their carbon footprint, waste and water pollution. As part of our mission, we partner with local organizations that provide job opportunities for individuals with disabilities that gives them the opportunity to give back to their community and be more self-sufficient.

Q: What was your motivation for founding it?

I watched my parents give so much of themselves to their community as I grew up, and I wanted to figure out how I was going to leave that same legacy. Knowing that the corporate world was not going to be my retirement plan, I needed to figure out how I could use my gifts, passions and values to sustain myself and still support my community. Not an easy task, but the peace of mind and knowing that I am involved in something that can impact the lives of thousands around the world makes all the sleepless nights worth it.

As the founder of The Bra Recyclers and The Undie Chest, my motivation is to unmute the conversation about underwear and hygiene poverty and create partnerships to help us restore dignity back to families in need.

Did your mom tell you to always make sure you had on clean underwear? Imagine as a child or as the parent of a child having to send them off to school and not having access to clean underwear. Unfortunately, this is the reality for millions of families. Hygiene and underwear poverty is running rampant right here in the U.S. The lack of underwear for a family just trying to survive, and find safety, food and shelter is traumatic enough. But adding the fact of not having clean underwear to the equation, chips away at your self-respect and dignity.

With over 15 years in the recycling and sustainability industry, I am very aware that there are millions of pounds of underwear thrown into our landfills every year. The World Economic Forum estimates that over 11 million pounds of underwear go to our landfills every day. That is unacceptable. These usable and highly requested items could be used to help support families in need around the world.

The Bra Recyclers has an opportunity to provide retailers with a more responsible and sustainable option to dispose of their overstock and returns so that they can reduce their carbon footprint and become better stewards of our planet and the people who live on it.

As a social entrepreneur, I saw a problem and opportunity and decided not to wait for someone else to solve it, so I used entrepreneurial principles to create The Bra Recyclers.

What were your key priorities when you first launched?

- 1. **DOING GOOD COST MONEY**. As a social entrepreneur, I had identified a problem/opportunity and I needed to determine how I could use entrepreneurial principles to solve it while also making a profit and doing good.
- 2. UNDERSTAND THE INDUSTRY AND MARKET. Because the textile recycling industry was very foreign to me and you just can't Google to figure out how to set one up, I needed to learn about the industry, the key players, pricing strategies and finding reliable and ethical partners. My best strategy to increase my knowledge and relationships in the industry was through networking groups and joining textile recycling associations.
- 3. HOW DO WE LET PEOPLE KNOW ABOUT US. Social entrepreneurship, textile recycling and specifically, bra recycling wasn't something most people had much knowledge about, so it was going to be important that we create awareness about the social and environmental impacts of these areas. Sharing stories about women and girls in need who struggled to have basic needs like a bra was key in creating a call to action for consumers and retailers.

Did you set out from the beginning to have a business with impacts on the Circular Economy or did this evolve over time?

When I started The Bra Recyclers, I knew the social impacts we would make by providing bras and underwear to shelters and transitional programs around the world. The Circular Economy, which they were not really calling it this in 2008, was a means to help me achieve the goal of providing thousands of women and girls with bras and underwear while also reducing the number of usable textiles going to our landfills.

How did you get the right stakeholder buy-in and funding?

It was very challenging getting partners to buy-in to the idea of bra recycling because most people thought that bras could not be recycled or reused. So, there was a steep awareness curve to train both the consumer and the retailers on the social and environmental impacts of recycling and also working with a social entrepreneur.

When I explained that nonprofit companies like Goodwill or Salvation Army are some of the largest textile recyclers in the world, they were surprised. Textile recyclers purchase items that are donated to these companies. What was key for me when I started The Bra Recyclers was that we were going to be transparent about how the industry works and educate consumers about the positive aspects of the industry. It was definitely easier said than done.

The Bra Recyclers was completely funded by me. We did not seek out investors or loans. This was such a new concept and we needed to be able to prove out the concept and make sure it was a viable business.

What challenges or objections did you face and how did you overcome these? Were there any that you didn't expect?

I don't think there is enough space in this article to list all of the expected and unexpected challenges and objections that we faced.

Top 3 Hit List

1. **ITS NOT EASY BEING GREEN AND DOING GOOD**. Most consumers don't have much knowledge of the textile recycling industry. When you look at where we fall in the supply chain for the retail

industry, it is typically at the end of the supply chain and most retailers are not required to share what happens with their overstock, returns or scraps.

The good part of being new to the industry was that you don't know what you don't know, so you can create new norms and challenge the status quo on how to do things. And that meant being a bit more transparent and educating the consumer and retailers about the industry.

- 2. DOING GOOD COST MONEY. We need to change the mindset that IF YOU ARE DOING GOOD, YOU SHOULDN'T BE MAKING MONEY FROM IT. This was and still is one the biggest challenges of social entrepreneurs. We try and educate people on what it cost to do good (e.g., labor, warehouse space, shipping, advertising, etc.), but in the U.S. we still have a long way to go to promote that for-profit companies can and should give back as much as nonprofits.
- 3. GOOD PEOPLE WHO WANT TO DO GOOD ARE HARD TO FIND. Our industry is very laborintensive and finding good people was very difficult as we grew. Our mission expanded over the last 5 years, and one key area was providing employment for people with disabilities to grow our business and leverage their value.

We have been fortunate to have the most amazing partnerships with two local organizations. They provide job opportunities for individuals in our community who cannot work in a normal work environment because of mental or physical challenges.

The CDC estimates that 61 million adults in the U.S. live with a disability. But they still want to be contributing citizens to our community and economy. So, I encourage everyone to think about how you can leverage the services of organizations in your community that are employing individuals with disabilities.

How did you successfully communicate your business mission/products/services outside of your region?

Using social media, networking events and just reaching out to anyone that would listen to stories about the social and environmental impacts of recycling helped to communicate the importance of our products and services. When I share that a bra is a rape deterrent for a woman on the street, it makes a person pause and want to understand more. Or when I share a story about a teacher who reached out to me because one of her 6th grade students wanted to damage her breasts because she was being teased and bullied about her 44G chest. These are the type of stories that provide that emotional connection and call to action.

For retailers, we provide them services and solutions that their customers were asking for. This includes scalable rewards and recycling programs, a Sustainability Scorecard so they can see the environmental impact of their internal recycling efforts and their customer's recycling efforts and demographics and data on who is recycling.

A Forbes article stated that 88% of consumers will be more loyal to a business that takes action for social and environmental issues.

Is there anything you wish you would have done differently in launching and growing?

- Because our industry is a cash business, if we had to do it over, we would consider a small business loan to have cash on hand to build the business faster and invest in our website and social media.
- In terms of marketing, we needed more targeted campaigns to attract retailers and we needed to align with retail associations to better help us get the word out to them. We focused on textile recycling associations initially so that we could learn the industry.

For other businesses that may want to tackle circular supply issues, what advice can you offer them?

- 1. **Understand the supply chain.** Decide where you want to get engaged in the supply chain for whatever products you will be working with.
- 2. Join trade associations. Relationships are key in the industry.
- 3. **Determine your value proposition.** What will you offer that is different or not offered to those companies in that area of the supply chain?

Do you have any recommendations for what the U.S. government can do to better help businesses like yours?

YES, there is so much more the U.S. government can do. There needs to be more regulations and guidelines on transparency in the supply chain on what happens with waste, particularly from clothing retailers. Currently, there is nothing really in place that holds them accountable for negative environmental (e.g., water pollution) and social impacts (e.g., use of slave labor) of their business.

With the passing of the California Act for Responsible Textile Disposal and Reuse, this is a great *start* to hold retailers and manufacturers accountable and have plans in place for disposal of their waste or be fined. The bill requires clothing manufacturers and retailers to submit a report on the amount of textile waste they generate and their effort to reduce it. The report must include details on recycling and reuse initiatives, donation programs and partnerships with third-party organizations.

The key to any of these Acts is that we need to limit the loopholes that allow companies to opt out because of a minor detail that was included in the Act. Also, with any of these Acts or programs, it will be key that there is a committee or unbiased group that will hold companies accountable.

Kate Vrijmoet necessary & sufficient coffee Chicago, IL <u>necessary-coffee.com</u>



Tell us about your business.

On September 20, 2019, I opened a tiny, take-out window, walk-up, specialty coffee shop in West Logan Square with a focus on Community, Sustainability, and Craft. I partnered with local businesses and women-owned businesses like Spoke and Bird, Collective Resources Compost, You're a Cookie, Fig Catering, Clare Johnson Landscape Architect, Marketwell, FireSigns, Theresa Rubino, CPA, Danielle Moles Creative, as well as my roasting partner, Olympia Coffee Roasting Company, who has a quality-oflife mission, award-winning beans, trail-blazing fair for all practices, and transparency. The branding and design aesthetic flowed from my 17 years as an art director, designer, and creative director. The decision to create a take-out window came from my research about café profitability models.

Our mission is to wake people up by connecting them through coffee. And we have a thrive for all vision, which is in alignment with specialty coffee culture.

We're Oceanic Global Blue Action Certified—nearly everything we have is compostable and we've diverted over 34,000 pounds from landfill to healthy soil. We're also one of the inaugural 100 U.S. businesses to become living wage certified. In 2022, we won Chicago's Best Coffee Shop.

What was your motivation for founding it?

Necessary & sufficient coffee began as a Placemaking in Art project. Placemaking in Art is a lesser-known branch of fine art that activates spaces for community connection and societal good. The cafe was my way of proactively responding to xenophobia during a period of extreme political vitriol. My life's mission is to foster deep connections within and among us. Creating a low-social-risk way for neighbors to talk to one another, and to see their common humanity, is my way of contributing to a kinder, safer community.

The name, necessary & sufficient, is a math term to describe the conditions required for a proof, the solution must be both necessary and sufficient. That's what this tiny, take-out window, neighborhood café is necessary & sufficient to foster community connections and wake people up.

What were your key priorities when you first launched?

The priority is to help people wake up. The cafe is modeled after two cafes. 1) *Lighthouse Coffee* in the Fremont neighborhood of Seattle, tucked in a neighborhood in a spot that was unexpected and off the beaten track, it was a mainstay of the community and a cool go-to for coffee lovers in the know. It became a status symbol to meet at Lighthouse. 2) *Trouble Coffee*. I learned of this San Francisco coffee shop while conducting research for an art exhibit I curated. It was origin of Avocado Toast, but the thing that amazed me was that the owner had no seating; instead, customers lined up and a wonderful thing began to happen. Neighbors who recognized each by sight, and some who didn't know they were neighbors began to meet and talk to one another.

Did you set out from the beginning to have a business with impacts on the Circular Economy or did this evolve over time?

I set out from the beginning to create a business with an impact on the Circular Economy.

Before opening my café, I spent nearly two years doing a deep dive into the specialty coffee industry. Specialty coffee is a combination of science and art with a social justice mission. It's challenging, exciting, and has a visible positive impact on small communities around the world. I conducted a dozen informational interviews with local small specialty cafes, attended the national SCA (Specialty Coffee Association) conference, and CoffeeFest conference, I enrolled in barista certifications courses, coffeeshop management classes, and machine maintenance and operation classes, and conducted firsthand competitive research in the area and across the city. I polled the neighbors surrounding my location asking them what amenity they wanted, the input was unanimous—coffee shop, please!

Which is also how I got the right stakeholder buy-in. As for funding, I did attempt to get funds in the form of a small business loan, but as a woman without a track record in entrepreneurial endeavors, it was not possible for me, even after completing the BACP entrepreneur certificate program. I did, however, have funds from the sale of my home, and a HELOC. So I used my own money and borrowed against my own assets. It was risky for sure.

What challenges or objections did you face and how did you overcome these? Were there any that you didn't expect?

When COVID-19 was on the horizon, I utilized my contacts in the PNW early and was ahead of the looming pandemic. Convincing my staff to pivot took some time, but by mid-February, I was able to mobilize my manager to work with me to create our COVID safety plan, which we published after sharing it with our alderman and local chamber. This early pivot made us proactive instead of reactive. I began carrying grocery items for the community and produce boxes. I partnered with local non-profits so that neighbors could support neighbors in need by purchasing a produce box from us and distributing it through the non-profit. I scrapped the idea of a sidewalk cafe, my landscape architect reimagined the space to be a respite, a beautiful and calm garden with responsibly socially distant seating. I worked with my payroll company to get benefits, EAP, 401k, and health benefits for my employees as well as jumping on the CARES Act COVID Sick Pay opportunity through my payroll company so that my employees could be paid while quarantining. I invested in a medical grade UVC light and Merv-13 ventilation filters. We stopped taking cash and started soliciting donations for the Caffe Sospeso program—a pay-it-forward coffee program for the neighbors and from the neighbors because we knew having a cashless system created inequities.

There are *always* unexpected challenges. You can expect the unexpected. I've enough experience in new endeavors to know that the lessons will come in areas I most need, are the most painful to learn, and are impossible to predict because they linger in my blind spot. For my first cafe, the lesson (for an artist working alone in her studio for 15 years) came in the form of learning how to work well with others. Learning how to build a respectable rapport with my employees and to help them develop in areas that are valuable to them. I was beside myself when my first team left. And then I learned from colleagues and research materials (*Grow Like A Lobster* by Joshua Dick), and from my SCORE mentor and private coaches, that this is very common. The staff you hire to start is not the staff you would hire as you better and better understand the business.

How did you successfully communicate your business mission/products/services outside of your region? We're a very local business. Our customers live in the neighborhood, or are in the food and coffee industry. We were fortunate to receive local, regional, national, and international press. And our PR and marketing partner, Marketwell, was instrumental in teaching us how to clearly, and concisely, communicate our mission, vision, and values before we even opened.

Is there anything you wish you would have done differently in launching and growing?

There's not much I would change in opening, though I might have had more confidence in my own ideas for the build out and pushed for some of that early on.

For other businesses that may want to tackle circular supply issues, what advice can you offer them? Do it! Understanding how the systems interact with each other is important. I'm not talking trash, I'm talking personal satisfaction. I can't solve the climate crisis, but I can do this small thing that plays a part in best practices, models sustainability for customers, partners, and employees, and most importantly, makes me feel good about my work. Compostable products are more expensive. And I find that customers who share our value for sustainability, community, and quality of craft, also feel good about their choice to patronize our business. I'm looking forward to our new cafe opening in May 2023 in the Printers Row neighborhood to take our sustainability model further. We plan to partner with Foreverware—a subscription service for take-out cups that are returnable and reusable.

Do you have any recommendations for what the U.S. government can do to better help businesses like yours?

A small business like mine does not have access to economies of scale. If I want to pay less for our compostable cups and lids and straws and take out containers, I have to order in high quantities. I don't have the financial resources to tie up my cash flow with a stash of inventory that will take me a long time to use. If the government had grants and tax credits for companies like mine, if the city paid for composting services that benefit all of us, this would be very helpful. Perhaps, if there is legislative financial support all the way up the supply chain for these products, then the price would go down for all small businesses.

Kara Mac Kara Mac Shoes Mount Kisco, NY <u>https://karamac.com/</u>



Tell us about your business.

I invented women's shoes that can instantly change into different looks by swapping out the proprietary heel covers, the sandal straps and the toe clips; we refer to them as "shoe candy". Wearers can get multiple looks out of a single pair of shoes, making them convenient for travel and decreasing the number of shoes purchased in a lifetime while still fulfilling the desire for different looks.

The footwear industry poses a serious environmental threat to the planet due to the toxins, chemicals and fossil fuels emitted during production. Too few companies have stepped up to the plate to lessen the harm to Mother Earth and the humans who make the shoes. The average woman owns 19 pairs of shoes at any one time and most of those shoes are rarely worn, ending up in landfills or incinerated, releasing toxic chemicals into our groundwater and atmosphere.

This year, I designed and sampled the first 100% eco-friendly leather boots that are comfortable, durable and will last a long time, but once they hit the waste-yard, will biodegrade 90% faster than any other leather shoe. I am on a mission to reduce waste by educating women that you can own less but wear more and keep more shoes out of the landfill. This collection is being crowdfunded on I Fund Women.

What was your motivation for founding it?

I had a problem that I wanted to solve for myself and thought that I could not be the only woman who had this problem. During my last position as a design director, I was commuting from Westchester, New York, to Grand Central Station. Then, I had a 20-minute walk to get to my office. I was greeted by a dozen pairs of dress shoes that were under my desk and would choose a pair that worked with my outfit of the day. I often had evening events that would require dressier shoes so many times there was a pair in my travel bag along with my laptop, paperwork and food. I wondered, why do I need so many shoes to get through my days? This sparked an idea to search the footwear market to see if there was a solution. I scoured the internet, looking for a shoe designer who had addressed this issue and it didn't exist, so I invented it. I wanted to create a shoe that could be manufactured with a variety of options.

What were your key priorities when you first launched?

I launched in 2015 after spending a week with my agents in Brazil. Six weeks later, 750 pairs of shoes were delivered to my house. I sold at large women's conferences all around the country. I got orders, repeat customers and passed my proof of concept that the accessories would not fall off while wearing. Over the next four years, I built the collection and now we have four heel heights and shapes and 10 shoe styles. I have seven years of line-building and proof of concept and sales with many repeat customers. I also have a double utility patent by the USPTO on my heel invention.

Did you set out from the beginning to have a business with impacts on the Circular Economy or did this evolve over time?

I had no choice but to let it evolve naturally. The eco-friendly materials were not available during the years I started manufacturing the shoes. It has only been a few years or so that the leather developers started to use chrome-free leather and a lot of plant-based leathers were also being created worldwide. Vegan leather and traditional leather footwear remain largest polluters and waste accumulators in the fashion industry. Vegan leather, unless plant based, is almost always plastic and lasts for centuries, eventually breaking down into harmful microplastics. Traditional leather is tanned in a bath of chromium, which is an incredibly harsh chemical that releases toxins into the ground, pollutes water systems and harms workers.

Eco-friendly is my #1 priority from production to shipping. This responsible footwear approach helps forge an emerging trend. Up to this point, sneaker companies, such as Allbirds and Blueview, feature recycled or biodegradable materials, but leather boots like these are a first.

Kara Mac Shoes are made from:

- Vegetable dyed leather
- Natural leather outsole
- Hand carved wooden heels from ethically sourced forests in Brazil
- Recycled cotton lining
- Natural rubber elastic
- Zipper made from Natulon[™] from YKK (recycled ocean materials)
- Non-toxic adhesives
- Recycled shoe box triples as shipping box and carry-all with included handle

How did you get the right stakeholder buy-in and funding?

The right stakeholder is our customer as we are Direct to Consumer. I have bootstrapped the company from day one and have successfully completed two crowdfunding campaigns, in 2015 and 2019. I am currently crowdfunding our eco-friendly boots and am entering the process of fundraising as I write this.

What challenges or objections did you face and how did you overcome these? Were there any that you didn't expect?

Before the pandemic, I was really hoping to make my shoe line eco-friendly now that I had proof of concept and I had customers, and women were reacting to the convenience to travel with one shoe and wear multiple looks. The problem was that "it was a pandemic". I ended up closing my retail brick and mortar store. The other 70% of my revenue just disappeared from in-person shows and conferences where I would take a lot of orders. I had to pivot to digital online sales, which was a two-fold process. I had to pivot the business so that I could still get sales direct to consumers, which was very difficult especially when you are doing 12 sizes in a particular shoe and women were uncertain about ordering. So I did everything I could to make the sizing simple and offer free roundtrip shipping on your first order. But to make the shoes sustainable at that point was not an option. Communicating with the factories was not possible, everyone was on lockdown. Thankfully, I am back in Brazil where I started in 2014, and thrilled to find out eco-friendly manufacturing is what they are pursuing. The leather is chromium free, using insoles that are easy to dissolve, natural leather soles and carved wooden heels. So once that shoe, boot or sandal gets put in the landfill whenever that is, it is going to biodegrade, faster than a typical leather shoe.

How did you successfully communicate your business mission/products/services outside of your region?

Website and emails. Once I closed my store in 2020, I had to pivot and sell 100% online because all the selling I did in person at women's trade shows and conferences were all shut down. I had to come up with a way to streamline online sales to make it very easy for women to make the purchase. We offer free roundtrip shipping on the first order to take the risk out of questioning if you ordered the correct size. Often, we would ship multiple sizes with a return label for the styles that didn't work. It was all about making sure we got you into the right fit. I would have one-on-one conversations with customers and they would send pictures of their feet, for a customer with bunions or another issue with their feet, for example. So I would pre-stretch the shoe to match the owner's foot before shipping. We have a 96% success rate doing that.

Is there anything you wish you would have done differently in launching and growing?

I think this is a really intense question because I feel that over the years, I have made a ton of mistakes, and I always hope those mistakes don't happen again as I move forward. It was a great time to learn and figure out what was good, bad, ugly and how we can make it better in the future. So I guess my best answer is that I've listened to my customers over the years on their particular issues, whether it's a boot or a sandal or a pump and have applied the corrections to the next round of production. For example, the "Betty Boot", which we've been running since 2014, had two things that women often commented on:

1) There was no traction on the bottom sole. Now, everything we do going forward has cut lines on the sole to make it less slippery when you first walk in them.

2) The toe cap was getting excessive wear on the leather from car pedals, hitting steps and stones, etc. Now all of our leather boots have a patent leather toe cap, which is an iconic fashion statement, but also protects the leather from wear.

For other businesses that may want to tackle circular supply issues, what advice can you offer them?

I continue to be immersed as a member of so many different circular and eco-friendly services that are in tune with conscious fashion and materials. Being aware that people or companies are ahead or behind you, what they're working on and does it pertain to your product is key.

Anyone who is or wants to be in this space needs to be connected with the companies that are out

there. There is so much to learn because innovation occurs daily—whether it's on social media, in a blog or part of a subscription service. Examples are *Sustainability Magazine, Fashion Dive, Causartist* and the *Conscious Fashion Campaign*. Then, there are podcasts like *Hot Buttons* by Rachel Kibbe and Shilla Kim-Parker, *Manufactured* by Kim van der Weerd and *TOMRA Talks Circular* by TOMRA. The list goes on and on.

I beat to a different drum. I look for ways that my company can be more sustainable because of what we do, as opposed to comparing ourselves to other footwear companies. We are in a different space, but a super exciting one. I really wish I could push other footwear vendors into our space and get them to understand what we are doing and let them know that they are welcome to do it, too. Keeping a pulse on the circular and sustainable world. It's going to make a big impact for the whole footwear industry.

Do you have any recommendations for what the U.S. government can do to better help businesses like yours?

Businesses like mine could really benefit from government contracts through the Women Owned Small Business Federal Contract Program. I have recently completed my certification application and it will take time to process, but I am eager to receive contracts in the footwear and leather areas in the near future, especially since all of our footwear is being made with eco-friendly materials. I think the government should make a big deal about it, whether in TV commercials or ads, because too few people in the U.S. really understand the harm that "fashion" is doing to the planet.

PROPOSALS

As opposed to making a broad, blanketed request to our nation's government, we find that the success of business owners, as well as Americans in general, embracing and supporting the Circular Economy model will be determined by the participation and alignment of all levels of leadership: city, state and federal. Additionally, we encourage all business owners, and women business owners in particular, to consider this: How we can each be present in the Circular Economy conversation to drive local changes, and in some cases, rely on ourselves and not rely on national regulations?

- 1. Counties need to understand the economics of "waste" and how they can benefit from shifting the perception from cost to economic development and revenue generation. Communities will benefit from the shift. To this end, finding/showcasing local entrepreneurs and experts who embrace and exemplify this economic model will help change the conversation. Everyone needs to understand the "problem" and the solutions that may not exist. Local governments can, and in some cases, are developing accelerators to foster "scalable solutions". We need our counties/states to get behind the awareness.
- All government entities need to come together and create clear communication channels to collaborate with one another. These entities need to lay the groundwork and foster the innovation in their communities as well as make sure there are no duplicated efforts—that all efforts are synergistic. Clear and intentional communication is key, i.e., collaboration between: Procurement Offices, Building and Workforce Development Departments, Economic Development Centers and Resource Resource/Waste Management.
- 3. Regional leadership/government entities need to have a comprehensive understanding of their counties: infrastructure, labor/accessibility of skilled labor, transportation, energy/water needs etc. and work together to create resource management infrastructure.

- 4. All community stakeholders need to be in alignment with sustainability goals: landfill diversion goals, finding and using local manufacturers who have "zero waste mandates", highlighting local business owners who are doing their part, and educating the communities on the gains and losses of sustainability work. Recognition, through awards or certification, for manufacturers that have achieved zero waste manufacturing and/or who have developed partnerships with other manufacturers to utilize their byproduct can also drive momentum for behavioral changes.
- 5. All counties/states/national need to provide financial assistance—grants, low interest loans and rebates—to aid businesses in the Circular Economy space, as well as provide access to experts, data, permitting assistance and other benefits to help create, develop and scale.
- 6. All counties/states/national must focus on transparency, regarding where they are in the process so that the communities are aware of the problems and the solutions, and incentives for how they can do their part.
- 7. Companies that are producing mass amounts of disposable products are not currently paying the true cost for landfilling tons of material. Policy could help tie the end-of-life costs to those that produce them and spur responsibility for material recovery.

STATE OF THE CIRCULAR ECONOMY IN THE U.S. - ATTRIBUTION

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