BUSINESS OF HOME



A PUBLICATION BY EDITOR AT LARGE

### Could you go a day without producing any trash?

Heath's pursuit of zero-waste manufacturing

#### PLUS

It's easier (and cooler) than ever to get green. We show you how.

## MORE THAN **ZERO**

Three years ago, Heath Ceramics embarked on a radical company-wide journey to eradicate waste. *BOH* caught up with the California–based brand to find out how, why—and how much it (didn't) cost.

BY FRED NICOLAUS PHOTOGRAPH BY MARC OLIVIER LE BLANC

Heath's owners, Catherine Bailey and Robin Petravic.



### ERE'S WHAT THEY DON'T TELL YOU

about converting your business to produce zero waste: You can't really do it, not all the way. There's always something that slips through the cracks, some tiny scrap of trash scuttling out the door. No company, even one that markets itself aggressively as "zero waste," is truly zero waste. Some joke wryly that there's really only one surefire way to get all the way there—shut the factory down.

For those who wish to attempt going zero waste and stay in business, the journey is painstaking and long. So why would a company undergo a difficult process working toward a goal it can never really reach?

Robin Petravic, the co-owner of Heath Ceramics with his wife, Catherine Bailey, has a flat, serious affect and a bone-dry wit. (Once, he told me about an interview with the founder of Clif Bar, Gary Erickson, who said he'd rather poke needles in his eyes than take his company public: "I totally get that," Petravic added, after a pause.) He and Bailey bought Heath in 2003 from a trust set up to represent the company's original founders, Edith and Brian Heath. The Sausalito, Californiabased ceramics company had a storied legacy-since 1948 it had represented a kind of American craft ideal of simple design wedded to high-quality workmanship. At its peak, Heath was producing about 100,000 pieces of dinnerware a year. But by the nineties the company had fallen on hard times and was down to only 24 employees, producing about 40,000 pieces annually. Under Petravic and Bailey's leadership, Heath has rebounded spectacularly; the company now employs more than 200 and boasts annual revenues of more than \$30 million.

The financial numbers are impressive, but Petravic doesn't linger on them in conversation. ("Growth isn't always good" is his oft-repeated mantra.) He's more animated by Heath's values-driven initiatives, which range from an employee ownership program to the company's Make Good market, an annual crafts fair in San Francisco for sustainability-minded makers. Having restored Heath to financial health, Petravic is now focused on creating a lasting company culture. "When someone says in a meeting that something 'feels very Heath,' that feels good," he told me.



#### **▲**

In Heath's San Francisco factory, clay cylinders are pressed into sheets, which are then cut into tiles. The scrap clay on the floor will be reused in the next round of pressing. In an era when most executives have at least a passing fluency in the language of sustainability, Petravic stands out. An idealist who talks with the granularity of an engineer, he doesn't sound like a CEO machine-gunning talking points he sounds like an earnest person trying to work through the thorny challenges of doing business in an ethical way. In 2016, he and Bailey sat down with their team to write a five-year vision for the business, and a particularly formidable hurdle emerged: Could Heath go zero waste?

ike many sustainability concepts, "zero waste" is a hotly debated term. A cursory Google search reveals endless back-and-forth about what technically counts as zero waste, the best way to go about achieving it, the gender politics that go hand in hand with its pursuit, and everything in between. But in broad strokes, the philosophy is simple: Aim to send as little to the landfill and the incinerator as possible preferably nothing at all.

If you think that sounds easy, here's a quick experiment. Try to go a whole workday without putting a single thing into the trash—no scrap of paper, no chewed-up gum, no half-finished yogurt parfait. If, at quitting time, your wastebasket is



empty—congratulations! You had a zero-waste day. Now imagine doing that every day—and that your job was to manufacture and sell thousands of pieces of dinnerware. That was Heath's challenge.

The reasons for attempting zero-waste production are obvious. For decades, Earth has been drowning in garbage. In a media landscape overcrowded with terrifying environmental analogies, here's one that stands out: If you were to collect the 3.5 million tons of waste that the world generates daily and load it into garbage trucks, they would stretch from Miami to Seattle. That's every single day.

Our garbage addiction impacts everything from climate change to the mass eradication of marine life. Reducing trash has always been a good idea. So why is "zero waste" suddenly a thing? There's some debate as to where the concept originated, but around the turn of the century, it began gaining traction going from a somewhat esoteric thought experiment to a realworld practice. In 2003, San Francisco announced it would go zero waste by 2020. New York followed suit in 2014.

In recent years, zero waste has caught on with millennials, the first generation that will likely feel the direct effects of an increasingly bleak environmental picture; Google searches for "zero Like all good detective stories, Heath's began at the scene of the crime: the dumpsters behind its manufacturing facility. Seeing (and smelling) what's in the trash is a not-too-technical but highly visceral way to start looking at the problem.

waste" have more than doubled since January 2017. Bloggers like Kathryn Kellogg, who famously spent a year cutting down her trash output to the contents of a single 8-ounce Mason jar, have helped personalize the concept. At the same time, wide-spread coverage of our global trash problem (if you haven't heard of the Pacific Garbage Patch, look it up immediately) has intensified public awareness. There are zero-waste blogs, zero-waste books, zero-waste lifestyle experts, zero-waste starter kits on Amazon and a zero-waste apartment in Paris with the *très français* name *La Maison du Zéro Déchet*. Going zero waste has never been more pressing—or more cool. So how do you do it?



he process takes a fair amount of detective work. And like all good detective stories, Heath's began at the scene of the crime: the dumpsters behind the company's manufacturing facility. Seeing (and smelling) what's in the trash is a not-too-technical but highly visceral way to start looking at the problem. "It's not necessarily to be encouraged," says Neal Beardmore, Heath's production director, with a laugh. "But we did do a little bit of dumpster diving. It gives you a real insight into what's going to the landfill."

Beardmore joined Heath in 2015, just as the company's zero-waste initiative was taking shape. A two-decade veteran of the ceramics industry, he had come to the company after working as production director for a large British pottery brand in his native England. Beardmore was energized by Petravic and Bailey's aggressive commitment to pursuing zero-waste operations, looking not just at the manufacturing process but also the waste produced in the company's offices and showrooms. "The fact that sustainability was knitted into the fabric of the business really excited me," he says.

That initial foraging expedition into the trash was one of the first steps in what Beardmore describes as a gradual process of understanding the waste Heath had been generating. Some of it was fairly obvious—things like the nitrile gloves workers used on the production floor or the Styrofoam peanuts customers used to ship returns. Other waste was more technical, like runoff from various stages of the manufacturing "We don't focus on cost, but there are no financial red flags. We've never seen any material change to our finances, so there's no reason not to keep doing it."

**≜** 

In-progress tile orders on the factory floor will be packed with recyclable paper-based material and shipped. The brand's small on-site ceramics shop is visible through the window. process. When Beardmore had a complete list, he started tackling the biggest sources first.

From the very beginning, Heath had help. In San Francisco, waste management is handled by a private (though government-regulated) company called Recology, which is every bit the progressive, tech-driven waste management firm you'd imagine San Francisco to have. Among the wide variety of services it offers (including curbside composting), Recology provides customers tools to track their landfill diversion rate the volume of waste that's being reused. The company also has a number of advanced methods that allow it to recycle tricky materials like plastic bags (as long as they're bunched together in a certain way), which are often rejected by other facilities.

Such tools were indispensable, especially as Beardmore was getting started. However, Heath has two facilities—one in San Francisco, in Recology's jurisdiction; the other slightly north of the city, in Sausalito. There, the company relies on a different waste management firm, Bay Cities Refuse—a much smaller operation without the budget or ambitions of its neighbor to the south. Bay Cities, for example, can't recycle plastic bags.

The discrepancy between the two waste management companies highlights a challenge of going zero waste, which is that sometimes you're only as good as your recycler. Beardmore and his team found workarounds, starting with a regular shipment from Sausalito to San Francisco. The weekly truck that goes from one Heath facility to another—a preexisting route to transfer cargo—is now also loaded up with plastic bags, just so that they can be tossed into a recycling bin.

If neither Recology nor Bay Cities could deal with a certain type of waste, Beardmore sought out a partner that could. Heath's manufacturing leads to a huge volume of worn-out plaster molds, which get crushed up as part of a compost. Heath also creates a sizable volume of broken ceramic pieces, which now go to a company that grinds them up to make cement. And those nitrile gloves workers were constantly discarding? They get shipped to personal-care corporation Kimberly-Clark (the maker of brands like Huggies, Kleenex and Kotex), which has a process to turn them into moldable plastic. Just as Heath had organically built up a supply chain to manufacture and deliver its products, the company was now building up a "waste chain"—and it was working. Each year that passed, the company was sending less and less to the landfill.

eath wasn't exactly starting from nowhere. Before Petravic and Bailey made the decision to pursue zerowaste operations, the company already had a deep history of sustainable practices, down to its core business model. Heath manufactures all of its products locally and sells in local showrooms—there's no national network of stockists to ship to weekly, and when the company does ship to individual customers, it uses recyclable packaging materials. That fact alone meant that Heath was starting with much less waste than the average midsize manufacturer.

Petravic and Bailey had also experimented with creative ways to cut down on waste. Heath's Stan Bitters tile line named after the organic modernist sculptor—is made from a clay body that includes recycled scrap clay and glaze overspray (the glaze that misses the piece during production). Scraps of leather and cloth from their Heath Sews line were used to fill insulation batting and to make chic keychains. The "use every part of the buffalo" mentality was already part of Heath's DNA.

In fact, the company's sustainability ethos goes even farther back, all the way to its earliest days. In 1947, Edith Heath (she was the ceramicist, while Brian Heath handled the manufacturing end) developed a clay body that required only one firing, as opposed to the industry standard of two. What's more, the firing process was accomplished at a lower temperature than was customary, requiring less energy. Heath still uses that same clay body today.

Interestingly, though the environmental impact of Edith Heath's innovation is significant, she wasn't thinking in terms of climate change or reducing landfill back in 1947. Her motivation, Petravic says, was an embodiment of the age-old expression *Waste not want not*. "I believe a lot of it came from her growing up during the Depression," he says. "You saved everything or you had nothing."

It's a point that today's advocates are eager to drive home: There can be economic benefits to going zero waste as well as environmental ones. Indeed, some companies end up dipping their toes into the process as a byproduct of overhauling their production process to save money. Before coming to Heath, Beardmore had introduced a cost-driven lean manufacturing program for his prior employer; they started cutting back on waste when they found out how much waste management was

# **SELLING IN**

Heath's zero-waste initiative is only one way the company looks ahead to a more sustainable future.

When Robin Petravic and Catherine Bailey sat down to make a five-year vision for Heath in 2016, going zero waste was only part of the plan. After all, what good would it do to cut down on sending trash to the landfill if the company itself didn't survive? The pair began looking at an issue many business owners put off as long as possible: succession planning.

"It's still a ways off, but at some point there's going to be succession at Heath," say Petravic. "We didn't want the company to be sold off to the highest bidder, we exit stage left, and that's it. We wanted to ensure continuity of the values we've built here."

Petravic and Bailey began looking at options, and it wasn't long before they hit on a solution that felt true to their philosophy: Heath would sell, but not to an outside investor. Instead, they would split the company with their own employees in a financial maneuver called an ESOP.

ESOPs, or employee stock ownership plans, have their roots in the industrialization of the American economy. In the 1800s, companies like Procter & Gamble and Sears, Roebuck & Company began setting aside small shares of stock for longtime employees as a kind of proto-401(k) plan. Today, they're most often used by business owners who want to cash out without selling to a competitor.

Heath's ESOP, like the company itself, is a little different. "From the start, it wasn't a typical situation," says Michael Pasahow, senior corporate counsel at Menke & Associates, the financial services company that oversaw the Heath ESOP. "The first thing they asked was, 'How is this a benefit for our employees?' In our business, that's normally the second or third question. Heath was different. They wanted to make it sustainable."

ESOPs are often conducted at the C-suite level, and employees are notified after the deal is a fait accompli. But in Heath's case, Petravic and Bailey told their staff at the beginning of the process, giving them time to acclimate to their new roles as owners. Even the pace of the Heath ESOP was structured to avoid disruptive change. "Often, the current owner wants to transition immediately and transfer 100 percent of the business to employees right away," says Pasahow. Heath is making the move more slowly: Petravic and Bailey transferred a minority stake of the business into trust, which will allow them to change the balance of ownership gradually over the years.

In 2018, the staff received their slice of the company at no cost; shares were divided on the basis of salary and seniority. Down the line, employees can choose to sell their shares back to the trust; the arrangement (which is typical of an ESOP) resembles a traditional 401(k), except there's only one stock and the employee doesn't pay for the shares—the company does.

"When we made the final announcement that the deal was done, it was at our Christmas party," recalls Petravic. "Sometimes it's difficult to take a photo with everyone in it, but this time it wasn't hard. People who normally would try to disappear into the back row were in the front row, as owners."



impacting their bottom line. "The side effect of cutting down on sending waste to the landfill is that you end up trying even harder to cut down on making it in the first place, which can cut costs [even more]," Beardmore says. "It's a behavioral thing."

It would be inaccurate to say that the zero-waste journey has saved Heath a ton of money. The company has certainly cut back on some costs—hazardous materials removal, for example. But in other areas, adding processes to deal with waste can be pricey. In some countries, tax incentives help close that gap, making zero-waste practices a financial no-brainer. Under current U.S. law, however, you have to be willing to make a long-term, values-based choice. You have to be a little Heath-y.

And although the zero-waste journey hasn't freed up bundles of cash for Heath, it hasn't cost them dearly either. "We don't focus on cost, but there are no financial red flags," says Petravic. "We've never seen any material change to our finances, so there's really no reason not to keep doing it."

A s it turns out, the biggest hurdle to going zero waste isn't money. It's people. You can create sophisticated processes to account for each and every tiny piece of trash, but if someone throws a soda can into the compost bin, it's all for nothing. An important component of Heath's initiative is simply getting its staff to do the right thing.

Jeff Kubis oversees Heath's staff-side zero-waste effort. He sees the challenge as a two-pronged problem: Educating people on best practices, then making it easy for them to make the best choices possible. The first half involves the expected meetings and training sessions. However, Kubis has found that one of the most visceral ways to get employees to focus on the problem is to show it to them firsthand. "One of the first things we did was organize monthly employee field trips to Recology's recycling center so you can see what they can handle and what can't handle," says Kubis. The visits fostered a greater connection to the cause: "People see what's going to happen to that container if you leave the lid on it."

The second half of the problem is fundamentally an interior design challenge. Over the course of its zero-waste efforts, Heath has been endlessly tweaking where it puts waste disposal bins in order to achieve maximum impact. "Early on, we only had one bin in our factory bathrooms," explains Beardmore. "But what kept happening is people would take their gloves off to use the restroom and toss them in, which would contaminate that waste. So we added a small glove bin to every bathroom. It's really about making it easier on people."

Kubis has been encouraged by the knock-on effect the education has had on Heath's employees. He says that once people get on board with zero waste at work, they tend to adopt it at home. And once they adopt it at home, they tend to lean on friends and family to follow suit. "We have people who bring in plastic bags to our Sausalito location from home so that they can be transferred over to San Francisco to be recycled," says Kubis. "It's really encouraging to see how enthusiastic people get."

Of course, that's only the people within Heath's walls. The company often has a bigger problem dealing with waste that comes in its doors from outside sources than the waste it generates in-house. The problem is, asking business partners to follow you on a zero-waste journey can be difficult.

"We have a vendor that manufactures flatware for us in upstate New York," says Petravic. "Their typical procedure would be to wrap each piece in an individual plastic bag. We asked them to wrap it in recyclable tissue paper instead, and they fought back a lot, saying that customers didn't like to see any kind of marking on the product. We had to go through a few tests, showing that if you wrap in tissue the right way, it works."



Heath's **Stan Bitters tile line** is made from a clay body that includes recycled scrap clay and glaze overspray.



The company repurposes scraps of leather into **colorful keychains**.



Heath has used the same **clay body** for more than 70 years. A proprietary mix, it saves energy as it requires only one firing (as opposed to the standard two), at a lower temperature.

Beardmore says Heath is in the early stages of reaching out to its other partners to make similar requests. It's a tough ask, but he's hopeful that the relationships the company has built up over the years will help. "If a customer is doing a one-off return, we can't necessarily get them to not use Styrofoam peanuts," he says. "But with vendors we've worked with for years, we think we can get some behaviors to change."

t is true that getting to absolutely zero waste is—at present anyway—more of a philosophical ideal than an attainable goal, but Heath is getting close. At present, the company is hovering above 90 percent diversion for its San Francisco shipping and logistics warehouse, with the rest of its facilities continuing to work toward reducing solid waste. Because going zero waste is more of an ongoing process than a journey with a definitive end, Heath doesn't have a specific target number it's shooting for. Though (and it probably goes without saying) the more landfill diversion, the better.

"We've still got a few years left, and we need to get better at tracking certain kinds of waste," says Beardmore. Still, 90 percent diversion is a gobsmacking achievement for a large manufacturer, and Heath has been roundly praised for its efforts, earning two California Green Business Certifications at the Innovator level—for its factory and showroom facility and its shipping and logistics warehouse, both in San Francisco—one of a select few local companies to do so.

Going down a zero-waste path has been a win for Heath it has earned them kudos, it gets people excited about the company, it hasn't hurt their bottom line, and most importantly, it's the right thing to do. So why doesn't everyone do it?

It can be argued, fairly, that Heath enjoys certain advantages. Being based in San Francisco alone is a huge leg up—the company benefits from an extremely proactive municipal waste management company at its beck and call. A ceramics company based in rural North Dakota might find it a lot harder to implement. Heath is also a profitable entity with a 70-year history and a fine-tuned business model. Going zero waste requires a certain level of financial security, and a young company struggling to get off the ground might find it difficult to divert the necessary resources and time to finesse its production process.

Beardmore (along with a growing chorus of activists) argues there's only one way to level the playing field: legislation. "That's really what's driving zero-waste success in the U.K.," he says. "What I see in the U.S. is a lot of posturing and money being awarded to zero waste in various guises. But there are very few manufacturing facilities that have really gotten over the line." Petravic concurs: "Absent local pressures and benefits, people won't be able to make these choices." In other words, until there are financial incentives for small companies to go zero waste, most won't.

Even so, it can be frustrating for activists when many waste reduction measures—like proper recycling—are smack-onthe-forehead obvious, and essentially free. And though Heath is an exceptionally idealistic company, it doesn't require passionate idealism to make simple changes.

"One of the first things Cathy and I did when we took over the company in 2003 was to start using ExpandOS [recyclable cardboard packaging material] to ship Heath," says Petravic. "ExpandOS has continued to exist as a company, it's an option out there for anyone to use. But I don't think I've ever gotten anything shipped to me that way, which to me is bizarre."

Petravic paused. "Except from my sister-in-law, but it was only because I had sent her something that way, and she was returning the favor," he added, chuckling, though the story was more sad than funny. All too often, the problem isn't the lack of a way. It's the lack of will. ■