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Our Mission Is Building Worth Beyond Wealth

Worth helps our influential, successful community better invest their time and money. We believe business is a lever for social and economic progress. From practical financial advice to exclusive profiles of industry leaders, *Worth* inspires our readers to lead more purpose-driven lives. Through our conferences, digital channels, and quarterly print publication, we connect the people and companies that are building the future. We showcase products and services that are indulgent, luxurious, and sustainable.

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Confessions of a Climate Convert

How Techonomy Climate changed Jim McCann's mind about the urgency of climate change.

BY JIM MCCANN

As my family can attest, admitting when I am wrong has never been easy for me; but I feel it is important that I share a recent, if rather late, realization I had. Before attending the Techonomy Climate event in March, I didn't fully understand the scope and importance of the climate crisis. I am sharing my experience and perspective in the hopes that I may inspire some of my like-minded peers to grasp not only the urgency of this issue but also the tremendous business opportunities it holds.

Like many of my friends and colleagues, my sense of purpose has always lain with the protection and prosperity of my family, friends, and employees. I think this worldview is both natural and understandable. In the wake of WWII, with the emergence of today's middle class, society's priorities became capitalist and commerce centric. The American dream that we all know so well—rising to the top of the economic food chain through hard work and determination—allowed Americans to generate a level of prosperity that hadn't been possible before. As a nation, we ran full speed ahead. For decades. And now, we are left to rectify our hastily made mistakes. The good news, however, is that we can fix this problem the same way we created it—through innovation and capitalism.

The Techonomy Climate event demonstrated just how much business potential there is in preventing global warming. Speakers like Bill Gross, Maddie Hall, Fred Krupp, and Michael Dunne inspired the audience, myself included, to a new sense of urgency and animation. They showed how technology can help us repair the damage done to our climate and surprisingly, some of the solutions are both simple and profitable.

Bill Gross's strides in the energy conservation industry lean on the application of basic physics—using potential energy to store clean energy harvested from natural resources like wind and solar. His kinetic innovation serves as a replacement for batteries, which require harmful chemicals such as lithium, to store energy. Emphasizing that the transition to green energy will be bigger than the industrial revolution, Gross showed how big players can generate and store the same amount of energy, just as efficiently as with batteries, in a cleaner, more reliable way.

Another of Gross's companies, Heliogen, is working to "replace fossil fuels with concentrated sunlight." They are doing this by using AI to continually reposition mirrors so that they reflect as much light as possible, effectively generating enough heat energy to create a viable alternative. Heavy industries, like cement making, steel making, and mining use massive amounts of heat energy to power their machines. Together, they generate 35 percent of all emissions. "Right now, they burn the dirtiest [stuff] to get that heat; we can give them that heat for zero carbon from the sun," Gross said. While transitioning over to green energy would be a massive undertaking for these companies, what's the harm in trying? The technology is there. And more than that, it has been scaled and proven to be more affordable and reliable. Why not shift to a more sustainable alternative that pumps no emissions into the air and is more efficient in the long run?

A common perception is that there is no point in switching to more sustainable methods because the rising temperature of the earth is a natural part of its cycle. I understand this sentiment, but we are in uncharted territory when it comes to the sheer volume of pollutants we are emitting. Gross pointed out that in his lifetime alone, CO_2 emissions have gone from 315 parts per million to 415. That is a staggering increase and to go back in time, we need thousands of innovators working on projects like his (all of which need investors).

But it is not just our atmosphere that bears the marks of our mistreatment. Every single year, tens of millions of tons of plastic are dumped into our planet's oceans. It was anticipated that this debris would float on the ocean's surface, but it turns out that less than one percent of all the plastic ever dumped in the ocean actually does. The other 99.8 percent sinks to the bottom in the form of microplastics, tampering with the ancient cleansing cycle our planet has employed since the dawn of time. And the number one offender for this clogging? Our tires. Every few years, we need to replace our tires because they wear down. In March, a question on my mind was, "where does that erosion go?" And sure enough, a 2017 study revealed that tire erosion accounts for as much as 10 percent of all microplastics currently polluting our oceans. Krupp is highly aware of this issue and, as president of the Environmental Defense Fund (EDF), is encouraging automakers to eliminate pollution from all light-duty vehicles by 2035. The environmental impact of our tires, more than anything, made me realize how ingrained our harmful habits are in our everyday lives. Which is why we need innovators.

Startups like Maddie Hall's Living Carbon, are examples of the endless opportunities in finding solutions that make an impact. Amazingly, Living Carbon uses biotechnology and extensive research to harness the power of plants to draw out and store carbon. With the mission of rebalancing the carbon cycle, Living Carbon is effectively speeding up evolution to counteract the unnaturally fast damage we were able to inflict. Luckily, not only are humans capable of evolving beyond what our earth was able to support, we are also capable of speeding up the evolution of the balancing agents around us.

For investors, opportunities created by the transition to green energy and emerging biotech should not be the only things on their minds. As Michael Dunne pointed out, there is an international imbalance when it comes to the supply of non-renewable resources. China has a death grip on the global manufacturing and supply of batteries. With the U.S. comprising only about 5 percent of the world's battery manufacturing, we are leagues behind. For the U.S. to truly become a global leader and protect our national security as this energy shift transforms the market, we must be cognizant of how we measure up to other countries. This is the time to reevaluate whether we want to continue to fight a losing battle over control of a limited resource or shift our attention to renewable resources that can be harvested right here at home for a fraction of the cost. We just need big players to commit to this energy shift and work with fellow business leaders like Bill Gross to make it happen.

I have implemented measures across each of our companies both to ensure that we are doing our part to minimize our carbon footprint and use our authoritative voice to call attention to these issues. By celebrating companies that are not only making a profit but also making a positive impact on the world, Worth is raising the bar for industry leaders and adding our voice to the consumer pressure on organizations to do their part to halt carbon emissions. At Techonomy, we bring together technological innovators who are working on big-picture solutions and encouraging their collaboration and discussion. At 1800-Flowers, we source our direct-ship flowers from farms in the U.S. and abroad that follow socially and environmentally sustainable practices; and in 2021 alone, we were able to track recycling for 5.3 million pounds of corrugate materials.

For those of you who prefer to maintain that the climate crisis is a problem for future generations, if you believe it is a problem at all, I would like to ask you the same question I asked myself—Even if you are right, what is the harm in trying? I would argue that even though shifting to renewable energy will take hard work, those who do not hop on the bandwagon will find themselves, and their businesses, the worse for wear. I may be late to the party, but I can recognize the responsibility we all bear to do the right thing and the business opportunities to be had along the way. The tide has shifted and the businesses that succeed will be those that both recognize this opportunity and make meaningful contributions.

Can Wine Save the World?

Wine industry innovators lead the way in sustainable farming, regenerative energy use, and supply-chain management. Plus, the wine is fantastic.

Welcome to *Worth Magazine's* first-ever Sustainability Issue! This magazine reflects our growing understanding that as the world changes, business must change with it. There are new constraints on extractive industries, some by government regulation, but others by consumer demand. Right now, everyone from the nation's leading financial advisors to consumers at the grocery story are making decisions based on sustainability. All businesses, and business leaders, will have to adapt. In this issue, we chose winemaking as a model for sustainable agriculture, green manufacturing, and consumer product marketing.

Humans have been making wine for at least 6,000 years. Earthenware pots, called qvevris, were filled with grape juice and buried in what is now the country of Georgia. The qvevris would spend anywhere from a year to 50 years underground fermenting. Of course, Winemaking is big business now, with more than 236 million hectoliters of wine produced in 2021. Not all of that wine makes it into bottles, but if it did it would be well over 2 billion bottles a year. An impressive number, but below average. Indeed, wine production has been below average for the last three years, The reason? Climate change.

The effects of climate change are uneven but generally detrimental. European producers have struggled, while South America and Australia have flourished. Energy costs to process grapes have skyrocketed, supply chain problems have strained exports, and shipping issues have limited local distribution. Winemakers must balance short-term profits with long-term sustainability. In this issue, we highlight the winemaking innovators that are rising to that challenge.

Our cover story features Julia Jackson of Jackon Family Wineries (La Crema, Kendall-Jackson, Cardinale). After watching the horrific wildfires of 2017 ravage through the Sonoma Valley, Jackson founded Grounded.org to create an in-person collaboration among the world's foremost climate experts. COVID-19 has slowed the live conference, but it has not stopped Julia from advocating and change-making.

After that, *Worth's* Ethical Cellar columnists, Deborah Grayson and Jonathan Russo, break down the business of sustainable winemaking. Biodynamic, Sustainable, and Organic all mean different things. They also uncover many vineyards that are following the best sustainable practices but can't advertise them without paying licensing fees. Best of all, we have their selections for the best wine picks. Don't buy them because they are sustainable, buy them because they taste great.

We also have a profile of Michael Dorf of City Winery. As an event-space owner and wine producer, he explains how to minimize climate impact and maximize profit. Want to cut glass consumption and lower shipping and container costs? Serve wine on tap. This fall, City Winery will open new taps at Grand Central Station in New York. BYOB never sounded so good.

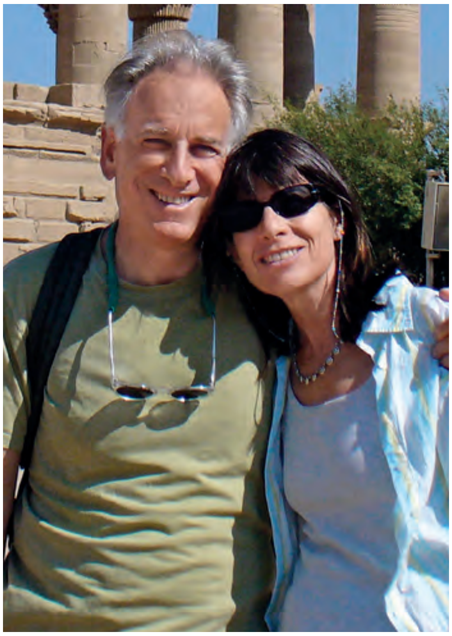
Of course, *Worth* is still your source for living and investing better. In this issue, we are launching the Forecast section, where we publish the best investing advice from the world's leading financial advisors. Forecast is where you should head to find out how to manage the inflation crisis or re-balance your portfolio for retirement.

Finally, as someone relatively new to *Worth*, I want to thank you for making me part of your community. Between Families of *Worth*, Women of Worth, the Health and Wealth of Our Planet conference (9/20, NYC), *Worth* is much more than a magazine. It is a mission. Building worth beyond wealth isn't something any of us can do alone.

As such, I welcome your feedback at the email below or on social media. Keep in mind that we are collecting nominations for the 2022 edition of the Worthy 100. We will have a formal process and online nomination form soon, but you can always just email me.

— Dan Costa
EDITORIAL DIRECTOR
dan.costa@clarim-media.com


Some Places You Visit. Others You Stay Generations.



Deborah Grayson and Jonathan Russo

Deborah Grayson and Jonathan Russo have been interested in food, wine, travel, and yachting for decades. They write on these topics for the Observer, Edible East End, Soundings, Organic Wine Journal and other publications. Deborah has a master's degree in both Public Health and Nutrition. Jonathan spent 40 years in the entertainment industry and founded the Organic Wine Journal. They live in Manhattan and Shelter Island, NY.

Crystal Thompkins

Crystal is head of Philanthropic Solutions for BNY Mellon Wealth Management. In this role, Crystal leads and coordinates strategy for all of Wealth Management's philanthropic services, including individual and family philanthropy, institutional endowments and foundations, planned giving and donor-advised fund services.

Crystal joined the firm more than 15 years ago in 2006 as a manager for the Planned Giving group. She has more than 20 years of experience working with nonprofits, having started in tax preparation and later moving to client relationship management. She has a depth of knowledge in all aspects of gift planning and donor stewardship from her work with large, complex programs across all sectors and provides insights on trends and best practices in support of nonprofit clients across the firm.

Crystal has been a frequent speaker at regional and national conferences and events and has published several articles and whitepapers. She is active in the nonprofit community and serves on several boards, including the Foundation Board of her alma mater, Winston-Salem State University.

Ruthie Kornblatt-Stier:

Freelance writer and editor, Ruthie Kornblatt-Stier, hails from the woods of western Massachusetts. After studying English and Literature at Barnard College of Columbia University where she was awarded the Stains-Berle Memorial Prize, she settled in New York City full-time to pursue writing in all its forms.

Ruthie has a passion for telling investigative stories about female entrepreneurs, sustainable technologies, art, culture, and more. In addition to her work as a journalist, Ruthie has worked as an animation screenwriter, communications consultant, and teacher.

Q: Who are some of your greatest literary inspirations?
A: My primary literary inspirations are Virginia Woolf, Joan Didion and Jia Tolentino: expert storytellers with a special talent for blending art, opinion and genre.

Q: What inspired your pursuit of journalism?
A: I love that journalism gives me a vehicle with which to share ideas and communicate with all different kinds of people. It also gives me a chance to explore subjects ranging from art and culture to sustainable technologies to female trailblazers.

Q: What impact do you hope your writing will have?
A: I hope that people will learn from my writing and subsequently have the desire to act, thereby creating a positive impact on the world.

Q: Any tips for other writers?
A: I believe that reading a variety of different genres and pieces is the most important thing a writer can do. Second to that is listening to your editor!

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Climbing Telluride

The RESET luxury resort supports an adventurous community by thinking globally and hiring locally.

BY EVA CROUSE

We had been pushing uphill to an elevation of roughly 13,000 feet when I realized I hadn't looked up for miles. Instead, I was paying careful attention to where I put my feet and trying to regulate my breathing in the escalating altitude. As we paused to take in the view, I raised my head and immediately experienced a sense of vertigo. The scene is breathtaking.

From our perch about two-thirds of the way up the Lizard Head trail, we can see no less than five miles in every direction. Rolling hills, blooming wildflowers, small lakes, and the stunning mountain range greet us everywhere we turn. I have spent considerable time in the Berkshires exploring the numerous trails running through the Appalachian mountain range, experienced the sensational fall views atop many of New Hampshire's peaks—including Mount Washington, hiked through the Chilean Andes in snowshoes, and much more. But I have never seen anything like this.

While this trail is not for the faint of heart, it is not undoable for the average person. As a resident New Yorker, my daily "hiking" routine is limited to my not-so-taxing strolls through Central Park, which tend to occur at sea level. This view, which seems like it should only be accessible to mountain goats, is somehow within reach for the average person. As I consider this, the question that has been on my mind for the past four days is answered. This is why people who move to Telluride, Colorado, do not leave. Having this world-class view accessible through your backyard would, I realize, be a nearly impossible thing to abandon.

Even though many of the local hikes surrounding Telluride, which sits in a picturesque valley, are accessible to normal people, there is plenty of extreme adventure fodder

PHOTO COURTESY OF RESET TELLURIDE

to satiate all of its adrenalin junky residents. The hiking, skiing, snowboarding, river rafting, ziplining, paragliding, mountain biking, and via ferrata-ing available in this small town attracts some of the most elite outdoorsmen and women I have ever met. As a former division one athlete, I naively went into this trip expecting to be able to hold my own in any situation I encountered. But meeting the residents of Telluride feels something akin to walking into a room full of marathoners.

Internally renaming Telluride "adventure town," I began to understand why this small community, tucked away in the San Juan mountains, is becoming so popular. The accessibility of outdoor adventure has attracted a select group of individuals looking for something more profound. Their shared reverence for nature and the human body's capabilities has generated a tight-knit community dedicated to finding the "rush." But they have run into some logistical problems. Chiefly, a severe housing crisis. People want to move to Telluride for the outdoor adventure lifestyle, but finding a job, let alone an affordable home proves near impossible. An imbalance between supply and demand has meant the average resident cannot afford to live there without working multiple jobs—effectively eating up all the adventure time that motivated them to move there in the first place. Similar to what we have seen on Nantucket during the pandemic, tiny, 800-square-foot homes are going for millions. Still, nearly every person I spoke to who moved there in their early 20's, has chosen to stay—for decades. There is something about this town that encourages them to be the best versions of themselves.

Ironically, the housing crisis is somewhat self-inflicted. Telluride is split into two parts—the town and the village—separated by a mountain and connected by a free gondola ride that takes you up and over in roughly 15 minutes. Looking down on the town from the gondola is stunning—if a bit strange. With the town only occupying about one-half of the valley floor, the other half is preserved as a big grass field. This struck me as odd for a community whose main roadblock to greater prosperity is a shortage of housing. And as it turns out, I was right. The field, which used to be a mining site, was purchased by a developer who intended to build a golf course on the massive plot. In an unexpected, united uproar, the people of Telluride refused to let this happen. Their commitment to the preservation of wildlife willed out, and in a herculean effort, they raised $50 million to buy the land, ensuring that their little slice of nature remained just that. This effort is immortalized in a 2018 documentary called "Forever Wild," and was aired by PBS this past April.

At the intersection of the demand for adventure and the job and housing crisis sits Dylan Bates' and Holli Ownen's RESET Telluride. Opening its doors for the first time this summer, RESET is a luxury, outdoor-centric retreat that has capitalized on the natural resources around them. Bates and Owen have developed a program for their guests that allows them to experience Telluride to the fullest while also providing good-paying jobs and partnership opportunities for local businesses, effectively uplifting a community with a particular set of restrictions.

RESET guests stay in the village at The Madeline hotel, owned by Auberge Resorts. The company's partnerships with local, sustainable vendors have yielded a curated, personalized experience that is also beneficial to their neighbors. The daily programming comprises half-day treks, 50-minute in-room massages, three vegan meals daily, yoga and fitness classes, acupuncture, a sound bath, and more. RESET is designed to help you unplug from your phone and laptop and rediscover what your body is capable of. Hiking anywhere from 6 to 12 miles a day, combined with afternoon fitness classes or yoga, is probably much more physical activity than the average business executive has time for in their routine. But the plant-based meals provided by the incredible culinary staff, combined with daily massages, leave you feeling surprisingly refreshed and physically capable. Their mindset is that food is medicine, so by providing your body with an onslaught of nutrients geared specifically toward physical recovery, you can leave your bottle of Tylenol at home.

Their relationships with their local partners significantly improve the mission of this retreat because tapping into what draws so many adventurous people to this small town is a large part of what makes RESET unique. The hiking guides are hired through a local company called Mountain Trip. Massage therapists from Telluride Massage Concierge perform the daily, in-room massages, and the yoga instructors come from five local yoga studios. Additionally, RESET is proud to support Telluride Mountain Club, a non-profit dedicated to preserving the trails surrounding the community.

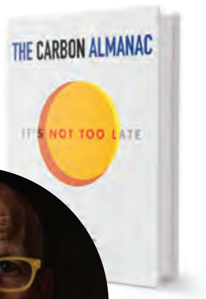
Starting at $10,000 for the week, RESET taps into that intangible something that invigorates those who live there and allows its guests to unplug from the fast-paced life outside the walls of this picturesque valley. RESET aims to help its guests reconnect with themselves, resetting their system through exercise, nutrition, meditation, and personal connection.

Equipped with everything necessary for true health, Telluride has drawn the likes of Oprah, Tom Cruise, and Jerry Seinfeld to purchase homes amid its rolling hills and valleys. The housing crisis this community is experiencing indicates an imbalance between its resources and the demand for adventure. And while the problems they face are far from being solved, it is undeniable that Telluride is on the climb. RESET offers its guests an opportunity to dip their toe into this world and experience all the things "adventure town" has to offer.

Climate Change Requires System Solutions

Recycling plastic water bottles won't save us, "system thinking" will according to *The Carbon Almanac's* Seth Godin.

BY DAN COSTA



Seth Godin is the best-selling author, marketing expert, and creator of the altMBA, a 31-day leadership workshop that provides students with the skills they need to make meaningful change. He also makes books. Lots, and lots of books. His latest is the *Carbon Almanac: It's Not Too Late*. Using tables, charts, and simple black-and-white illustrations, the Almanac's meticulous research brings our climate crisis into stark relief. It also illuminates a path out of the problem using a standard set of facts, system thinking, and simple market dynamics.

Why did you want to do an Almanac?
Before being a bestselling author, I did almanacs, how-to books, and The Smiley Dictionary. But this time, it's different. Climate isn't a local problem—this is the only planet we can live on. Climate isn't a political problem—no one wants to live in a world filled with deserts and floods. And this isn't a far-away problem. It's right here and right now. I wanted to volunteer my energy and skills to help to do something.

Who is the Climate Almanac written for? Is it a playbook for climate-change advocates or a tool to convince doubters that the problem is real?
We need to be smarter. Your readers are really smart about their businesses and their customers. That makes it easy to talk about, make decisions, lead, and take action. But the forces of the status quo have pushed us to feel dumb about climate.

There are actually very few doubters, and their skepticism doesn't matter. What matters is that people who have taken the time to understand the situation can begin work to change the systems that drive our economy. Some folks will turn a profit, and some will be on the cutting edge of the future, but anyone working to make systemic change is doing something important.

You took a very systematic approach to build this almanac. Can you talk about the team you worked with?
In less than six months, three hundred editors and designers in 41 countries created this book. Every page and fact is footnoted in our public sources. The team put more than 20,000 hours into this, which would have been impossible for a single person to accomplish.

Businesses are designed to make a profit. This simple fact has played a massive role in getting us into this climate crisis. How do you see that part of businesses changing?
Markets solve problems. That's why they work. Markets that don't have anyone in charge yet somehow coordinate supply chains, marketing, and interactions to create enormous productivity and value for people.

But markets only work when we accurately measure the costs of inputs and outputs. And markets work when they have boundaries where entrepreneurs and leaders can find new solutions.

Our problem is simple: For 100 years, we've artificially lowered the price of carbon (oil, concrete, gas, plastic, fertilizer). As a result, like a factory dumping poison into the river, we've all been dumping CO_2 and other gasses into our atmosphere.

Once we price carbon fairly and accurately, the market will instantly adjust. And it will create massive opportunities for small businesses and entrepreneurs, perhaps as significant as the web was.

Did anything in the almanac shock you?
Plastic recycling is a sham invented by the plastics industry. And "carbon footprint" was invented by Ogilvy, working for British Petroleum. And Exxon's secret memo from 40 years ago about the shifts in our climate is a must-read for anyone who has been seduced into being a skeptic.

Are there behaviors that you have changed after completing this project?
I'm a hypocrite, and so is everyone reading this article. Individual actions matter, but what will make a difference is systemic action. So, the fact that I haven't eaten meat in 30 years is fine, but my work on this project might lead to 400 schools adopting meatless Monday—that's a much bigger impact.

I could list the changes I've made in my personal and professional life, but that's a trap. It's a trap! Fix systems. Fix incentives. Then we'll be okay.

What can the *Worth* reader do to make change?
We created this book so you would share it. If you buy six copies and simply hand them to your colleagues, the systems will begin to change. Because first, we need to feel confident enough to talk about it.

How Making Garbage the Hero Created a $100 Million Business

Founder and CEO of Terracycle, Tom Szaky, transformed his composting company into a multimillion-dollar enterprise that helps big players operate more sustainably.

BY LEWIS SCHIFF

When most people envision entrepreneurial success, they think of Mark Zuckerberg conjuring a global network the world can't imagine living without, or Steve Jobs putting a sleek iPhone into the hands of millions of people.

Stinky piles of worm-infested garbage rarely come to mind.

Yet TerraCycle founder and CEO Tom Szaky has a lot of big thoughts about garbage. "Garbage is such an interesting idea," he muses. "Everything we possess in the world will one day be owned by a garbage company, with no exception. But for how big it is, isn't it incredible how un-innovative the industry is? I think it is because garbage is literally smelly, and nasty. We don't want to deal with it."

Despite the product's yuck factor, Szaky found a way to make it profitable. He launched TerraCycle in 2001 as a freshman at Princeton, producing rich plant food by feeding red worms with the garbage from the university's cafeterias. Before long, TerraCycle was a $5 million brand on the shelves of The Home Depot and Walmart across North America.

GETTY

The goal was to "eliminate the idea of waste," not only by serving it up to worms so they could poop out the company's product, but also by packaging it in soda bottles and spray tops plucked from the waste stream. It was this second part of the equation that led Szaky to the idea that would propel TerraCycle into a global enterprise. The growing company needed more and more packaging to meet its needs, so it established "Bottle Brigades," essentially campaigns to get consumers to round up the bottles and tops needed to fill the supply chain.

The company pivoted from being a packaged consumer goods (CPG) manufacturer to a B2B service provider by garbage the hero and monetizing the "bottle brigade" side of the business. "What we realized is that what makes a material recyclable or not has nothing to do with the material itself. It's whether a garbage company can make money doing it."

Today, TerraCyle's worm-poop business is dwarfed by a far more sustainable and scalable business model: sponsored recycling and packaging reuse. Essentially, Szaky has filled in the missing component in the recycling equation: profit. In this model, CPG brands, retail chains and even municipalities engage the company to recycle "non-recyclable" products and packaging into playground equipment, park benches and other tangible products of community value. Instead of spending money on waste disposal, they're investing in improved brand reputation.

As unique as TerraCycle's path has been from dorm-room business to global enterprise, Tom Szaky followed a map I've seen over and over among successful companies and one that any entrepreneur could easily replicate. Unlike the myth of entrepreneurship, It doesn't start with some genius coming up with a solution to a problem we never knew existed. And it doesn't require pumping millions of VC dollars into building "critical mass" before even hoping to make a profit.

It starts small, with a smart, solid idea for a money-making business that can grow on its own. For TerraCycle, that moonshot is Loop, a division that helps companies develop durable packaging that TerraCycle collects and cleans for reuse.

"Loop couldn't have happened without TerraCycle," Szaky says. "It provided the know-how, the infrastructure and the funding."

Grape & Grain: Meet The Head Distiller Of Cardrona

Sarah Elsom, head distiller of Cardrona and (partly) reformed winemaker, sat down with *Worth* to discuss the similarities between these two crafts.

BY JACK CROXFORD-SCOTT

They say that grape and grain don't mix. Indeed, the whisky trade almost relishes in those tropes which see single malts as punchy and intense. They're the unforgiving essence of the hauntingly beautiful landscapes they are distilled in. They have heritage, sure, but they're rough around the edges and proud of it.

Wine is an altogether subtler affair, right? Alcohol strengths are lower, and the tasting notes are cleverer if just as pretentious. More French words are thrown around. Things are quieter. More civilized. They're different businesses and they appeal to different crowds who drink in different places.

But what if they're much closer endeavors than assumed?

Sarah Elsom would know. She's the head distiller of Cardrona, one of New Zealand's newest distilleries, and a (partly) reformed winemaker. Handily, that meant that we had to work through an Otago pinot noir and then a few drams of the whisky she makes to prove ourselves wrong.

Q: Your background is wine. You studied viticulture and chased harvests from country to country before returning home to New Zealand. So, how did you end up distilling whisky?

A: My family always drew me home between harvests. But vineyards drew me to Central Otago over my hometown of Dunedin. My path to distillation was one of good timing. When a world-class distillery is being built down the road and you're already fermentation obsessed, there's no way you're not going to check it out.

I hadn't quite lined up my next move and visiting the building site that was Cardrona Distillery, in late 2015, was enough to completely tilt my world on an axis.

There was such buzz and excitement among the people working on site. Distillation was something new, but it felt like a natural extension, or side step while remaining connected to celebrating raw materials and working with oak. It felt like the right move and still does.

In the wine trade, terroir—the notion that the land makes the wine—is everything. Does it have a place in whisky?

Absolutely. Perhaps even more so because it dives into a deeper meaning of the word, beyond growing conditions unique to a single year and soil type. Terroir is also the people and the nuances of a place. Then, of course, there is the maturation; the spirit ages in a permeable vessel for years, breathing in the essence of the land it is resting in. Whisky is absolutely a reflection of place.

And what about those perceptions of whisky as that hardened and fiery spirit best for fireside winters and bracing seas? Is whisky making a gentler, more nuanced affair than many think?

That whisky exists. I love that notion. The take home is that so do other styles AND other (just as romantic) sipping situations. Those curious about whisky are often introduced to an aggressive spirit that has them retreating to what they know. Whisky can be seductive, elegant, and layered. If it's too hot for you, add water and let the dram reveal itself. If you can't get past the smoke, understand that the use of peat is a stylistic decision and one that you may need to work up to. Or not. I promise you; there is a whisky out there that will pull you in. The beauty of where the industry is heading right now is that you may discover whisky in a highball or a beautifully balanced cocktail. You may find it paired with a dish or, my favorite, as a boilermaker, a dram paired with a beer.

Distilling in New Zealand's rural Southern Alps is presumably not for everyone; can you tell us about the distillery team?

It attracts the adventurous type. We live in nature's playground. Right now, our grounds and maintenance manager, Chris, is out shoveling snow so our visitors can access the front door!

Beyond the extreme beauty of Cardrona, it is Desiree's [Cardona's Founder] story that attracts people to work here. Her's is of an incredible woman; one who sells a successful farm and travels the world absorbing knowledge in pursuit of a passionate career. This place was built from the ground up; that takes a lot of grit and confidence in yourself and the people that engage along the way. You can't help but want to be a part of Cardrona Distillery when that's the story you're a part of.

What defines Cardrona's raw spirit character? And how does your production setup contribute to it?

Cardrona's new make spirit is rich. It's sweet but layered and floral but in a way that leads you to honey, not to perfumery notes. It is full of anticipation. Our single malt white [raw, unaged] spirit turns heads. Far removed from neutral, it is ester-laden, with pears and banoffee at the forefront.

And in terms of maturation, Cardrona has already done a fair amount of experimenting. Which wood types suit your new-make spirit best?

It is too early to choose just one, and I believe the spirit will sing with different expressions as it matures. Sherry's aged spirit is seductive now as it can stand up to a strong, raw new make. The pinot noir casks are the ones to watch as we move into this next chapter of maturation.

Your whisky is still relatively young; how do you expect Cardrona's spirit to age over time? Can you already tell where it is going flavor-wise?

Right now, it's about watching the disconnect fade between what the spirit offers and what the oak adds to that. A cask sample can taste different on any given day. We look forward to the challenges and learnings in constructing marriages and selecting single cask expressions. It's really not a bad gig!

Best way to enjoy a whisky?

However you like it. The 'how' puts up walls. The Cardrona team are all about people discovering whisky, enjoying new expressions and falling in love with old favorites time and time again.

Fall Fashion Picks

BY RUTHIE KORNBLATT-STIER

Despite the often-overwhelming nature of the climate crisis, we as individuals have more power than we think—we can make a profound impact by investing in sustainability across all aspects of our lives. Consumers hold power to fight climate change through our everyday choices, selecting brands and companies to support that align with our values.

One industry in which making eco-friendly decisions can be particularly challenging is fashion: an industry that regularly comes under fire for its lack of equitable and sustainable practices, favoring quantity over both quality and ethical means of production. Moreover, numerous well-known fashion brands have been found guilty of greenwashing, a deceitful practice that involves branding products as more sustainable or ethical than they are. In recent years, however, more and more brands have emerged that are dedicated to sustainability, transparency, and integrity.

As consumers, we're continually looking to fashion as a way to express ourselves and feel our best. But knowing how to navigate the uncertain world of high-end fashion with an eye on sustainability and impact can feel simultaneously limiting and overwhelming. These six items and brands are some of Worth's favorite sustainable alternatives to greenwashed brands–the world of sustainable fashion is filled with sophisticated options for even the chicest consumers.

ALICE BAG FROM NOIRANCA

Retail price: $285

With a simultaneously classic and experimental look, ALICE by NOIRANCA mixes fun with sophistication and luxury. If you're looking for a sleek multipurpose bag, look no further. ALICE's teardrop shape gives any outfit a glamorous flare when worn as a crossbody bag, shoulder bag, or purse. Coming in a variety of colors and made from NOIRANCA's PETA-approved vegan leather made of 58 percent recycled polyurethane, ALICE is a fantastic alternative to its leather alternatives.

NOIRANCA is a brand that specializes in creating timeless bags and is committed to sustainability across the board. Always striving to offset their carbon footprint, the company only works with exclusive suppliers who meet strict sustainability standards in addition to ensuring product traceability and transparency throughout their production process. Furthermore, NOIRANCA avoids toxic chemicals typically used in bag production and prioritizes safe, healthy, and fair conditions for all of their artisans.

THE UTILITY SHIRT FROM TAYLOR STITCH

Retail price: $188

The Utility Shirt from Taylor Stitch lives up to its name, pairing a rugged and long-lasting construction with an exquisite quilted lining made of recycled nylon and polyester. In addition to being an infallible shirt for any situation, the Utility Shirt features Taylor Stitch's signature California collar, hand-warmer pockets at the side seams, and through-chest pockets for extra storage.

Taylor Stitch is a brand built on five pillars of sustainability: sourcing responsibly, building, closing the loop, creating a community, and giving back. Their production materials are recycled—even their packaging is made of 80 percent recycled bags, tags, and labels. Taylor Stitch understands the importance of durability not only as a component of quality but also as an essential tool to help the brand and its customers reduce waste. The brand also has a "long-haul guarantee" program that allows customers to repair any piece of their Taylor Stitch clothing if necessary.

THE FREDDIE SKIRT FROM GABRIELA HEARST

Retail price: $990

Featured on Gabriela Hearst's Fall Runway, the Freddie Skirt is knitted with high-quality wool, silk, and cashmere and fitted through the waist, the skirt flares out at the hem for a piece that embodies both professionalism and personality. Its elegant simplicity allows it to be paired with a variety of other pieces for a look that is both modern and classic.

Gabriela Hearst and her eponymous brand are strong competition for other non-sustainable luxury fashion brands, such as Hermés. Hearst has been praised for her rigorous attention to detail and quality and emphasizes sustainability in all her collections and couture shows. She is known for minimizing waste by designing new clothes using the yarns and fabrics from her previous collections and adhering to a "no-plastic policy." Furthermore, Hearst is the creative director of Chloé, another luxury fashion brand with an impressive set of transparent and sustainable goals, from minimizing their impact on the environment to championing gender equality.

GUARDIAN FROM NORDGREEN

Retail price: $799

The Guardian watch is a sleek staple made with a premium brushed metal finish, recycled stainless steel, and sapphire crystal glass. Designed to last over 100 years, Nordgreen takes a scientific approach to time wear. Each aspect of the Guardian is essential, playing a specific role in the watch's function and constructed with longevity in mind. Nordgreen defines this singular watch as "a symbol not just of caring about the environment and humanity, but of having the strength of mind and character to actively co-create."

Nordgreen's first step in creating the Guardian was to conduct a circularity and sustainability study to determine which aspects of watch production exert the environmental damage. They then selected the best high-quality alternative materials for each component of the Guardian to create one of the world's most sustainable watches. Nordgreen is a brand that strives for circularity, sustainability, and transparency in every one of its products, adhering to strict sustainable and ethical standards across the board.

DALLIANCE GOLD BRACELET FROM OR & ELLE

Retail price: $4,400

Or & Elle is one of the first diamond Atelier brands to bring sustainable practices to the world of high luxury jewelry. With a singular gold band interrupted and encircled by a delicate ring of diamonds, this understated Gold Bracelet is a brilliant accessory or gift for any occasion.

Hailing from Antwerp, Belgium, Or & Elle was founded to enforce sustainable and transparent production practices in an elite industry. Working only with lab-grown diamonds and recycled 18K gold, the brand avoids mines and intermediaries in all aspects of their supply chain. It selectively employs laboratory partners who are third-party accredited by SCS Global Services. Additionally, Or & Elle handcrafts their jewels in a family-run Atelier in Antwerp to ensure that every piece is fully traceable, 100 percent climate neutral as well as created with the utmost quality and care.

CUSTOM ORANGE PENNY LOAFERS FROM DUKE + DEXTER

Retail price: $740

These singular Penny Loafers from DUKE + DEXTER are handmade and hand-painted to order in England by a team of dedicated craftsmen. Their colorful design is both a bold and delicate statement. Interested in something different? DUKE + DEXTER will put you in contact with an artist to make your custom design a reality. These classic loafers are also available in various colors, from white to green to black.

"Appalled by many of the shocking practices within the fashion industry," DUKE + DEXTER ensures that all of their materials are sourced sustainably and releases collections in limited runs to avoid extraneous waste. Their artisans handpick every leather, suede, and fabric. Furthermore, the brand's shoes are designed in London and produced in a family-run workshop. Returning to older production practices allows DUKE + DEXTER to guarantee transparency throughout all aspects of their brands; they know where each material comes from and their workers' names at every step of the process.

Tourism Without A Trace

Real ecotourism requires more than picking up your towel. Here are our top tips and best destinations.

BY KAITLYN MCINNIS

Ask yourself: why are you booking yet another flight to your favorite destination? Why are you keen to check another country off your must-see bucket list? Most people travel for the local culture and the unique sights and sounds along the way.Visiting these well-loved spots in a sustainable and respectful way allows both the local population and our children and grandchildren to continue to enjoy them. Being a genuinely eco-conscious traveler is necessary if we want to continue being able to see and experience the world for generations to come.

"Most of us first became aware of sustainability when we learned that by picking up our towel off the hotel's bathroom floor, we would single-handedly save the Amazon rainforest. It didn't quite work out that way, as nice as it sounded," says Justin Smith, president of The Evolved Traveler. "Greenwashing, as it is known, still exists today, in more subtle forms and usually as marketing gimmicks. Unfortunately, public perception about sustainability hasn't progressed much past this, despite an increasing number of travelers eagerly looking to incorporate these practices into their journeys."

PHOTOGRAPHY BY JEREMY KORESKI

According to Smith, environmental impact is one of three core pillars of sustainable tourism and certainly the most recognizable. That said, two other equally important pillars are protecting cultural heritage and maximizing benefits to the local economy. Taking the three elements into account, the core of sustainable tourism is drilled down to acting and treating the people and places we visit with respect, the same way we expect others to act when they tour our homes and communities. It is effectively the practice of "do no harm" and leave the destination as you found it, if not better, for those that come after. Smith suggests taking the following questions into account when planning a sustainably-minded trip abroad:

1. Are our accommodations utilizing sustainability practices such as water and energy conservation? Are they using sustainable materials versus single-use items when and where possible?

2. Is it possible to use alternate means of transportation such as trains, buses, or biking?

3. Are we supporting the local community and economy by patronizing local-owned restaurants and stores?

4. Do the airlines, hotels, and tour operators we travel with provide the opportunity to carbon offset?

5. If we visit indigenous people or groups, are we respectful of them and their culture? Did they participate in the criteria and planning of tourism to their towns, villages, or homes?

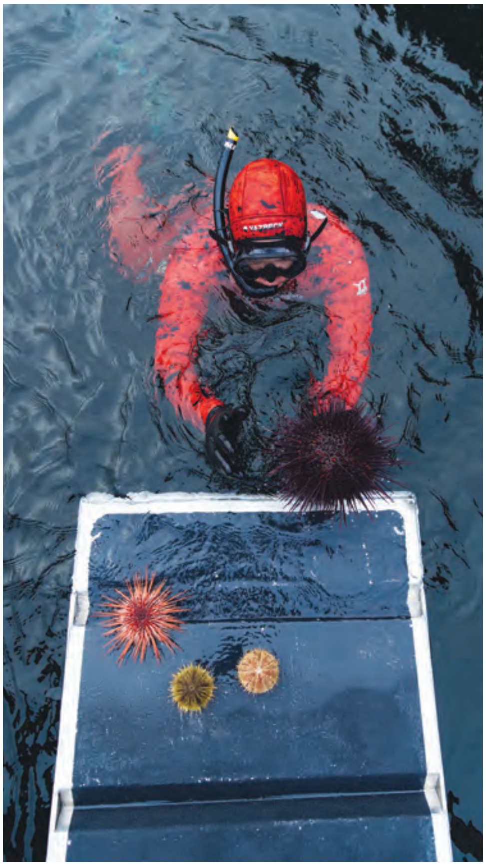
Sustainability and eco-friendly travel can be hard to get right at first—but it does need to be fundamental to travel going forward and, in many ways, should be considered crucial. The reality is sustainable tourism is common sense stuff. Vacations should never be work or come with a to-do list, and certain tricks will ensure you're doing the most to ensure your travel will be beneficial to all concerned—not just you or the local population but for the environment as well.

GO SLOW.
Heather Magnussen, responsible travel and sustainability manager at Audley Travel, says that changing your schedule is one of the easiest ways to foster a more eco-friendly trip—especially if you have the luxury of time. This can be done by adopting a slower approach to travel and spending more time in fewer locations. "Travelers should look for low emission tours such as walking tours and consider greener options like train and boat journeys instead of internal flights," says Magnussen. "When flights are necessary, travelers should check if the operator/airline offers the chance to offset the trip's carbon emissions."

RESEARCH SUSTAINABLE ACCOMMODATIONS.
If you are in the early stages of deciding where to vacation and haven't yet chosen a destination, Magnussen suggests looking at the sustainability practices in your shortlist. For example, does the goal have an effective recycling scheme, lead the way in wildlife conservation, or use profits from tourism to provide community support? Do the hotels/tour operators offer reusable water bottles and provide filling stations? Many destinations worldwide—from eco-lodges to city hotels—have begun implementing sustainability commitments and goals that go far beyond picking your towels up off the bathroom floor.

RECONSIDER YOUR TRAVEL DATES AND AVOID PEAK-SEASON TRAVEL.
"Many destinations see a massive spike in visitors during certain months, for example, when the weather is warmer and drier or when there's a specific seasonal reason for visiting, putting a strain on resources," explains Magnussen. "Visiting at alternative times of the year means fewer crowds and shorter waiting times, and for trips such as a safari, gives the experience of seeing the wildlife in the green season. Traveling out of peak times also helps provide local people year-round jobs."

CAREFULLY CONSIDER ANY ANIMAL EXPERIENCES.
Animal experiences tend not to be the most ethical or sustainable, but there are certain countries and excursions that work with animals in a cruelty-free fashion and help stimulate the local economy–and



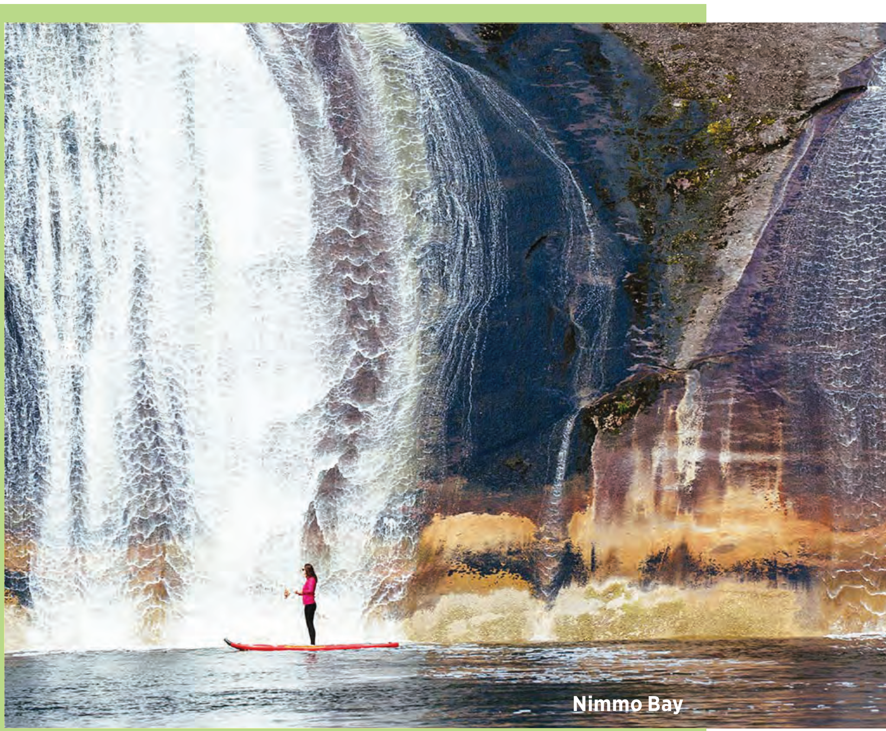
PHOTOGRAPHY BY JEREMY KORESKI

those are the ones worth seeking out. “Always look at the animal welfare policy of the operator or excursion, and if there isn’t one, then this should be a warning sign,” explains Magnussen. “Only consider experiences where the visit won’t have a detrimental impact on the individual animals, or a species as a whole.”

ENSURE YOUR VISIT WILL HAVE A POSITIVE IMPACT ON THE COMMUNITY.
According to Magnussen, while exploring a new destination, travelers should always observe the local cultural sensitivities, avoid taking photographs of children, and ask permission before taking photos of any adults. “Where possible, shop locally and eat in locally-owned and community-run bars and restaurants to ensure the money spent benefits the local people,” she adds.

PACK CAREFULLY AND WITH PLASTIC REDUCTION IN MIND.
“Take water bottles (ideally double insulated ones for the added benefit of keeping drinks cold) to refill at hotels or refill stations found via apps and websites like Refill My Bottle and Refill Not Landfill,” suggests Magnussen. Packing a reusable coffee cup and a reusable cutlery set, or spork, further reduces plastic consumption when eating and drinking away from hotels and restaurants, and a reusable shopping bag is helpful when purchasing souvenirs.

Magnussen also suggests recycling any packaging at home before traveling and choosing travel soap and shampoo bars which also reduce plastic waste. “It is easier to reduce plastic usage in some countries than others, but in all destinations, I recommend asking for drinks without straws when ordering in bars and restaurants,” she says.



Nimmo Bay

Eco-friendly Hotels and Resorts to Consider

PLAYA CATIVO ECO LODGE IN GOLFO DULCE, COSTA RICA
Playa Cativo Eco Lodge is nestled among lush tropical rainforests and boasts nearly 100 percent clean electric energy production, an on-site organic farm where vegetables, medicinal plants, and ingredients are planted and harvested to be used in the kitchen and bar, and also works with the adjacent Piedras Blancas National Park to protect the land and the biodiversity in Golfo Dulce. The main lodge and private cabins are also made from 80 percent biodegradable or reusable material.

NIMMO BAY IN GREAT BEAR RAINFOREST, BRITISH COLUMBIA
Nimmo Bay has had sustainability at the heart of operations since the 1980s. One of the biggest and best examples of its eco-friendly practices is the hydropower system, which was installed in the early eighties and has been powering Nimmo Bay with clean, green power ever since. The property’s next steps include phasing out the use of diesel power and shifting to electric motors on the boats, providing employees with educational opportunities and avenues for community engagement, increasing the number of locally hired indigenous team members, and continuing to source all products—from food to bedding and everything in-between—as locally and ethically as possible.

MANGROVE BEACH RESORT IN WILLEMSTAD, CURAÇAO
Mangrove Beach Resort aims to bring awareness about the importance of contributing to a healthy and sustainable environment not just on the resort—but also on the island of Curaçao. The all-inclusive resort leads the way in terms of sustainable resort culture. It features innovative and eco-friendly initiatives such as using osmosis technology to transform seawater into clean and drinkable water, donating food leftovers to local farmers, purchasing products and ingredients from said farmers, utilizing solar energy, and sending kitchen oil waste to facilities with environmental permits to transform the oil into sustainable aviation fuel (SAF).

Eco-Friendly Travel Gear

After months locked inside, it is probably time to upgrade your to-go kit.

BY MICHAEL LEVIN

We saw the planet react when the world shut down. For a short time, significantly fewer boats, planes, trucks, and cars disrupted the natural world, allowing wildlife to flourish. As the world starts to travel again, eco-conscious travelers can do their part to keep emissions low and minimize waste.

KLEAN KANTEEN

As we all know, reusable water bottles are far better for the environment than single-use plastics, which inevitably end up in landfills. But with so many options on the market, it can be hard to know which one is right for you. Klean Kanteen, which makes its bottles using 90 percent post-consumer recycled 18/8 stainless steel, is a great option. All of their products are manufactured in a climate-neutral manner. They are BPA-free, which is vital because this artificial chemical is toxic, even though it can be found in most plastic water bottles in your local grocery store. I own and personally recommend the insulated 32-ounce model with Loop Cap, as it keeps water cold and is easy to carry around despite its size.

COTOPAXI ALLPA 35L TRAVEL PACK

Ninety-four percent of the products made by Cotopaxi are made from repurposed, recycled, or responsible materials. By designing products that mitigate waste, Cotopaxi limits its dependence on fossil fuels and aims to manufacture 100 percent of its products using at least one of these methods by 2025.

The company's founder, Davis Smith, grew up in the shadow of Ecuador's Cotopaxi mountain, from which his company takes its name. Cotopaxi dedicates one percent of its revenues to supporting healthcare, education, and livelihood in the Americas. It also provides funding to organizations such as the International Rescue Committee (IRC), Mercy Corps, and United to Beat Malaria.

The Cotopaxi Allpa 35L Travel Pack is built for comfort and style, with its ergonomic design, under-the-airline-seat profile, distinctive, bright colors, and lightweight and highly durable materials.

NXT-LEVEL BIO-DOWN JACKET

Australia's Katmandhu.com offers sustainable and beautiful activewear, including the NXT-level Bio-Down jacket, which just won a 2022 ISPO award. The ISPO awards honor the most outstanding products and services in the sport and outdoor industries worldwide. Katmundhu's jackets are biodegradable, meaning they won't last long in a landfill after enjoying a long life. The company's website notes that only one percent of textiles are recycled. Using bio-degradable material ensures that your coat won't be moldering thousands of years from now. By looking at the end of their product's life cycle, Kathmandu is working from the ground up to ensure that their products "do no harm." Ⓦ

Oura Runs Rings Around Other Fitness Trackers

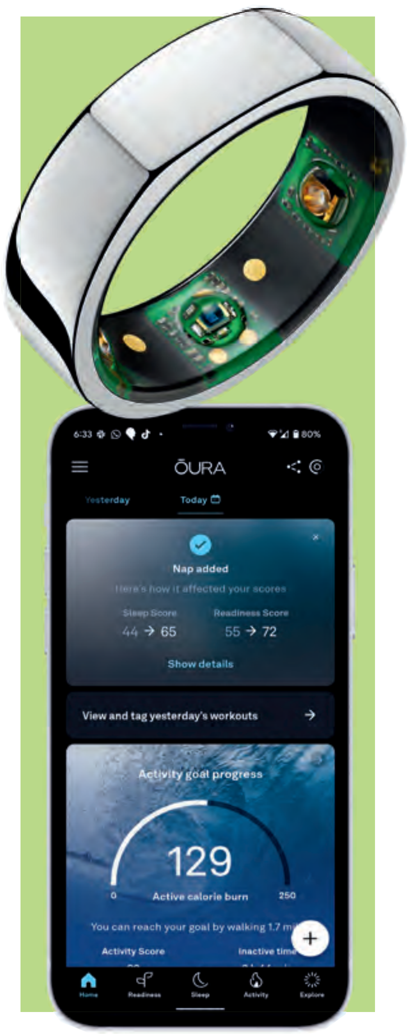
Inconspicuous design conceals one of the most potent fitness trackers in the world.

BY DAN COSTA

There are few real status symbols in the world of technology. It seems like half of the world uses lovely but interchangeable Apple products. The rest of us cobble together a toolset of plain Android devices and plainer Windows PCs. In this marketplace, the Oura Ring stands alone. It is a signifier that you are part of an elite group of body-metric trackers in the know.

I have been wearing an Oura for more than four years. In that time, the Oura went from being a subtle hallmark of the technical cognoscenti to adorning the fingers of celebrities including Prince Harry, Shaquille O' Neal, Jack Dorsey, Kim Kardashian, and Gwyneth Paltrow. Oh, and also, Will Smith. (Thankfully, the Oura is plastic.)

The Oura ring is so unassuming that you may know someone who uses it and not even have noticed. (Maybe not, Oura users tend to evangelize.) That inconspicuous profile is a big part of its appeal but make no mistake; the Oura is one of the most sophisticated fitness trackers on the market. And with firmware and app upgrades coming almost every quarter, it keeps getting better.



The ring looks like a basic wedding band, which has been pointed out multiple times as I routinely switch left and right hands. That means I can still wear my Shinola wristwatch without looking like I am wearing a ton of jewelry. Although it looks like metal, it is plastic and completely waterproof. Inside are two infrared sensors, two negative thermal coefficient body temp sensors, a 3D accelerometer, and a gyroscope.

Like most fitness trackers, the $299 Oura will report your daily activity, heart rate, body temp, sleep times, sleep quality, and more. Unlike a lot of trackers, Oura measures Heart Rate Variability, a great indicator of your overall readiness. (Turns out, when you sleep, you want your heart rate to vary more, rather than less.) The company just released an update that tracks blood oxygen levels when you sleep, which can help you identify breathing distubencesat.

Fitness tracking began with simple step counting, but that information is only so helpful. We know when we have been active and when we spend the day sitting at our desks. Sleep time, quality, and heart rate variability are far more helpful in leading a healthier life. Seeing the statistical consequences of your decisions, whether staying up too late or drinking a little—or a lot—too much, helps us tack back to a better life course.

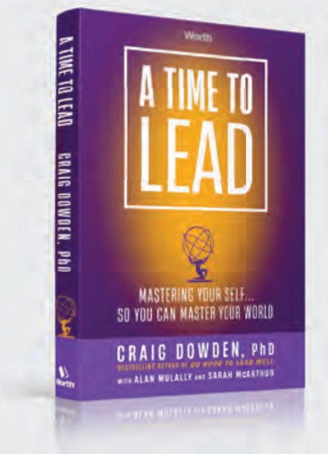
Perhaps most importantly, the Oura gives me actionable information regarding sleep quality. I recently took an overnight flight from Newark to Paris. The flight boarded at 10 p.m., and after the meal service, it wasn't until midnight the cabin lights were out. During these night flights, it is hard to know exactly how much sleep you get. Oura was clear: I got less than three hours of sleep, and my sleep and readiness scores were abysmal. Even worse, although I had dropped into deep sleep quickly, I got no REM sleep, which tends to come at the end of a sleep cycle. I was a mess, and the Oura Ring confirmed it.

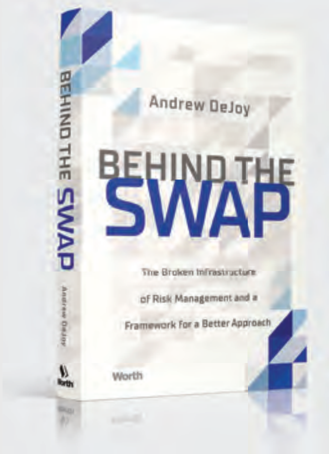
After getting to my hotel and taking a nap, I could bring those scores up and have a lovely dinner on the Seine before going back to bed at a reasonable Paris time. (See the sad details in the screenshot.)

The Oura is a commitment. Like many former hardware companies, Oura now has a monthly subscription plan of $6 a month. It comes with software updates and mediation apps. The company announced a partnership with Strava, so your Activity and Readiness data can be automatically exported to that app.

When it launched, it was hatred to recommend the Oura because it was hard to get, and no one knew if this little-known tech vendor would survive. Today, the Oura seems like a sure bet for consumers and an attractive acquisition target for big tech firms like Apple and Google that want a state-of-the-art player fitness tech.

Worth
BOOKS






Craig Dowden, PhD
A Time To Lead


Andrew Dejoy
Behind The Swap


Bill McKendry
Do More Good


Gloria Feldt
Intentioning


Frank J. O'Connell
Jump First Think Fast

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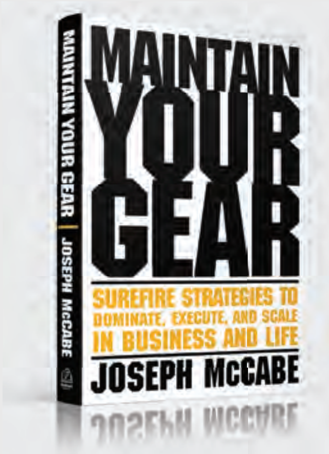
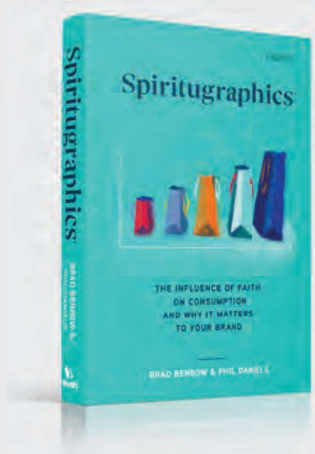
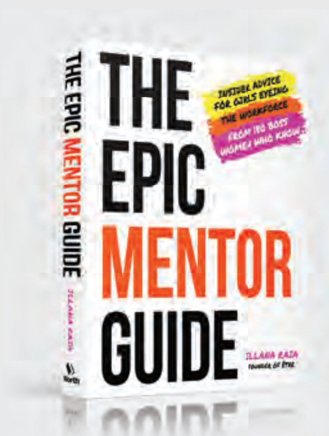
Worth BOOKS

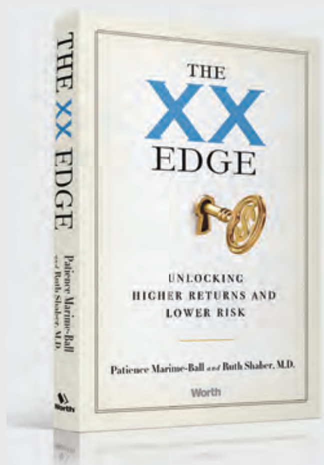




Joeseph McCabe
Maintain Your Gear

Brad Benbow &
Phil Daniels
Spiritugraphics





Illana Raia
The Epic Mentor Guide

Bella Rushi
The Innovating Executive

Patience Marime-Ball
& Ruth Saber, MD
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How a System-of-Systems Approach Can Help Fight Climate Change

BY SCOTT CORWIN
Managing director & chief strategic and commercialization officer for Deloitte U.S. Sustainability, Climate & Equity Growth Practice

The growing urgency of the climate crisis, coupled with demands from customers, employees, regulators, and others, has pushed many recognizable brands to announce net-zero emission goals. Though these efforts are laudable, it's increasingly apparent that they may not be sufficient to meet the challenge ahead of us. If we are going to successfully transition to a low-carbon economy with the requisite speed to rise to the challenge posed by the exigencies of the climate crisis, organizations will need to collaborate with a common purpose and in new ways across systems.

Executives should consider adopting approaches that entail working across industries, geographies, and value chains to meaningfully reduce greenhouse gases. Adopting a system-of-systems approach, as articulated in a 2021 Deloitte Insights article I coauthored, can help catalyze seemingly disparate forces to advance a low-carbon economy.

Realizing a low-carbon economy is a transformational effort requiring systems change across the building blocks of modern life: energy, mobility, industry and manufacturing, agriculture and land use, as well as emerging carbon capture technologies. Supportive government policies, innovative financing, and advanced digital technologies will collectively encourage the growth of an emissions-light economy.

Accelerating Transformation

Some of the most impactful opportunities to address the climate crisis lie at the intersection of low-carbon systems. But many climate solutions face bottlenecks or fragmented approaches. For example, many consumers resist buying electric vehicles because there are limited charging stations, but charging providers balk at installing more infrastructure without clearer evidence that there will be sufficient demand.

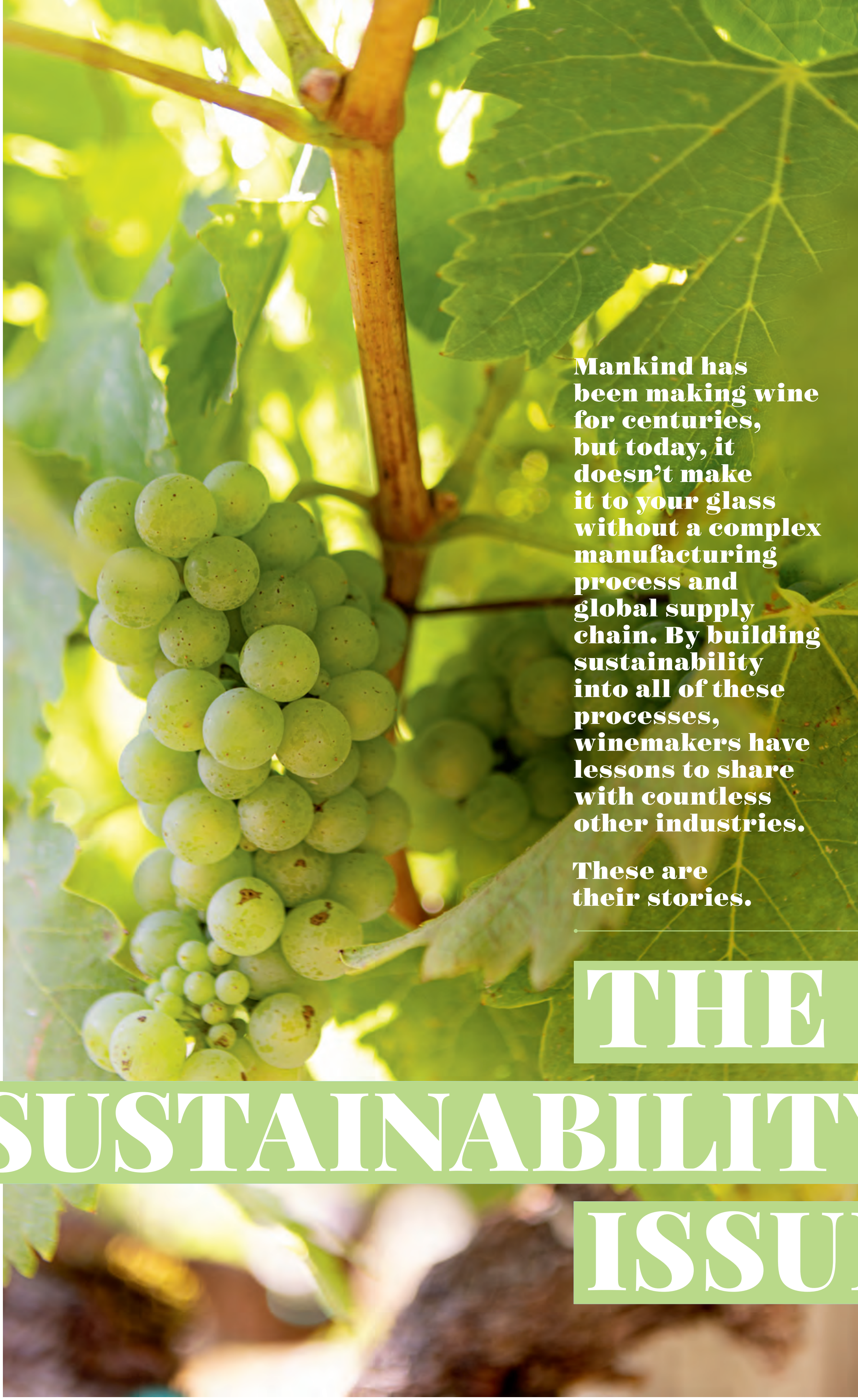
Indeed, several decarbonization technologies are likely to require billions in investment before there is any certainty about viability. Challenges such as these can be overcome by adopting a system-of-systems view that looks at the interdependencies across the core systems of the global economy. By adjusting their view, leaders can aggregate demand, sending clear signals to tip markets or pool risk to accelerate investment.

Consider just one such opportunity that could accelerate emissions reduction: carbon markets. A scaled, high-functioning carbon credit market could incentivize a range of players to reduce emissions and provide funding for early-stage technologies. But we're a long way from a functioning system. Carbon credits today often have fragmented standards and certifications with few connection points.

Getting there will require cooperation across multiple systems of the low-carbon economy. Carbon credit suppliers—ranging from reforestation projects to direct air capture and more—would have to collaborate with buyers. Financial institutions have key roles to play, potentially providing credit certification, brokerage, and portfolio management. Robust technology platforms could enable rapid execution of transactions. Governments can shape the overlying incentive structure through policy and regulation.

Activating Systems Change

Deloitte's goal is to advance actions that directly lead to rapid, non-linear shifts in the transition to low-carbon technologies. We know from past transitions that change can happen quickly once tipping points are reached and invite organizations looking to adopt systems approaches to contact us about possible collaborations.



Mankind has been making wine for centuries, but today, it doesn't make it to your glass without a complex manufacturing process and global supply chain. By building sustainability into all of these processes, winemakers have lessons to share with countless other industries.

These are their stories.

THE SUSTAINABILITY ISSUE

GROUNDED OPTIMISM

After Jackson Family Wines' Julia Jackson lost her home to wildfires, she founded Grounded.org to shift the course of climate change.

BY DAN COSTA PHOTOGRAPHY BY JENNA ACALA

Few things are as traumatic as losing your home. Like so many residents of Sonoma Valley, Julia Jackson had to evacuate her home when the Tubbs Fire ripped through the region in 2017. Jackson is a second-generation proprietor of Jackson Family Wines (JFW), one of the largest and most successful winemaking companies in the world. This was no protection against wildfires whipped up by climate change.

"Driving down the freeway, it looked like a scene out of an apocalypse movie, Jackson says. "The hospital was on fire. There was fire on the freeway. I couldn't breathe. It was raining ash. I remember thinking; We're heading off a cliff faster than I realized."

Before the ash had settled, Julia decided to create Grounded.org, a non-profit organization dedicated to catalyzing Earth-based climate solutions. "We have all the solutions to mitigate the worst impacts of the climate crisis; they just need to be funded, scaled, and rapidly deployed if we want our species to have a livable Earth by 2030, Jackson says. "Less than 3 percent of all philanthropic giving goes to the environment. From my perspective, while other philanthropic endeavors are important, nothing will exist if we don't have an Earth."

Grounded.org is designed to drive investment in real climate solutions. And there are plenty to choose from; Grounded's projects include regenerative agriculture to protect biodiversity, restoring carbon sinks, honoring indigenous leadership and land guardianship, amping up renewable energy infrastructure, stopping ecocide, and philanthropic giving to relevant climate solutions organizations.

Jackson's vision for making climate change ranges from the macros, using the legal systems to impose penalties for "ecocide," to the micro, reducing wine bottle weight can significantly impact transportation costs and carbon emissions. One theme remains constant, how do we take action to prevent the fires next time?

The 2017 Tubbs Fire in Northern California was traumatic for thousands of people. Can you describe what effect it had on you personally?
The Tubbs Fire and the Kincade Fire in 2019 profoundly impacted my mental health. I suffered from PTSD after losing my home to the Kincade Fire and was able to heal through a daily practice of meditation and support from amazing friends and family. A few months after the Tubbs Fire, I founded Grounded.org, a non-profit organization dedicated to earth-based climate solutions, out of a sense of urgency, desperation, hopelessness, and fear. Ironically, I now feel more grounded and am no longer operating from a place of constant fear. I feel more optimistic that we can mitigate the worst impacts of this crisis, as we have all the necessary solutions to start moving towards a clean energy economy and drawing down atmospheric carbon. The antidote to my climate anxiety is action. Action, action, action. I used to work and then burn out. Now, I'm more purposeful about resting and recharging. The more I rest and care for my health, the more strategic, powerful, and impactful my work has become.

The fires remind us that the climate crisis is here, and it's happening now. The McKinney Fires in California last month burned over 55,000 acres and killed people and animals in its path. The floods we saw in Kentucky, made worse by climate change killed dozens. This is an immediate crisis. And according to the latest IPCC report, we've only got 7 years left to limit global temperatures to 1.5 degrees Celsius and we only have less than 60 harvests left due to topsoil degradation.

What has the aftermath been like in wine country as a whole?
Wildfires are just one symptom of the larger problem—a global climate emergency. Obviously, the fires were devastating for wine country and everyone who lives in the region loves this part of the country or is connected to it. But the climate crisis is a

transformational issue for the entire global wine industry. Winemaking is one of the most sensitive and delicately produced agricultural products—the temperature, the condition of the soil, the altitude at which you're growing, and the weather all have an impact.

We're seeing two paths: one where producers struggle, and a second where traditions and approaches change, and wine producers have to innovate. Today, for instance, you're seeing wine produced in different regions and more explorations around varieties of grapes that are resilient to warming temperatures.

Ultimately, though, the fires showed us how vulnerable human beings are. We know from scientists that we need to keep global temperature rise below 1.5 degrees Celsius, or we will begin to experience famines, droughts, extreme weather, mass climate refugee migration, food system collapse, and worse. This is already starting, impacting every product on Earth, not just wine.

What makes Grounded's approach to finding climate solutions unique?

Our approach is unique because we aim to de-silo the climate solutions space, recognizing that there are many amazing individuals working on solutions but that it is time for us all to come together as a united front. Grounded is one of many organizations that will be part of attempting to turn the crisis around. We have a role to play, but we recognize that it will take all hands on deck. Our approach at Grounded focuses on what we must stop and what we must do. We must stop our reliance on fossil fuels, stop committing mass ecocide, stop taking over indigenous lands, stop killing hundreds of millions of keystone species and stop wiping out all vital carbon sinks. In terms of what we must do, we have to start drawing down atmospheric carbon, regenerating and protecting ocean and land carbon sinks, protecting and reintroducing keystone species, implementing regenerative agriculture, converting to circular and doughnut economies, indigenous land guardianship, scaling up renewable energy infrastructure and putting way more money into environmental causes and solutions. We don't need to terraform Mars; we must invest in and stay grounded on this planet.

A lot of our solutions have come through research and community-building with solutionists all over the world. We tend to stay away from geo-engineering and quick-fix solutions like carbon-capture technologies.

Our work includes Clean Energy Freedom, a national campaign urging President Biden to achieve clean energy independence using executive emergency powers. The national campaign is organized by veterans, clean energy workers, energy experts, artists, and climate advocacy organizations and has already successfully pressed the White House to invoke the Defense Production Act in June to scale up clean energy production. The campaign is now focused on implementing and funding this act, and on helping to secure the hundreds of thousands of pure energy jobs the country needs to meet our energy needs. We're grateful to partner with the Department of Energy on this campaign.

The Jackson Family Wines' wineries have taken a bunch of steps to operate more sustainably. Can you talk about your approach to things like water usage and power generation?

Jackson Family Wines is a multi-generational family business. It's our family legacy. Even before I was involved in "climate activism" our family has looked at resources and our own footprint differently and has tried to exemplify leading through action. This includes land and water conservation, as well as how we power our operations on-site. My sister Katie has been leading sustainability within Jackson Family Wines, and helped spearhead our Rooted for Good: Roadmap to 2030 initiative, which made smart water management practices a priority and committed us to becoming climate positive by 2050, without purchasing offsets.

The fires remind us that the climate crisis is here, and its happening now.

Like with climate policy and climate solutions globally, there's no one silver bullet or magic solution—you need to try a lot of different solutions in concert.

On water, the company has developed and adopted the latest innovative water management practices in our vineyards and wineries. For example, we were one of the first wineries to use Blue Morph UV technology to clean and sanitize our tanks. This is a great alternative to using water or applying chemicals to sanitize. We created our own rainwater capture system to store rainwater in our steel tanks; we built a state-of-the-art barrel washing system that reuses water up to 3 times; and we developed a system of soil moisture probes, drones, and other technologies in our vineyards to get real-time data to measure soil moisture and ensure we're giving each plant the optimal amount of water. All these efforts have helped us reduce our water usage by 43 percent since 2008.

On carbon, since 2015 we have reduced our footprint by 17.8 percent through a mix of approaches. We built the largest on-site solar array among wineries in the U.S. with more than 23,000 solar panels across California and Oregon. I was very proud of that. We plan to invest more to provide more than 50 percent of our annual winery operations electricity consumption from onsite renewable energy. We are also installing a utility-scale wind turbine at our Monterey Winery that is estimated to offset 100 percent of the winery's electricity consumption each year and provide additional generation capacity.

These are more effective ways to power our operations and they support our effort to decarbonize our business.

Ultimately, Jackson Family Wines would like to find solutions to completely decarbonize our emissions footprint that will be shareable within the broader industry. This is why we have partnered with another family-owned wine business, the Familia Torres of Spain, to co-found an organization called International Wineries for Climate Action. The mission of this organization is to create a place for other like-minded wineries to commit to those same goals of reducing emissions by 50 percent by 2030 and reaching Net Zero by 2050, and to collaborate on generating solutions that the global wine industry can adopt to successfully decarbonize. We are hoping that together, the members of IWCA will be able to offer a roadmap for decarbonization that the global industry as a whole can follow.

Reducing bottle weight also seems like such a simple move to reduce glass use and transport costs. Have more wineries followed your lead there?

Bottle weight is a big climate issue for the wine industry, and for any industry producing bottled products. When we first calculated our carbon footprint in 2015, we learned that a big portion of emissions came from our packaging, specifically the weight of our glass bottles. Over a quarter of our carbon emission footprint came from glass bottles.

To address this, we worked with our glass suppliers to update our bottle molds and reduce the bottle weight of our 4 highest volume bottles, including our Kendall-Jackson Vintner's Reserve Chardonnay, which has been the #1 Chardonnay in America for close to 40 years now. For that bottle specifically, we reduced the weight by approximately 2-3 ounces, which was a 5 percent decrease in its weight. It's really hard to tell, but a majority of that reduction came from reducing the size of the punt at the bottom of the wine bottle. We also moved to more recycled glass material, which now makes over half of the glass we use.

Like many sectors, you're seeing across the wine industry a move towards climate action and carbon mitigation. More wine trade gatekeepers have also come out in recent years in favor of transitioning to lighter weight glass bottles. We all recognize that small steps like this can have a big impact on reducing carbon emissions, cost savings, and more. This has been a big topic at International Wineries for Climate Action as well. We're having a lot of great collaboration and discussions with our winery peers, and our light-weighting bottle efforts have been a successful model for this process.

As a family business, Does JFW have more freedom to make these kinds of changes compared to a public company?

Family ownership means we can be more flexible and think far beyond next quarter results. This is true in wine as it's true in any sector, where different ownership models can give the flexibility to make changes to climate more easily. That doesn't mean that we don't have room to improve, or that publicly traded companies are off the hook. One of the most inspiring movements of the last 5-10 years is divestment and shareholder activism, and efforts among investors and consumers to make it clear that they expect action on climate.

At Jackson Family Wines, we want to be around 100 years from now. My parents founded Jackson Family Wines to last generations. Addressing the climate emergency is a big part of that, and while we have long prioritized natural resource conservation, climate change has also created opportunities to be smarter about our business, like adopting regenerative farming practices that build healthier soils and enhance vital ecosystems and biodiversity. As a family business, we have also been able to be nimble as leaders in the sector, including collaborative efforts such as co-founding IWCA to lead industry decarbonization efforts.

If there's no planet, there's no profit. There's no more line—we must change how we do business.

What advice do you have for businesses trying to walk the line between running a profitable business and protecting the planet?

The narrative that it's one or the other, it's "either profitability or the environment" is a damaging rhetoric that's outdated, myopic and based on short-term limited thinking. There's a saying I like to say, as I'm sure many that work in the environmental space have said as well. If there's no planet, there's no profit. There's no more line—we must change how we do business.

Look at the wine industry: crops are changing rapidly, or even dying because of the heat. Climate change means that even if you can still grow grapes and produce wine, your yield tastes different and has a different character than even three, five years ago. Wine is the canary in the coal mine—change is here. It's happening.

I'm not really a huge fan of the term "sustainability" because we are sustaining ourselves off a cliff and sustaining business as usual. I'm more of a fan of terms like "regeneration" because we have to regenerate our values, the earth, and ways of conducting business. The good news is that your customers and your employees also want change. Studies continue to show that consumers are increasingly demanding action from business leaders and corporations to mitigate climate change. That makes climate solutions good business for the companies that authentically engage in this effort.

Additionally, there are many for-profit climate solutions. I've actually invested in some pretty innovative

climate startups that are really starting to take off. There are companies that are innovating in plastic alternatives that are highly profitable. There are textile alternative companies that are innovating and becoming profitable through the demand of fashion companies to incorporate innovative and biodegradable materials into their manufacturing. There are plant-based seafood and meat options are also increasing market share. Of course, there are renewable energy companies that are really starting to take off and becoming price competitive with fossil fuels per kilowatt hour. The tides are shifting, and businesses are being created to solve the climate crisis that are generating profits at the same time. My advice is simple: protecting the planet can no longer be a secondary priority, or relegated to sustainability efforts, CSR or charitable programs. Make an impact and environmental change like your life and business depend on it—because they do. If you lead, your customers and stakeholders will follow.

How has your time with Grounded affected your everyday life? Do you make different choices when it comes to diet, travel, or shopping?

I eat way less meat than I used to. I'm more conscious about the products and brands that I support, and I tend to buy second-hand clothing or eco-conscious brands. I'm also way more conscious of the earth and spend more time out in nature connecting with trees, animals, and the dirt. I stay away from brands that are committing ecocide. Because I come from a family of farmers, the environment has been of deep importance throughout my life; my family's business depends on a symbiotic relationship to the land to produce wine, and our love and understanding of it have made us successful. I grew up not only feeling a connection to the environment but understanding the importance of taking steps to protect it. The climate emergency and my own experiences living inside the climate crisis have only deepened these connections.

My advice here is really two-fold: First, we can all support brands and organizations that are taking steps to become more carbon-neutral. A little can go a long way here. By choosing to buy from brands that are producing eco-friendly products or trying to become more proactive about their environmental impact, you are using your power as a consumer to help improve the state of our planet.

Second, minimize your carbon footprint wherever you can. Compost. Buy your food from local producers. Opt for a reusable water bottle instead of plastic. Take steps to reduce food waste. Never stop educating yourself on solutions that address this issue. There are so many steps you can make in your daily life that will be part of the time-critical need for solutions.

I believed in making different choices from a young age because of my connection to nature, but the urgency of the moment has really inspired me to uplift and scale solutions in my own life.

You have called for making ecocide a crime. Can you explain what ecocide is and who you want to make accountable?

We have the most efficient carbon capturing technologies on the planet, they're called trees. Just this year, 16 million hectares of forests have been cut down or burned. On any given day, we're losing around 50,000+ hectares of forests. We have to harness the law and stop this and the only viable legal framework that exists that can put an end to warp speed destruction of vital climate solutions like forests, mangroves, species, wetlands, etc. is stopping ecocide. The movement to end "ecocide" is led by Jojo Mehta and Sara Qualter, dear friends and colleagues who run the U.K.-based Stop Ecocide International. Ecocide is a word to describe what is happening to our planet, the mass damage and destruction of the natural living world. It literally means "killing one's home." And right now, in most of the world, no one is held responsible.

We need to preserve over half the Earth's land to stay below 1.5 degrees in global temperature rise—and to do that we need to make ecocide an international crime. Why isn't the mining, logging, exploitation, and destruction of huge masses of land a crime, like genocide? What we want is for the International Criminal Court (ICC) to create a law that would prosecute corporations and global leaders for ecocide, the large-scale decimation of ecosystems that sequester carbon, sustain Indigenous communities, and keep our air and water clean.

We cannot expect technology to reverse the climate crisis without stable ecosystems and a healthy biosphere. Criminalizing ecocide is a necessary precursor to climate solutions. The natural world is incredibly intelligent, and if we treat it with respect and a minimal footprint, we can turn the climate crisis around. I will make a bold statement and say that I believe criminalizing ecocide is in the top 3 most effective solutions to the climate crisis.

You were recently appointed to the California State Board of Food and Agriculture? How is that going to help you affect change?

Food systems transformation is an incredibly exciting climate solution. At the local, regional, and state levels, our approach to food and agriculture has a massive impact on climate. I was so honored to be appointed by Governor Newsom and serve the State of California. I aim to use this position to advise on implementing regenerative ag and solutions around food and ag that can help us drawdown emissions. I'm also here to be of service, to learn and to grow as a leader. I've got a lot of learning and listening to do to best understand other perspectives and ways to work together with farmers from all industries.

Is there a plan for another in-person Grounded Summit?

We're going to be very involved with the Department of Energy's first ever Global Clean Energy Action Forum in September, and in related activities to build support for clean energy and electrification to address both inflation and the climate crisis.

One of the most powerful ways we can be a part of the solution is to bring together the clean tech and clean energy entrepreneurs who can help us to create the million new clean energy jobs the moment demands. We may do that at some point through our own Summit, but for now I am very excited about the Clean Energy Freedom campaign, and the community we're bringing together to partner for this set of solutions and action coming out of the Biden Administration.

If you could get *Worth* readers to take one action, what would it be?

Read a climate solutions book. My entire family are huge fans of reading and education. I'm a fan of books that aren't doom and gloom but are proactively solutions-focused. I like to read so I always recommend books that have profoundly changed my life. I believe knowledge is power and the more you learn the more informed you are and motivated to act. A few books I recommend are *Drawdown* edited by Paul Hawken, *Braiding Sweetgrass* by Robin Wall Kimmerer, *Doughnut Economics* by Kate Raworth, *Regeneration: Ending the Climate Crisis in One Generation* by Paul Hawken, *We Are the Ark, Returning Our Gardens to Their True Nature* by Mary Reynolds, *The Rights of Nature* by David Boyd and *The Future We Choose* by Christiana Figueres and Tom Rivett-Carnac just to name a few.

I've got a great team at Grounded so please don't hesitate to reach out and join our newsletter. We can direct Worth readers to the campaigns and earth-based solutions with the most potential, and to the frontline, grassroots, and emerging leaders who need support and partnership. I want to connect everyone reading to a climate solutionist they can support in whatever way is most appropriate for them.

A shocking but very real statistic is that only 2 percent of all philanthropy goes to environmental causes, and that's nowhere near enough to match the scale of the crisis. A far smaller fraction supports frontline communities—the women-led, indigenous-led, and directly impacted organizations that have the answers. We need funders and donors to step up and commit more to solutionists across the globe, through dollars or deep partnerships that will help to scale and uplift their work.

Right now, we also hope that Worth readers will get behind Clean Energy Freedom, which has already pressed the Biden Administration to invoke the Defense Production Act to scale clean energy production. Clean Energy Freedom is a big tent, with a growing set of business leaders, solar and clean energy entrepreneurs, celebrities, activists, and solutionists at the table. If that's not the right fit, we need help scaling the global movement to Stop Ecocide, defending biodiversity and keystone species, and more.

Any action you take matters. Recognize that you are powerful as a human being in your every day and that you can make a difference. We're only on this planet for a short time and we have to steward it for the next generations. My father used to always say he was a "steward of the land" and I believe we can all become stewards of a better future.

A shocking, but very real statistic is that only 2 percent of all philanthropy goes to environmental causes, and that is nowhere near enough to match the scale of the problem.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Inside The Ethical Cellar

The wine industry is pioneering a new form of ethical, sustainable agriculture.

BY JONATHAN RUSSO AND DEBORAH GRAYSON


PHOTOGRAPHY BY M. J. WICKHAM/COURTESY OF BENZIGER FAMILY WINERY

Surveying the vines from a crest at Olianas, just outside Gergei, Sardinia, we feel enveloped in the magic of a healthy farm. Out of the corner of an eye, one of us spots something moving close to the ground. Geese? In a vineyard? In this "Bio-Integrale" field, geese work nibbling away at the lower leaves, allowing grapes to aerate. And on the days the geese rest, draft horses and donkeys finish the task.

If you've toured as many vineyards as we have, the difference between ethical and conventional ones is palpable. Grapes from the former appear healthier and often glow with an inner luminescence. The fields are different too. They're alive with undergrowth, birds, and bees. They sometimes look unkempt. They're not sterilized from pesticides, fungicides, and herbicides.

This is why it's so hopeful the world of ethical wine is having its moment. A once obscure, fringe movement, practiced and promoted by radical grape growers, vintners, and wine merchants, has exploded globally. Sales of organic wine are now $10 billion and likely will grow 10 percent annually to reach over $20 billion by the end of the decade. One recent survey showed that 58 percent of New Yorkers and 68 percent of Parisians base their wine purchases on sustainable practices.

The ethical wine movement is a subset of critical new agricultural thinking, which realized that the farming practices that brought us increased reliance on petrochemicals to supplement depleted soil is not going to be the solution going forward. The world has learned that chemical interventions lead to diminishing returns, more toxic farmlands, and will not feed a growing global population.

In the UK, University of Manchester's Professor Richard Bardgett, lead author of a 2020 UN Paper, reported: "There is a vast reservoir of biodiversity living in the soil that is out of sight and is generally out of mind. But few things matter more to humans because we rely on the soil to produce food. There's now pretty strong evidence that a large proportion of the earth's surface has been degraded as a result of human activities."

BUT FIRST ...

Before going further, here's a brief review of ethical wine-making and what grape growers have done to address these unfortunate trends. They appear in order of least to most stringent.

SUSTAINABLE:

This is the loosest term and has no Federal or trade-enforced definitions. However, several regions have established guidelines/certifications like Northern California's Lodi Rules. Hopefully, it means the grower or vintner is doing something better than traditional winemaking. Sustainable could mean dry farming rather than irrigation in a water-scarce region. Or it could mean using fewer pesticides and other toxic vine treatments. It can also mean using solar or gravity-fed (energy reduction) processes during fermentation and storage. The label or website should explain what makes the wine sustainable. It is really up to the drinker to drill down and ensure this is not green "wine-washing."

One winery that understands this trend is Wolffer Estate in Sagaponack, a bucolic hamlet on Eastern Long Island. As their vineyard manager Richie Pisacano told *Worth*, "For seven years, our estate grapes have been certified by Long Island Sustainable Winegrowing, an independent, third-party viticulture program tailored to the unique needs of our region. We adhere to a checklist of nearly 200 farming best practices to minimize the use of chemicals and fertilizers, promote high biological diversity and healthy soils, and protect our delicate maritime ecosystem. We have invested in solar power and encourage native vegetation and wildlife to help balance and enhance our unique biome."

ORGANIC:

The same USDA rules apply to grapes as all other organic agriculture, i.e., growers can only use pest and mold reduction methods consistent with strict guidelines. Following these regulations earns the vineyard the right to put the organic symbol on its label. Note that these rules do not cover additives or manipulations in the vinting process, although it is reasonable to hope that a vintner who cares enough to grow organically will also apply ethical standards afterward. The word "Bio" is used in Europe to designate organic products.

NATURAL:

This is another user-generated term without any regulatory oversight. It is understood to mean zero intervention in both the growing and vinting processes. Grapes ferment in naturally occurring yeasts with no chemicals or fermentation helpers, like sugar, allowed. No color or flavor enhancers, ubiquitous in conventional winemaking, are utilized. Natural winemaking produces more misses and taste outliers because standardization and uniformity of vintage years are not the goals. The true expression of the grape is.

Two subsets of natural wine are the increasingly popular "Pet-Nat" (pétillant naturel, translated to "naturally sparkling") wine that is bottled during the first fermentation, resulting in trapped carbon dioxide which yields a bubbly, champagne-like effect, and "Orange wines" where grape skins remain in contact with the fermenting juice.

BIODYNAMIC:

The use of this term is strictly limited by the copyright holder, the Demeter Federation. After WWI, Biodynamic farming was developed by Rudolph Steiner, an Austrian polymath and one of the greatest minds of the 20th century, as a method of increasing the yield of ruined farmland to feed Europe's starving masses. His process incorporates enhanced natural fertilizers, crop rotation, and holistic animal and plant considerations. Sometimes derided for fringe/questionable practices like planting with moon cycles and burying "teas" in cow horns, Biodynamic farming has proven to be one of real value. Over 800 wine producers in more than 20 countries have earned the Demeter certification.

Benziger was Napa and Sonoma's first Biodynamically certified winery. Chris Benziger, a founding family member, explained to *Worth*, "One of the great benefits of Biodynamic farming is the roots are encouraged to dig deep for nutrients and water. Over the years, ours have gone very deep and, in the process, have become almost self-sufficient. They have better resilience to drought and other weather extremes. Also, the deeper the roots, the greater potential for complexity because every band of soil the roots cross allows the vine to pull up that strata's minerals into the grape. The result is more terroir.

"The biggest benefit of Biodynamic farming is that it is reparative. It replaces the biological capital," Benziger says. "This type of farming thinks generationally, not quarterly. It is long-term and truly sustainable."

One of our most influential wine writers, Jancis Robertson, believes the extra care needed to grow grapes Biodynamically results in higher quality wine in the bottle.

BEYOND LABELS

Moving past definitions, we find most interesting the degree to which these ethical practices are not only mainstream but are used by premium winemakers. For example, on a recent tour of wineries in the exulted Napa Valley, Opus One, Spotswoode, Tres Sabores, and others were organic, Biodynamic, or both. Some of the world's ultra-high-end wines, like Bordeaux's Chateaus Palmer and Latour, are certified Biodynamic. So is Chateau Petrus, often considered the greatest wine in the world, as are dozens of the best Burgundies.

An important and surprising aspect of using these categories is that most high-end vintners choose not to label their wines organic or

Biodynamic because they sell them for their quality. They prefer the wines to speak for themselves and are not compelled to inform customers about their growing practices. During a visit to Burgundy a decade ago, we learned that many Chateaus in the region have been in the same families for hundreds of years, and the proprietors live on the property. They refuse to poison their land, so they quietly grow their grapes organically. Neither their websites nor their labels mention it. Your best source of information will be a knowledgeable wine merchant.

Why does it matter whether the wine is ethically made or not? What are the benefits? Why should it be your preference over conventionally grown grapes?

The multi-faceted answer starts with the soil. Non-pesticided earth is alive with thousands of microorganisms, insects, and worms. As prescient climate scientist James Lovelock wrote precisely half a century ago in his book Gaia, the land is a living part of the planet. When endless insecticides, pesticides, and herbicides are applied to the vines and often directly to the soil, it becomes lifeless, and the first link in the chain of life is broken. (For more on this, see Damian Carrington's Guardian article "Global Soils Underpin Life but Future Looks 'Bleak.')

We've all heard about imperiled bees. In this regard, they're like canaries in mines, warning us that we may be in trouble. Like them, humans need an entire biosphere to prosper and survive. We know it sounds like a woo-woo eastern religious philosophy but harming the most diminutive creature's life cycle has dire repercussions for many other organisms living on the same planet.

Next up on the scale of biological complexity are the workers who come into contact with the grapes. Farm workers, in general, are an exploited population. In conventional farming, they are unprotected from a host of toxic substances. If you have seen a photo of a field laborer harvesting in a hazmat suit, you would understand the issue.

Growers who use toxic materials endanger not only their employees but also the workers' families. Chemicals blow into nearby neighborhoods—usually where the workers live—landing on their clothing, inhaling into their lungs, and polluting their drinking water. Children are more susceptible to these poisons and can easily suffer severe developmental damage.

Numerous studies have shown these chemicals can affect neurological functioning, stunt development, and increase the risk of cancers. Like the garment industry, now in its ethical revolution, the case can be made that your enjoyment of a product should not come at the expense of others. Instead, it should be based on an ethical chain that respects all who touch it.

And, like clothing manufacturing which has so many steps, ethical wine need not be limited to the fields. CEO of the City Winery chain Michael Dorf told Worth, "Not only do we try to provide the highest quality wine possible, but we eliminate the largest portion of wine's carbon footprint—the bottle, packaging, and shipping. Our wine goes from vat to a keg to drinkers' glasses or reusable bottles. Plus, we plant trees to offset the carbon footprint of our grape deliveries."

Luckily, sometimes this ethical process is consumer driven. At Francie, a Michelin-starred Williamsburg hotspot, maître d' Erica Cantley told Worth, "We're in Brooklyn where a lot of diners are looking for organic, Biodynamic, or even orange wines. But none of the wines are on our list because of this. It's a bonus. Their quality is the reason." Francie isn't unique. Many restaurants don't highlight their ethical wines, but staff will know and probably be delighted to tell you.

Lastly, it's simply not in your interest to poison yourself. According to the Organic Wine Alliance's Pesticide Fact Sheet, in California alone in 2010, 25 million pounds of pesticides were applied to conventionally grown wine grapes, resulting in more pesticides than those used to produce almonds, table grapes, tomatoes, or strawberries.

A European Union study found that 100 percent of conventional wines contained pesticides. The analysis revealed 24 pesticide contaminants, including five classified as carcinogenic, mutagenic, reprotoxic, or endocrine disrupting.

The French Ministry of Agriculture has identified 15 pesticides systematically transferred from grapes into wine during the winemaking process. Mirroring the U.S., grapes are among the most contaminated food products on sale in the EU because they receive a higher dose of synthetic pesticides than almost any other crop.

Why anyone would knowingly consume these chemicals remains a mystery to us.

Some good news for ethical wine drinkers or those considering ethical wines: There is a glut of grapes in the world. And every country has some and a significant amount of organic grapes. Most are expanding their production: the result—a lake of ethical wine that keeps prices low.

In states with minimal liquor taxes, it is not unusual to find ethical wines for a little over $10 a bottle. Organic wines from California like Bonterra, Frey, Benziger, Oregon's King Estate (the largest Biodynamic vineyard in America), and Chile's Natura each ship hundreds of thousands of cases annually and can be found in many U.S. supermarkets and places like Trader Joe's.

French producer Gerard Bertrand has blended ethical winemaking with eye-catching packaging and marketing, allowing the company to bring its extensive family of wine—16 estates in the South of France—to 171 countries. Their award-winning rosés set the standard for refreshing summer wines and start at modest prices. The fact that they are ethical is not only of utmost importance to Bertrand but, he believes, "a key part of what I can deliver to the wine drinkers everywhere."

All of this illustrates that ethical wine is not an elitist niche. It is for everyday drinking. Price point and quality-questioning resistance are not valid.

In conclusion, pick your reason for drinking ethical wine. Whether it's for the earthworms, for Gaia, for the workers and their children, for the climate-change resilient plants, or your liver, there is a profound benefit to organic, Biodynamic, or natural wines. Plus, there is no downside. Their quality equals or exceeds conventional wines, allowing all wine-drinkers to make an ethical selection without sacrificing refinement.

The Ethical Cellar's Fall Wine List

There are hundreds of Biodynamic and organic wines available worldwide, but these are some of our favorites.

BY JONATHAN RUSSO AND DEBORAH GRAYSON

CHILE

Chile's climate is ideal for Biodynamic/Organic farming, so many excellent entries are in the field. One is:

•**Koyle Family Vineyards.** Located in the Colchagua Valley in the foothills of the Andes, it makes numerous wines from multiple estates at varying price points. For over 100 years, the family has been turning old-world grapes into wine. One of the current owners recently trained at Chateau Margaux to continue their wine-making heritage.

FRANCE

La Coulee de Serrant (Chenin Blanc). Minerally, dry white from the historic vineyard owned the leading light of Biodynamic farming, Nicolas Joly.

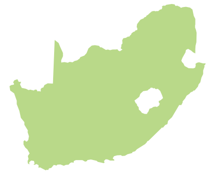
Clos du Temple (Grenache, Cinsault, Syrah, Mourvèdre, Viognier). Award-winning rose from Biodynamic superstar Gerard Bertrand. If this bottle is out of stock, Bertrand has many other more affordable, no-compromise roses.

ITALY

Arianna Occhipinti. From Sicily's southeast, this young, revolutionary producer burst on the scene in the early 2000s. She makes a wide variety of reds and whites, each reflecting her unique vision of the grape, the land, and her personality.

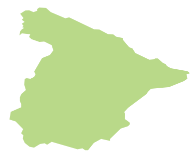
NEW ZEALAND

Pyramid Valley (Chardonnay and Pinot Noir). Highly rated by numerous wine reviewers, Pyramid Valley's Pinot Noirs contain hints of berries, spice, and herbal elements, while the Chardonnay is aged in oak and then steel. Bottled unfiltered and unfined.



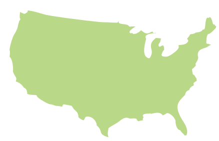
SOUTH AFRICA

Reyneke. Demeter certified Biodynamic vineyard located in the legendary Stellenbosch region. Their highly rated wines, including the Bordeaux-style Cornerstone, consistently score 90-96 from the major guides. They also produce Sauvignon Blanc and Chenin Blanc with similar ratings.



SPAIN

Bodegas Bhilar. From Spain's Rioja region, these well-crafted Biodynamic reds and whites come from grapes grown and blended in the nearby villages and their single vineyard bottling.



UNITED STATES

Quivira. This long-time estate in Sonoma's Dry Creek Valley was one of the first that inspired our conversion to Biodynamic viniculture. This stunning property makes Zinfandel, Sauvignon Blanc, and Rhone varieties. The wines are known to be richly concentrated and wonderfully complex.

Beaux Freres. Oregon is best known for its Pinots. Willamette Valley's Beaux Freres' 2019 vintage received a 98 from Wine Advocate, which praised its "scents of brambly fruit, rose petals, forest floor, sweet balsamic and blood orange." Practicing Biodynamics.

Coturri Winery. Tony Coturri, considered the originator of the American natural wine movement, has been making "just grapes" wine since 1979 from his Glen Ellen (Sonoma) location. Not for everyone, this extremely fruit-forward wine is sulfite-free. Coturri makes 3 reds from Zinfandel, Carignan, and Petit-Sirah.

Why the NICHOLAS AIR Business Model Benefits Private Aviation Clients

The effects of a years-long pandemic paired with an ever-expanding population of high net worth families, have meant both good and bad news for the private aviation industry.

BY WILLIAM P. HOGUE

If you are a frequent flyer of private/business aircraft, you may have noticed some subtle, and some not-so-subtle changes in the private aviation industry over the past few years.

For example, you may have noticed a shrinking number of private aviation companies along with increased minutes on "daily minimums" and many more "peak days" during the year, as well as more equipment delays and maybe noticeable "wear and tear" on the planes you fly. And there's a reason for that.

The effects of a years-long pandemic paired with an ever-expanding population of high net worth families, have meant both good and bad news for the private aviation industry.

The good news: Pandemic driven restrictions on commercial flights pushed those with the means to opt, as never before, for private air travel.

The bad news: Increases in flyers triggered some companies to announce ambitious expansion plans that were, shall we say, a bit overly optimistic, including unprecedented orders for new aircraft.

According to Peder von Harten, President of private aviation firm, NICHOLAS AIR, "You continue to see massive investments into the space, but much of that is based on the swell of private aviation and the current flying environment, paired against the large amount of capital that the private equity and the venture capital funds need to deploy."

So, the rosters of "members" at private aviation firms balloon, but, asks Doug Gollan, editor of Private Jet Card Comparisons, "Is the fleet big enough to accommodate the influx of flyers?" If the answer is "no," that company must either, A. buy more airplanes for "on-fleet" jet card flying, versus B. increase the use of third-party "open fleet" or "brokered jet" operators.

And, as von Harten points out, those third-party "open fleet" operators "are struggling to retain market share because of the lack of consistency and reliability in the product."

Why? "On-fleet" jet card flying, means you fly on a plane that your aviation company owns, maintains and operates, that is part of its "fleet." "Broker flying" means an aviation company, a broker, books your flight with another operator. Meaning the plane you fly on is not owned by the aviation company that booked your flight.

Why should this matter to private aviation clients?

According to Peder von Harten, "Most companies have expanded their aircraft offering to include older jets, less desirable aircraft in the market, and cut their service standards. Those older aircraft break more often and their parts are harder to find, resulting in stranded passengers with no backup options."

Gollan gives NICHOLAS AIR, which owns all of its planes and whose flights are 99 percent on-fleet, high marks for what he calls the company's "measured growth." That is, "NICHOLAS AIR increases its fleet in increments that match its actual growth."

Which is one reason, as von Harten argues, "NICHOLAS AIR is really a top 5 or 6 in revenue, not to mention our research shows we are one of the most financially stable in the business right now."

Gollan also mentions the exceptional condition of NICHOLAS AIR's planes. As he describes it, "Their planes average five years old and they have these cleaning brigades for their planes. Which means clients are flying in a plane that is in pristine condition."

Not to mention, a plane that is as carefully maintained as it is polished. Which also avoids delays. As von Harten says, "If a broker plane has a cracked windshield, it could take a week to replace it. We have those windshields in stock."

To sum up, von Harten says, "At NICHOLAS AIR, we are very smart about deploying our resources and very tactical about how we approach the market." Meaning, "We get to run our business based on analytics and the 'art of running a business.'"

And perhaps the most important lesson an industry in flux can learn from the company's "measured growth" is, as von Harten says, "It is the easiest way for us to ensure we keep the promise to our Members that the end product remains top notch."

PARTNER CONTENT

City Meets Vineyard

Two global crises forced City Winery's Michael Dorf to rethink his business model at critical moments. He found success and sustainability on the other side of both.

BY KIRSTEN CLUTHE

"Whether it's caused by the fires or the drought in California, our relationships with the farmers are continually being affected by climate change. There's no question that climate change has affected the number of [City Winery] closings in Nashville and Atlanta in the last couple of years because of weather-related issues like flooding. And, just across the board, we're seeing it affect our business."

In 2008, Michael Dorf was getting ready to launch a new business. The founder and former owner of The Knitting Factory was about to introduce an elevated entertainment experience to New York City—a luxury concert environment built around wine and winemaking. Customers would be able to have the whole winemaking experience in his new venue alongside his Chief Winemaker David Lecomte and create their own unique barrel of wine. It was an experience that Dorf had had himself with rockstar winemaker David Tate in Napa several years before and one that he wanted others to enjoy. The day that the first shipment of grapes arrived at City Winery, Lehman Brothers declared bankruptcy, and everything changed. Customers who had signed up were no longer interested in paying $13,000 to make their own barrel of wine.

By the Spring of 2009, the wine they'd made from the world-class Pinot Noir and Cabernet grapes they'd purchased started aging beautifully in the barrels. While doing a barrel tasting, Dorf knew they had to sell the wine because it was ready (and it was so good!), but there were more challenges—bottle approval, getting a bottle line in the winery, corking, and labeling. At Chief Winemaker David Lecomte's suggestion, they decided to put the wine from the barrels into stainless steel kegs and set up a tap system. From necessity came invention; somewhat accidentally, they'd found a green solution to winemaking.

Today, 75 percent of the wine served at City Winery locations never goes into a bottle. The wine is served by the glass, and this year, they'll do 2 million glasses of wine which translates into 40,000 cases of wine not going into glass bottles. That efficiency, from barrel to stainless keg to glass, dramatically reduces the environmental impact that shipping would have if City Winery was bottling every barrel of wine.

"There might be truckloads of glass that don't have to be moved from Germany or from Mexico, where glass generally comes from. So, you think about all the savings there and what happens after you fill a bottle. Not having to use a bottle and literally go straight from the barrel to a stainless steel keg, right into a glass, and into someone's bloodstream. The buzzword in wine is DTC—direct to consumer. You know, there's no more efficient, environmentally friendly way to go DTC than right into a glass that the customer consumes."

Dorf didn't set out to be an environmentalist. His early decisions were mostly about efficiency, which, by default, helped the environment. But along the way, adopting a sustainable approach to business was the right thing to do and made the most business sense.

City Winery banned plastic in their venues years ago and installed water refill stations, which visiting artists use with refillable water bottles that they can also keep as a gift. The concept of a refilling station also inspired a unique expansion idea. Dorf asked himself if 75 percent of the wine served onsite never goes into a bottle, what could they do about the other 25 percent? The answer? Open a wine refill station in Grand Central Station.

Launching this October, customers can pick up a bottle of wine at City Winery Grand Central, then return the bottle for a $5 credit (and get a new bottle). The returned bottles are then washed, refilled, resealed, and returned to the shelf for sale.

"The most important component of the reusability idea was—what is the incentive for someone to actually return the bottle? Europe's a little ahead of the U.S. in terms of recycling. In America, $0.05 is the incentive to return a bottle, plastic, or a can. 5 cents. That's what it's been since the seventies. That's not a lot of incentive for most people. It's not going to foster programs. So, we are doing a $5 return program. Every bottle that you return, you get a $5 credit. It's a high incentive to not leave that bottle on the train or throw it away."

Customers can return the bottles to any City Winery location, as each one has the ability to be a refill station. Dorf says they're trying to think creatively about expanding the program to reach more people and believes there are wholesale opportunities with brands like Whole Foods.

"The key is this $5 return value. That's a game changer. So, who knows? Maybe we'll get a lot of attention for what we're trying to do. And it will, in turn spur some of the larger corporations to follow suit. We feel that we've done almost everything we can on-premises to "drink green," as

the trucks, we can sustain the fermentation time with no loss at all to the quality of the fruit."**

Dorf is bullish about providing an authentic winery experience to customers, so every City Winery location is a bonded winery. And along with bigger locations like New York, he's building a network of micro wineries in places like St Louis, Columbus, Detroit, and Pittsburgh. The choice of locations was a combination of things—all are underserved in terms of a modern, high-end music experience and, when viewed on a map, make sense logistically. The cities create a perfect route for an artist on tour who is moving between New York, Chicago, and Nashville.

"For me, one of the greatest compliments I get—and it goes into the decision-making—is when a musician says to me: 'I love City Wineries. You guys have built a better stage. You've got great food. Backstage is incredible. The audience loves seeing me in this location. Gosh, if you could only be in Toronto. I need a place in Toronto. I need a place in Milwaukee. I have an audience there, but I don't have a place to play. If you could only open there.' I love hearing that and I have been taking notes for ten years now of all of the markets we're going into next. "

What's next? International expansion. Toronto is on the list, as is London. And in each location, Dorf and his team will source locally and bring their green business innovation.

"We believe food, wine and music are some of the most powerful ways to connect people—and that includes bringing awareness to the most important issues of the day. As we expand, we can't wait to bring more guests the sense of joy you get from fully immersing yourself in your surroundings at City Winery while also raising awareness about ways we can collectively reduce our impact on the planet and give back to the communities around us. We hope that by engaging our team, guests and the industry more broadly in our sustainability efforts, we can be part of the solution."

we like to say. And now this is our way to do something for the off-premises side, which has always been more challenging."

In 2020, they moved most of their winemaking to the town of Montgomery, NY. The site was an old mill, which was painstakingly restored in the middle of the pandemic. They also inherited a dam with hydroelectric power. The dam now provides 100 percent of the electricity used on-premises.

Even better, they can sell the surplus back to Central Hudson Gas & Electric, making the business more than net zero. Dorf is taking that model to other City Winery locations by using solar power to achieve net zero on all electrical use, including another Hudson Valley location that will be 100 percent powered by solar.

City Winery buys grapes from 35 world-class vineyards, mainly from California. The Pinot Noir and Chardonnay grapes come from Willamette Valley in Oregon, one of the best Pinot Noir terroirs in the world. They also get grapes from the Finger Lakes region in New York and some unexpected locations such as Michigan.

"The location becomes really important. So, we get to go to the best terroir or locations to buy our grapes, ship them to all of the city winery locations, and get the wine right where the consumption happens. So, we just kind of inverted the model a little bit. In these days of technology and the ability to ship and put tracks in trucks and maintain a stable 36-degree temperature from the moment we unpack

The most important component of the reusability idea was—what is the incentive for someone to actually return the bottle?

10 Most Sustainable Companies 2022

These companies have made sustainability part of their DNA and had an impact this year.

BY ARICK WIERSON WITH CONTRIBUTIONS FROM SHELLEY KOHAN

ILLUSTRATION BY JING ZHANG

At just about every turn, we, as the custodians of this planet, are seemingly intent on destroying the only home we know. It's as if our world is spinning around inside a microwave oven; we see it overheating, we even smell it burning, but we can't muster the effort to press the 'cancel' button.

In some respects, we are all equally guilty regarding environmental irresponsibility; shaming and singling out certain bad actors is no better than the dueling volunteer fire departments in 19th Century New York City that opted to fight each other rather than coordinate their efforts to put down a blaze. Who's to say my jet-fueled trip from L.A. to Milan is any more justified than the landfill at the edge of town?

But truth matters, and in this era of fake news and pockets of siloed information, we must get our facts straight. According to the Climate Accountability Institute, over the past 30 years, just 25 private and state-owned companies have been responsible for over 50 percent of the world's greenhouse gas emissions. Suppose fossil fuels continue to be extracted at the same rate over the next three decades. In that case, average global temperatures will rise by approximately four degrees Celsius. This almost apocalyptic-size change would lead to catastrophic consequences, including substantial species extinction and global food scarcity.

But wagging a finger at the petrochemicals industry is not much of an answer. To state the obvious, the oil and gas sector still plays a critical function in powering modern society. Still, its immense carbon footprint certainly begs an equally compelling question: Which companies are serious about addressing climate change and which are simply paying lip service?

Parsing corporate greenwashing from real action is not always easy; what CEOs say they are addressing and what their company is doing has been referred to as the "say/do gap." The fancy wordsmithing found in annual reports and corporate websites is often markedly different from what frontline employees report witnessing up close. According to a recent report on sustainability leadership, many C-suite leaders cite climate change and pollution as critical issues. Still, their employees do not see meaningful action to back it up.

With this question in mind, *Worth* set out to identify and highlight ten globally impactful companies across a broad range of sectors that are making real strides in addressing their carbon output. This list is not a ranking–how does one compare the challenges of a sprawling fitness empire with that of a global cruise line? Instead, consider this a fact check on a host of globally recognizable brands living up to their promises.

Patagonia

THE GOLD STANDARD FOR CORPORATE ENVIRONMENTAL RESPONSIBILITY

Regarding sustainable companies, Patagonia is widely held as the gold standard. It is one of the very few companies of its size that have achieved B-Corp status—the designation comes from having a business model oriented in equal measures towards profitability, humanitarianism, community impact, and environmental sustainability. With the fashion and apparel industry being one of the world's biggest polluters, Patagonia's forays into second-hand clothing with its Worn Wear program and its groundbreaking pledge to invest 1 percent of global sales in sustainability initiatives has helped to redefine what it means for apparel companies to be environmentally focused. Patagonia's lasting legacy will be its influence on the industry at large—most acutely on its direct competitors. Because of the example set by Patagonia, brands such as The North Face and Arc'teryx have been coaxed into following their lead (sometimes resulting in risible yet virtuous battles of green one-upmanship).

Life Time Fitness

HEALTHY PEOPLE + HEALTHY PLANET

Over the past 30 years, Bahram Akradi, the founder, chairman, and CEO of Life Time, has successfully built the largest health lifestyle ecosystem across the U.S. and Canada. Today, the company offers nearly 160 sprawling athletic country clubs, a handful of coworking and residential complexes, and the rights to numerous marquee sporting events such as the Miami Marathon and the annual "Race Across The Sky" in Colorado.

With sustainability at the forefront of his business model, Akradi has relentlessly pushed his staff to embrace minuscule sustainability practices. Everything from the reduction of towel sizes to the elimination of single-use plastics has been addressed. Additionally, by simply replacing interior and exterior lighting with LEDs and installing advanced energy-management systems to optimize energy usage, Life Time was able to reduce its energy consumption by 38 percent and lower its water usage by nearly 60 percent.

Seemingly tiny adjustments merged to make a massive impact when applied at scale. In July of this year, his efforts to reduce Life Time's carbon footprint earned him recognition from the U.S. Department of Energy's Better Buildings Challenge, which named his business the top-ranked company in the country for energy reduction.

Hurtigruten Group"

CRUISING TOWARDS A CARBON NEUTRAL FUTURE

Hurtigruten Group was established in 1893 by Norway's government as a means for connecting people living along the country's jagged coastline and fjords, shipping goods, and delivering mail. Nearly 130 years later, the company has emerged as the most innovative, technologically advanced, and sustainable cruise line in the world. Led by CEO Daniel Skjeldam, Hurtigruten Group now operates excursions across the globe to Antarctica, the Galapagos Islands, Alaska, the Caribbean, and an array of local routes in its home market. As the company has broadened its global footprint, Skjeldam has guided Hurtigruten Group from a small shipping company into the world's leading sustainable adventure travel company.

It's no secret that traditional cruise ships are considered one of the biggest polluters per square foot, so it's worth noting that Hurtigruten Group is bucking that trend with an array of eco-friendly initiatives, the most notable of which is its commitment to sustainable power. In 2019, Skjeldam announced that, in partnership with Rolls Royce, nearly the entire Hurtigruten fleet would convert to hybrid battery-powered ships. The MS Fridtjof Nansen, for example, was named by an independent body as the safest and most sustainable cruise ship in the world. Moreover, the company recently unveiled plans for the first zero-emission ship to sail in 2030. Hurtigruten Group's move to adopt clean power tech at sea sent ripples throughout the cruise industry, leaving larger competitors scrambling to play catch-up.

Mortenson Construction

BUILDING A MORE SUSTAINABLE FUTURE

With annual revenues approaching $5 billion, Mortenson is one of the top 100 largest private companies in the United States. Although Mortenson is best known for high-profile megastructures like the U.S. Bank Stadium in Minneapolis or the expansive Marriot Gaylord Rockies Resort & Convention Center in Colorado, it's the company's work in alternative energy that has made it a standout. "It's pretty simple—addressing climate change and sustainability is in our collective best interest," said Chairman David Mortenson. "We started in the mid-'90s with our first wind turbine, and now, 30 years later, well over a third of our business is in alternative energy—and it's one of the fastest growing segments of our portfolio."

Mortenson has developed a reputation as the country's most experienced builder of wind turbines, solar farms, and large-scale energy storage systems in the U.S. Xcel Energy selected Mortenson to construct the Rush Creek Wind Project in Limon, Colorado, the largest single-phase wind project in the United States. Mortenson is also the driving force behind the Edwards & Sanborn solar project in Kern County, California, slated to be completed in 2023. It will generate 950 megawatts of solar energy and provide 2,400 megawatt-hours of energy storage, effectively making it the largest single solar and battery energy storage project. And in the business of industrial battery facilities, the company's work on the DeCordova Energy Storage system in Texas, the largest energy grid in the state, has become a window into the future of clean energy storage at scale.

Panera Bread

COOL MEALS FOR AN OVERHEATED PLANET

Sara Burnett, the VP of sustainability at Panera Bread, ensures that the privately-held fast-casual restaurant chain continues to innovate along an increasingly sustainable path. A decade ago, Panera became the first major chain to disclose the number of calories in each dish. In 2020, it became the first to deploy carbon labeling indicating the environmental impact of each menu item purchased by its customers. This move was partially inspired by a 2019 UN report that pointed the finger at the global food system's role in global warming, which accounts for over a third of all greenhouse gas emissions. Burnett, along with Panera's CEO Niren Chaudhary, and the company's R&D team, overhauled the menu to offer an array of so-called "cool foods"– dishes (served at any temperature) that negatively affect the minuscule carbon footprint. Carbon-friendly food, it turns out, is good for the planet and business; recent reports found that 6 in 10 Americans say that sustainable food is important to them and a significant driver of brand loyalty.

Bentley Motors

WHERE THE APEX OF AUTOMOTIVE PERFORMANCE MEETS SUSTAINABLE LUXURY

Since 1919, Bentley has been synonymous with supreme automotive performance and luxury grand touring. But this classic brand from Crewe, England, is chiseling out the third pillar to its already stellar reputation: sustainability. Led by Bentley's global CEO Adrian Hallmark and Christophe Georges, the president and CEO of Bentley Americas, this brand has laid out perhaps the most aggressive timeline among its peers for converting to an all-electric fleet. By 2023, every new model of Bentley will be offered in a hybrid version; by 2026, all new models will be provided only in hybrid or all-electric models. Bentleys will be 100 percent electric by 2030.

But Bentley's commitment to sustainability goes beyond the manufacturing of EVs. At its factory in Crewe, they are incorporating an array of ambitious sustainability initiatives. These include installing over 30,000 solar panels and several waste management and recycling programs that will allow them to become plastic neutral by 2025. Bentley is well toward achieving its broader vision of becoming a climate-positive factory, an astonishing feat for a carmaker.

Ecolab

WATER PRESERVATION AT SCALE

For years we have been hearing academics and pundits make predictions about the future of water–clean potable water, specifically. "The Wars of the Future Will Be Fought Over Water, Not Oil," read one particularly memorable headline published in the New York Post. Hyperbolic guesstimates aside, it's clear that the issue of water preservation is and will continue to be central to many meaningful environmental impact programs. Sitting at the intersection of large-scale water management and sustainability initiatives is Ecolab, a $15 billion a year company specializing in water treatment, purification, cleaning, and hygiene in various applications. Every major corporate water preservation initiative in the news, from the Manchester United football club to Kraft Heinz to Hilton Hotels, has Ecolab's fingerprints.

One salient example of Ecolab's impact was its recent work with Exelon, the largest energy company in the United States. Exelon Generation, the nuclear power division of the company, had set an ambitious goal of providing safe, clean, low-cost nuclear energy while protecting the environment. To bring that goal to fruition, Ecolab's Nalco Water division was brought in to transform how the company utilized water—a core aspect of any nuclear power operation. Ecolab's work resulted in reducing millions in direct costs for Exelon and saving the company billions of gallons in annual water usage.

Yeti

HARD GOODS BUILT TO LAST

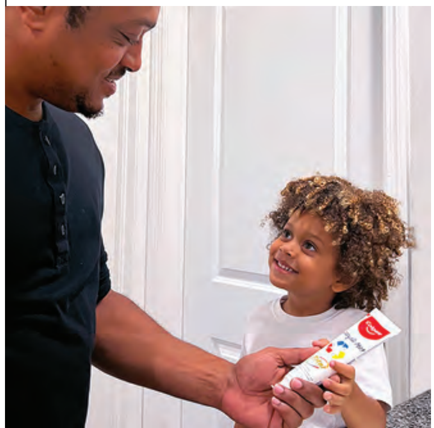
Coolers and tumblers are probably not the first things you think of when you think about the environment. But for Matt Reintjes, the president and CEO of YETI, addressing the environmental costs of plastics and poorly-made products is what it's all about. "YETI was founded to create a better cooler with unmatched performance and durability that could survive outdoor adventures better than the flimsy coolers on the market, which often ended up in the trash after a few uses." Part of the customer appeal of YETI's famous drinkware line is its value as an alternative to single-use, disposable plastic cups and thermoses. Importantly, Yeti is taking this "kick single-use" ethos and expanding it into new product categories beyond coolers. One hundred percent of YETI packaging will be recyclable, reusable, or compostable by 2025–which is a big deal given the company's growth trajectory. In 2020 YETI surpassed $1 billion in revenue and in 2021 reached global sales of $1.4 billion.

Toro

HARNESSING MASSIVE REACH AND NEW TECH FOR MAXIMUM IMPACT

When you hear the name Toro, the image of one of their iconic cherry red lawn mowers or the buzz of a weed whacker likely comes to mind. But in recent years, the Bloomington, Minnesota-based leader in lawncare has dived head-first into electrification. Its Flex-Force power system of interchangeable, battery-powered yard equipment has given it a certain 'Tesla-like' status in neighborhoods across the country. Its new autonomous robotic mower, set to launch in 2023, will redefine the industry as it ushers in what Toro calls 'smart-yard' technology that connects sustainable watering, lighting, and lawn care all from the convenience of a single app.

But less well known to the public and of even greater importance both financially and in terms of environmental stewardship is the company's advanced professional irrigation and water management systems that serve some of the world's most renowned golf courses, sports fields, landscaped parks, and essential agricultural acreages. From the 36 holes at Singapore's famous Sentosa Golf Club to Disney properties to farmlands across the globe, Toro has successfully positioned itself as an end-to-end provider supporting the entire growing lifecycle of millions of acres of the earth's surface. Company Chairman and CEO Rick Olson, who worked his way up through the company ranks, fully understands how Toro's massive reach uniquely positions it to have an impact. Since assuming the top leadership role in 2016, Olson has reoriented the company around a series of bold sustainability goals it holds to in its annual sustainability report.



Colgate-Palmolive

TAKING OWNERSHIP ON A GLOBAL SCALE

Ann Tracy, the chief sustainability officer at Colgate-Palmolive, is not one to mince words. "With a brand in more homes than any other, we are reimagining a healthier future for all people, their pets, and our planet," Tracy said. She is referring to the company's $17 billion consumer goods empire encompassing everything from toothpaste to dog food to household detergents. "We have arguably the largest consumer reach on the planet—six in ten households on the planet use Colgate products—which is why it's on us to offer consumers products that are better for the planet. It's our responsibility." To that end, the company embarked on a significant journey to reexamine every business unit and function, from sourcing to packaging and shipping, to see how each product and process could lower the company's overall environmental impact.

Colgate sells 9 billion of the estimated 20 billion tubes of toothpaste sold worldwide each year–exemplifying the innovation and success they have found companywide. From moving to a first-of-its-kind recyclable tube (a technology Colgate even shared for free with competitors to hasten global adoption) to launching chewable toothpaste tablets into the market, which cut down on shipping water, Colgate is not afraid to upend the status quo if it means lowering the environmental footprint of its products.

Investing in a Better Future

Goldman Sachs's Abigail Pohlman helps clients shape the development of renewable energy, technologies, and infrastructure.

BY RUTHIE KORNBLATT-STIER

From the record-breaking heatwave in the United Kingdom to extreme flooding in coastal areas, climate change is rapidly taking its toll on our world and communities. Abigail Pohlman, Head of Goldman Sachs' Private Wealth Management Sustainable Solutions Group, has observed how the worsening climate crisis not only harms our environment but also exacerbates global and societal inequalities.

Eager to play a role in developing a more sustainable future, Abigail matriculated at UCLA, where she majored in International Development Studies. This unique program allowed her to dive deep into the study of the discriminatory social, political, and economic forces that shaped our current climate crisis. After graduating, Abigail joined the Larta Institute, a nonprofit devoted to fostering sustainability through innovations in science and technology.

After a few years in the nonprofit world, Abigail wanted to find a way to broaden her impact. "I decided that in order to hone my abilities, I needed to understand the corporate world, and learn how businesses are run and what that strategy looks like," explained Abigail. "My plan was to then take that knowledge back to the nonprofit space."

To her surprise, she found herself all the more inspired while working as an analyst for Goldman's Los Angeles Private Wealth Management team. "I realized that I had hit my stride," she said. "I was working with a number of different nonprofit clients and implementing customized investment strategies in order to help them grow and create a positive impact."

Abigail credits John Mallory, the Co-head of Global Private Wealth Management, with helping her pursue her ever-growing passion for sustainability and equality: "He's been there from day one, supporting and championing me and my passions and providing opportunities along the way."

Embraced by a culture of both camaraderie and innovation at Goldman, Abigail was encouraged to follow her passions and develop her own projects. In 2009, Abigail and John Mallory developed Goldman's Institutional Client Solutions (ICS), a group that provides individualized investment guidance, education, resources, and solutions to help nonprofits both achieve their financial goals and invest in ways that align with their values and missions.

"We built ICS together, and it grew into my full-time job," Abigail commented. "It's actually similar to the work I was doing before with nonprofits, but this was an opportunity to formalize it." ICS now works with over 600 nonprofit clients across the country, ranging from educational institutions to hospitals and medical centers. Describing what she loves about the connections that ICS forges between organizations and individuals, Abigail said, "It allows us to tie in the work we're doing with communities across the world to the work we're already doing with our high-net-worth clients. A lot of our high-net-worth clients are already involved in these nonprofits that we're working with, and if not, we provide them an opportunity to get started. It's wonderful to see our work coming full circle."

Even after developing ICS, Abigail felt that she could do more. She approached the co-heads of Goldman Sachs Private Wealth Management, John Mallory and Meena Flynn, and told them that she wanted to be able to offer high-net-worth clients a better, more cohesive offering for sustainable and impact investing.

"In true Goldman form, they told me that if I had an idea, I should go ahead and build it. So, with that greenlight, I went ahead and started our Sustainable Solutions group." With the support of her team, Abigail designed a group that would combat the damage and inequalities of climate change while also working to advance inclusive growth. Developing the Sustainable Solutions group has been simultaneously invigorating and challenging.

"There wasn't a blueprint, so it's been an exciting journey," she said. "The hard part is not being able to turn to someone who's done this before. I've needed to draw the map myself. Every day I get to decide how we're going to prioritize, how we're going to make a difference."

Abigail regards sustainability as a pillar in the investing world, not just a trend. Sustainable impact investing has skyrocketed in popularity, a development that Abigail has played a pivotal role in facilitating. "Many of our clients understandably feel overwhelmed and skeptical when it comes to impact investing. Being able to sift through options and break it down into actionable steps is something that I consider to be a core and essential part of our job."

In addition to her Private Wealth Management clients and nonprofit ICS organizations, Abigail also works with corporations and even governments to help them understand and tackle sustainability issues and

PHOTO COURTESY OF GOLDMAN SACHS PRIVATE WEALTH MANAGEMENT

transitions to renewable practices. "We've all set very ambitious net-zero targets for 2030 or 2040, and that's going to require the right kind of investment. We're going to have to improve not only our technology, but also our infrastructure. To achieve those goals, we need to properly invest in companies at every level of the supply chain." Abigail helps her clients to become key players in the development of renewable technology, energy, and infrastructure.

Impact and sustainable investing is an option that is accessible to everyone, both individuals and institutions alike. Abigail encourages her clients to think of it not as a limited option, but rather as "an additional tool in your toolkit. There's no reason to hold strategies that incorporate sustainability to a different standard than other potential strategies or opportunities." Since 2015, the Sustainable Solutions group has seen an unprecedented growth in sustainability and impact investing. There has been over an 80-fold increase in the number of assets for Abigail's clients that are invested in sustainability and other impact strategies. "Out of our largest 500 clients, over 50 percent of them are actively incorporating sustainability into their investment strategies," she said. Sustainability is not only a priority that Goldman encourages for their clients, but a value that is embraced across the firm. "We, as a firm, have a commitment to investing over $750 billion in sustainable finance by 2030," Abigail explains.

In addition to being grateful for the encouragement that she received while developing the Sustainable Solutions group, Abigail feels supported in all aspects of her work at Goldman. She counts herself lucky to be involved in an institution that is ahead of the curve in their emphasis on diversity, equity, and inclusion (DEI) and inclusive hiring practices: "A lot of people don't know this, but there's actually a Women's Council at Goldman that I serve on." Additionally, Abigail was an integral player in the development of Goldman's In the Lead platform, a platform designed to help high-net-worth women take charge of their wealth, philanthropy, and legacy. Abigail carries her support for DEI and gender equality into her work in Sustainable Solutions; climate change impacts women, minorities and low-income people first. Abigail encourages her clients to think about gender in the context of their investment portfolios, advocating for including more women and women of color in leadership and decision-making roles.

"Over half of Goldman's regional offices are led by women," she explained, "many of whom have been my mentors and peers over the years. To have grown in this business surrounded by women has been a huge factor in my success and the success of the firm as a whole."

Abigail's diverse experience interfacing with all aspects of the corporate and nonprofit worlds has given her a distinctive perspective on the power of impact investing. From being a leader on Goldman's Women's Council to advising nonprofits and governments on the transition to renewable infrastructure, she feels proud of the impact she's already been able to achieve as Head of Goldman's' Sustainable Solutions Group. She knows, however, that there's still work to be done.

"As stewards of big pools of capital, we have to ask ourselves if we're using our wealth to define the world we want to live in. How are we going to leave the world in a better way than we found it?"

He Got a Rare Disease Diagnosis So He Rethought The Whole System

BY DREW IANNI

Onno Faber never expected to become a medical innovator. He was living the American dream. Born and raised in The Netherlands, Faber embraced entrepreneurship early, as founder of a software engineering company during high school. He eventually moved to the U.S. to grow a technology company in the mobile communication space. But soon after arriving in Silicon Valley, he began to lose hearing in his left ear. "As it turned out, there was a brain tumor on my hearing nerve and further scans and research showed additional tumors in my brain and spinal cord", Faber recalls. The eventual diagnosis was a rare genetic disorder called NF2, which leads to tumors of the nervous system including in the brain, spinal cord and nerves.

Rare Diseases Are Actually Common

"This is when I first learned about rare diseases," says Faber. "My sensory nerves were threatened, I was deaf on the left side and there was the potential for serious vision problems and mobility issues." After consultations with doctors, Faber was told there were no drugs for his disease and eventually found a treatment through his own research and community engagement that stabilized the tumor growth and insured he would not lose hearing, mobility and vision for the time being. Faber recalls saying to himself back then: "Instead of thinking about it as a devastating diagnosis, how can I turn it, spin it around, and create a positive impact for all people finding themselves in a similar situation?"

Faber researched his condition obsessively, working to understand not only his own rare disease but how the broader healthcare industry diagnoses and treats rare diseases. "The first thing I learned was that rare diseases are actually very common," he says. "When you hear that one in 50,000 has my particular disease, that sounds 'rare'. But as soon as I learned there are thousands of rare diseases, the reality is that one in 10 people in the US have a rare disease–or about 20-30 million people."

Despite the surprisingly large market and the fact that 95 percent of rare diseases have no FDA-approved therapy, Faber also came to learn that there is little commercial incentive to work on rare disease treatments. This revelation inspired a newfound passion and the founding of a rare disease "drug hunting" company built around patients and families dealing with these diseases. "We asked ourselves, what types of communities need to be built?" Faber recalls. "How can we align these communities to make the 10,000 small problems a big problem and ultimately create an algorithm and engine to scale rare disease diagnosis and treatment?"

Your Friendly, Neighborhood Sequencing Machine

As Faber continued his research, another tumor appeared, pressing against his brain stem. But Faber is a natural entrepreneur. Once that tumor was successfully removed, Faber didn't let it bring him down. Instead, he decided to take things further. "A friend of mine was a computational biologist and had a sequencing machine in his living room," Faber recalls. "That's the advantage of living in Silicon Valley." Faber was able to sequence and analyze his own DNA, and that led to a project with Google. As Faber remembers, "We had 400 people coming for a weekend to hack on the data and we eventually found the first drug that I tried to repurpose for my condition."

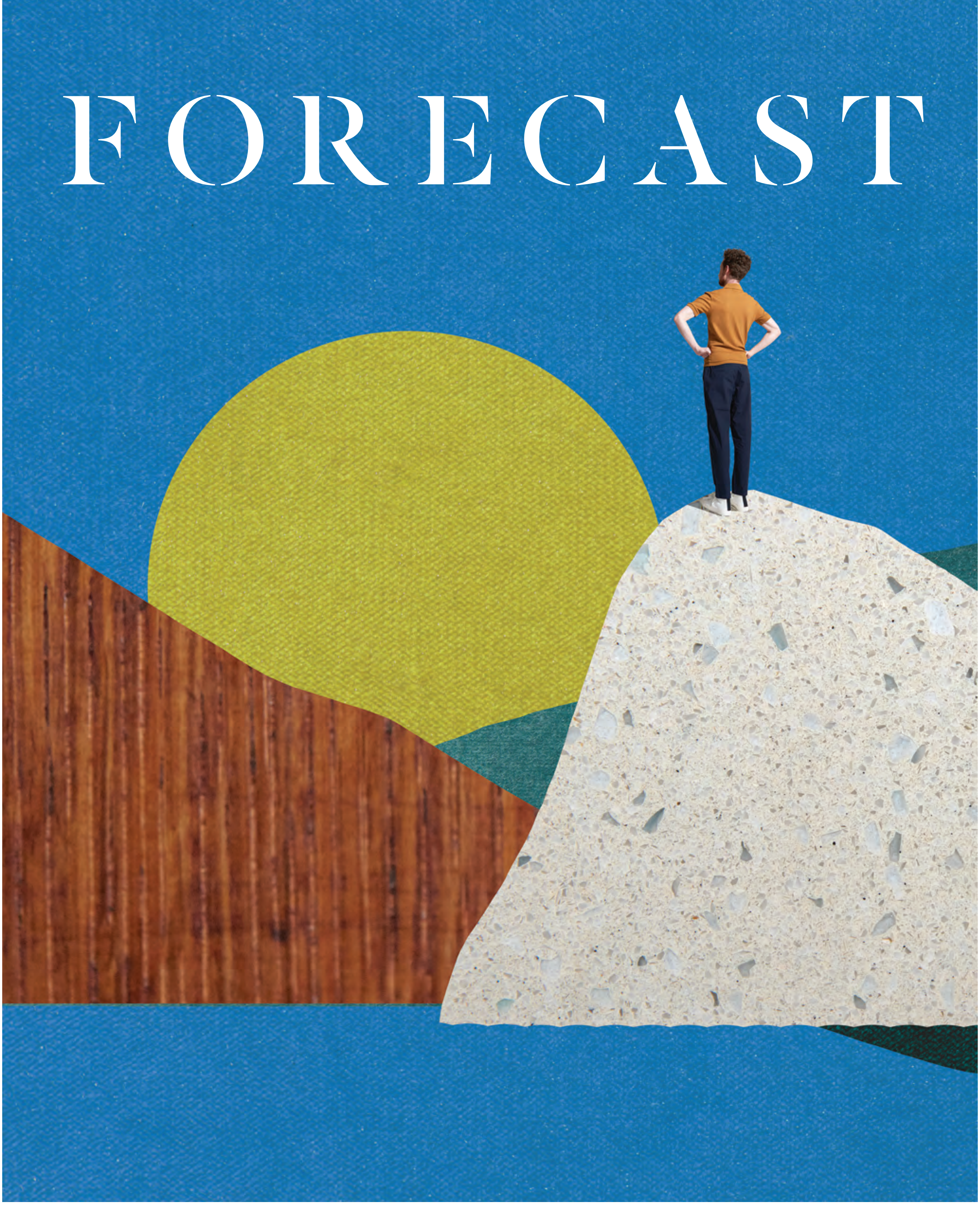
This experience led Faber to continue working on how to combine sequencing and drug discovery into one continuous process. He launched Rarebase in 2020 with his co-founder. "The goal" he says, "was to find ways to make rare disease a scalable problem, and we wanted to start with the patient and the families."

Building Knowledge at Scale

"Today, sequencing is mostly used for disease diagnosis," Faber continues. "At Rarebase, we also use sequencing to find treatments. We can sequence every single experiment and, for example, can determine what a particular drug does to the expression of the DNA in a specific cell type. That allows us to create hypotheses around which drugs might reverse the underlying biology of a rare disease." The goal, ultimately, is to use the platform to matchmake between drugs and as many of the more than 7,000 rare genetic diseases as possible.

The Road Ahead

Ask Faber what he is looking forward to, and he says, "the technology will evolve to become cheaper and more scalable so we can generate more and more data," he continues, "and, ultimately, help rare disease patients find treatments so they can have a better quality of life. The technology is there. We just have to enable access so that rare disease patients can benefit from it too."



Financial Forecasts & Insights

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Understanding Impact Investing

As private foundations aim to direct 100 percent of their assets to serve the greater good, we examine four distinct approaches they can take.

JEFFREY HASKELL

Many foundations that are established to solve society's most pernicious problems have investments as their lifeblood. Their assets must be invested in profitable businesses to sustain operations and grow. So, what happens when a foundation's mission is directly contradicted by its own investments? What if the problems a foundation was created to solve are exacerbated or caused by the behavior of businesses found in its investment portfolio?

It can sometimes seem as though a foundation's assets and grantmaking programs are in direct opposition to each other or, at the very least, are failing to work together to accomplish a charitable mission. Since many foundations invest 95 percent of their assets while distributing about 5 percent for charitable purposes, it's conceivable that the damage done by the investments exceeds the good accomplished by the distributions.

Over the last decade, more foundations have attempted to address this issue and get all of their horses pulling in the same direction. These foundations want their investments to enhance their philanthropic efforts or at least not run counter to them. If their 5 percent for their minimum charitable distribution requirements are regarded as the "do good" portion of their foundations, the goal for the other 95 percent might at least be to "do no harm." Hence, their adoption of impact investing.

The growth of the impact investing sector has exploded in the last ten years. The International Finance Corporation (IFC) reports that $2.3 trillion was invested for impact in 2020, equivalent to 2 percent of global assets under management. And a Global Impact Investing Network (GIIN) study reveals a 42.4 percent increase in the sector from 2019 to 2020. Impact investing is also a broad tent; many individuals, businesses, and organizations claim a seat under its canopy, each employing different tools and approaches.

As private foundations aim for 100 percent of their endowment assets and grant funds to serve the greater good, we examine four distinct approaches they can take for impact investing, ranging from fiscally conservative to financially risky:

- Community Investing
- Socially Responsible Investing
- Program-Related Investing
- Mission-Related (or Social Venture Capital) Investing

COMMUNITY INVESTING

One of the easiest ways to dip a toe into impact investing waters is by simply moving your money from a traditional bank to a community development financial institution (CDFI) such as a community bank or community credit union. These financial institutions are common throughout the U.S., and you've probably heard of them without realizing that they have a social mission tied to their financial products.

CDFIs are government-regulated and government-insured, just like other financial institutions. They offer checking and savings accounts, money market accounts, certificates of deposit, and all the usual services you'd expect from a traditional bank. They provide market-rate (or very close to market-rate) interest to depositors and, from a consumer's perspective, are comparable to commercial banking institutions, albeit with a less extensive network of ATMs.

The difference between traditional and community banks is what they do with the money on deposit. Rather than lend it to large corporations outside the local vicinity, community banks invest it locally through loans for affordable housing projects, home mortgages in low-income areas, and new businesses. Many low-income neighborhoods have benefited from CDFIs that use their deposits to build that community rather than siphoning funds out for the benefit of outside parties. The Calvert Foundation, for example, directed Calvert Community Investment (CCI) notes to help rebuild communities in the Gulf Coast region devastated by Hurricanes Katrina and Rita. These same notes offer investors a range of terms, including interest rates that vary up to 2 percent payable at maturity.

Community investing can be a relatively low-risk cash management strategy, an easy way for a foundation or philanthropic individual to put more financial assets into the service of a charitable mission. To look for a CDFI in your community, go to www.cdfifund.gov for a listing of CDFIs by city and state.

SOCIALLY RESPONSIBLE INVESTING

Socially responsible investing (SRI) has been around for more than 30 years. It began with a simple idea: Don't hold the stock of companies that actively work against your values. So, an environmental grant maker might screen "big oil" out of its portfolio, and a health grant maker might avoid "big tobacco." Other standard screens filter out companies with interests in gambling, alcohol, pornography, dealings with repressive governments, or defense contractors. Because this approach focuses on what investors do not want to hold in their portfolio, tools that help them filter their investments have been dubbed "negative screens."

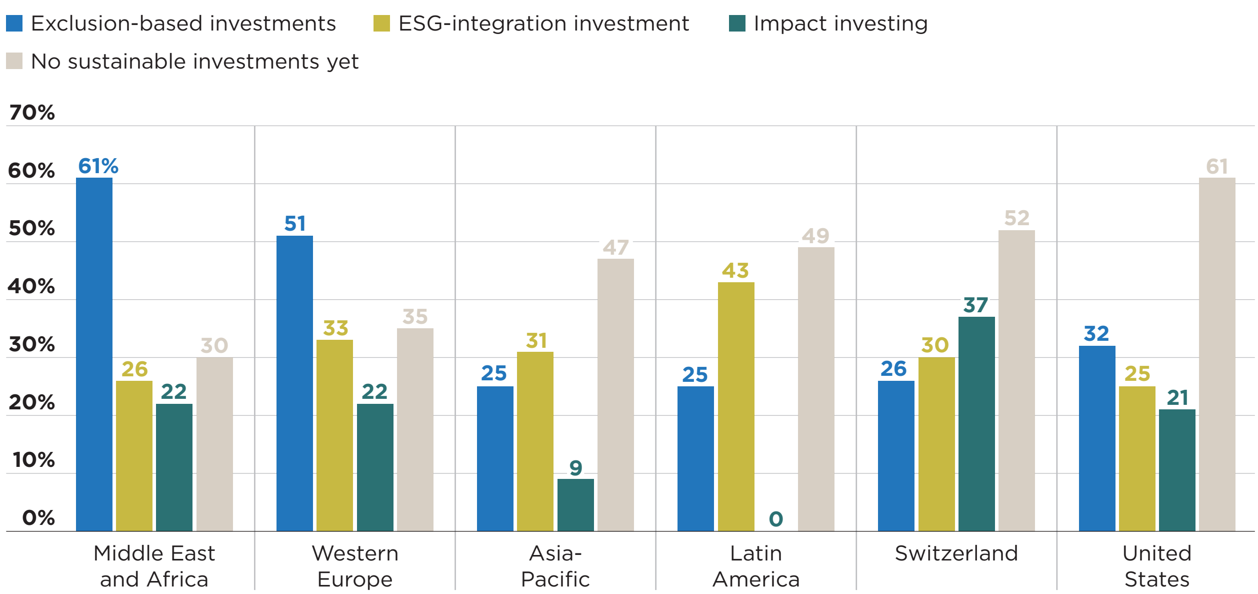
Critics point out that while employing negative screens to eliminate "sin stocks" may help an investor sleep better, they don't necessarily accomplish much. The companies screened out are usually very large and very profitable. A few conscientious investors selling their stock or just declining to buy it will not affect their share price. And by screening out a whole host of potentially profitable sectors, an investor employing negative screens may limit their ability to earn returns on par with the market. As most investment advisors benchmark performance against broad market measures, portfolios using negative screens are widely thought to underperform.

In recent years, investors and their advisors have taken a new approach to socially responsible investing involving "positive screens." Instead of shutting out objectionable companies, a positive screen actively seeks companies demonstrating the kind of corporate social responsibility that philanthropic investors would like to encourage. The primary positive screens are around environmental, social, and governance (ESG) practices, collectively known as "ESG screening." Rather than focus on what you don't want companies to do, ESG screening selects companies based on the positive things they are doing.

Some recent studies challenge the widely held belief that one needs to accept lower returns in exchange for socially responsible investing (SRI). ESG-screened companies disprove the myth that SRI isn't profitable. Previous research has found no statistically significant difference between traditional and SRI funds' performance. In fact, as The Forum for Sustainable and Responsible Investment reported, a 2012 DB Climate Change Advisors meta-analysis of more than 100 academic studies found that incorporating environmental, social, and governance data in investment analysis is "correlated with superior risk-adjusted returns at a securities level."

Beyond being good philanthropy, ESG screening is increasingly accepted as just good business. ESG investing has become more mainstream over the past decade, fueled by rising investor interest and recognition that social and environmental impacts are creating material financial risks for companies and investors. In other words, polluting the environment to make a quick buck today is what investors might call a "short-term play." It will not be an effective strategy over the long haul as governments, consumers, and investors increasingly penalize companies with poor ESG practices through loss of business, lawsuits, bad publicity, and costly clean-up.

Sustainable Investment Strategies of Family Offices in 2022



Source: USB

Done well, investing in ESG-screened funds can be a natural part of a private foundation's investment strategy that carries no more risk than traditional investing in the stock market.

PROGRAM-RELATED INVESTING

When we think of a private foundation supporting a charitable cause, most of us think in terms of grants–but foundations can also make loans and provide loan guarantees in support of their mission. Such loans are defined by the IRS as program-related investments (PRIs) and are an increasingly common tool among private foundations.

PRIs come out of the foundation's grantmaking purse and as such, they qualify toward the foundation's 5 percent minimum distribution requirement. However, while grant dollars go out the door never to return, PRI dollars are generally recovered in part or in whole, and may even earn some return for the foundation in the form of interest or appreciation.

To qualify an investment as a PRI, the foundation must satisfy three requirements laid out by the IRS:

- The primary objective of the PRI must be to significantly further the foundation's charitable mission.
- The production of income or appreciation of property must not be a significant motivating factor.
- The investment must not attempt to influence legislation or elections; a PRI may not be used to support candidates for office or lobby elected officials.

Collectively, these requirements suggest that if the foundation were driven purely by financial considerations, it wouldn't make the PRI because the loan or investment will usually have some downside that makes it unattractive to commercial investors: High risk, low return, and illiquidity are common traits among PRIs, so much that one might even consider PRIs "bad investments for a good cause." Evidently, the IRS concurs: Because PRIs fulfill a foundation's charitable purpose, they are exempt from the normal rules that prohibit the foundation from making so-called "jeopardizing" investments.

Foundations use PRIs creatively in myriad ways. Most first experiment with them in the form of a loan to an organization they already know well, oftentimes a prior grantee. For example, they may offer their community church a very low-interest loan to finance the construction of a new facility. Or they may provide a no-interest line of credit to their favorite art museum to help smooth out the bumpy financial times between blockbuster shows. They even may co-sign a loan to allow a housing agency to access funding from a commercial bank, which, absent a default, doesn't require them to put a dime out the door.

MISSION-RELATED INVESTING

Traditionally, philanthropists give away money and investors make money. The former wants to create change and the latter wants to pocket it. You'd think that the two goals would be incompatible, but a new hybrid of philanthropy and private equity investing blurs the lines, allowing foundations to do well by doing good. Similar to private equity investing, foundation donors make investments in private companies or venture capital funds—the difference being that these investments go beyond mere financial returns to provide social and economic benefits. Foundations that engage in mission-related investing (MRI) use their endowment funds to invest in profit-seeking solutions aligned with their mission. These often are social, environmental and economic challenges that cannot be easily met through grants alone. The determination as to whether these "social venture" investments are PRIs or MRIs depends on whether they exist primarily to return a financial profit or to accomplish a social good. Let's take two examples for a foundation fighting childhood asthma:

In our first example, the foundation becomes aware of a promising drug that's in development. It's only effective against a rare type of childhood asthma, so it doesn't have much commercial potential and is therefore unlikely to make it into production. The foundation could provide a seed money loan for the drug's development and this "poor investment for a good cause" would qualify as a PRI and count toward its 5 percent minimum distribution requirement.

In our second example, the foundation becomes aware of a terrific new company that's developing an inexpensive, electric car capable of going 500 miles before recharging. This is a very exciting investment opportunity for a whole host of reasons. From a financial standpoint, an extended-range, inexpensive, electric car has tremendous market appeal; from a mission standpoint, it's also attractive because car emissions contribute to childhood asthma. Clearly, investing in this start-up would be compatible with the foundation's fiscal goals and mission objectives. However, because the venture foremost is considered a good investment from a financial standpoint, it qualifies as an MRI and not a PRI.

Keep in mind that MRIs, unlike PRIs, are subject to jeopardizing investment rules and that a private foundation can be subject to excise taxes for making imprudent investments. For this reason, involvement in any of the activities outlined here and below should be based on a well-considered investment policy that includes a thoughtful asset

"A new hybrid of philanthropy and private equity blurs the lines, allowing foundations to do well by doing good.

allocation strategy among different classes of risk.

THREE MAIN APPROACHES TO MISSION-RELATED INVESTMENTS

Mission-related investments (MRIs) can be made in a variety of ways. For instance, you can buy stock in a well-established company that's aligned with your mission, you can invest in a social investment fund, and you can conduct angel investing in start-up companies that have a social mission.

1. Buying Stock in Well-Established Companies

An obvious investment choice for a foundation dedicated to environmental conservation might be a tech giant that's developing more affordable solar panels. But what about a granola manufacturer that buys Brazil nuts, which only grow in healthy rainforests, at above-market rates in order to incentivize forest preservation?

2. Social Investment Funds

A foundation willing to take some risk with a portion of its investment capital can become an investor in one of the tiny but growing crop of "social investment funds." Traditional venture funds raise capital from private investors and select a portfolio of young companies in which to invest. They provide not only funding to the young company, but also expertise and connections, all in exchange for an ownership stake and often, a seat on the board of directors. Social investment funds take this same approach but focus on finding and funding potentially profitable businesses with a social mission. Managed by professionals who charge a service for their fees, these funds seek target companies, known as "social enterprises," that focus on providing positive social impact as well as financial returns. Examples might include technologies that provide clean water, facilitate remote access to health care, or improve public safety. And social venture funds aren't limited to technology start-ups. They can support fair trade suppliers, companies that provide healthy, organic school lunches, car-sharing services, and much more. Social investment funds are often dedicated to a specific issue. For example, Good Capital's Social Enterprise Expansion Fund (SEEF) provides growth capital to social enterprises that address the root causes of inequity in the U.S. and around the world. Another fund, Root Capital, aims to grow rural prosperity in poor, environmentally vulnerable places in Africa and Latin America. Because the concept of social venture investing is still in a nascent stage of development, these funds often lack traditional track records and transparency. New tools have been developed to help social investors track and evaluate the social impact of their investments, such as the Global Impact Investment Ratings System (GIIRS, pronounced "gears"). Some funds (and some funders) are rigorous in defining and measuring the social impact of their portfolio companies while others seem to be satisfied with the idea that they are "supporting good work."

3. Angel Investing

"Angel investors" are "first-in" funders who personally evaluate individual investment opportunities and use their own funds to invest directly. Where social investment funds rely on the expertise of a professional management team, angel investing might be considered the "do-it-yourself" approach to social investing. Angel investors typically take on very high risk in early-stage companies in the hopes of a commensurately high reward if one of their companies turns out to be the next Google. For private foundations and individual philanthropists who are willing to put in the time and effort themselves to grow social enterprises, an angel approach to social investing can be attractive because it allows them to use not only their money but also their networks and expertise to help a young social enterprise get up and running. In some cases, angels band together to form networks or loose affiliations that share the work of doing due diligence on potential investments. Each member then decides if he or she wants to take part in the investment. A well-known social angel network, Investors Circle, is an environmentally focused, international group of angel investors founded in the early 90s. Today, there are many such networks including Toniic, an international group of social investment angels founded by KL Felicitas Foundation donors Charly and Lisa Kleisner. There are also communities of angels that come together on "Investor Days" around the country to hear pitches for start-up social enterprises, sponsored by entities such as the Unreasonable Group in Colorado and Impact Engine in Chicago.For the foundation that looks closely at its current investment portfolio and finds a lack of alignment with its grantmaking objectives, there are many options to put both pools of assets to work for positive social outcomes. From relatively low-risk cash management options with community development financial institutions to high-risk angel investing in social enterprises, every philanthropist can become an impact investor. The key to success is to take an incremental approach, starting with a small portion of assets at first and then expanding as you gain experience and confidence.

Jeffrey Haskell, J.D., LL.M. is a chief legal officer for Foundation Source, which provides comprehensive support services for private foundations. The firm works directly with financial and legal advisors and individuals and families.

It Will Take a Recession to Tame Inflation

And that's not likely to happen this year given the economy's underlying strength.

BY BOB DIAMOND AND LARRY KANTOR

GETTY

The global pandemic produced widespread shortages, culminating in inflation not seen in 40 years. When the surge in prices began more than a year ago, it was natural to assume that it would move back down netflixon its own as supply bottlenecks faded away. But a different reality has become increasingly apparent: Easing supply constraints will not be nearly enough to bring inflation back to an acceptable level. Demand will have to weaken significantly—sufficient to push the unemployment rate up—and that spells recession.

There is no doubt that supply issues—initially brought on by the pandemic and exacerbated more recently by the war in Ukraine and shutdowns in China—have contributed to the rise in inflation. But it turns out that supply is not the main problem. In fact, it has been unusually strong: U.S. consumer purchases of goods fully recovered by the end of 2020 and rose by more than 16 percent last year. Meanwhile, foreign producers have been delivering a record amount of goods to U.S. consumers: Goods imports increased 19 percent in 2021 and have accelerated even further this year.

A surge in demand has been the primary driver of higher inflation, reflecting the extraordinary government stimulus that was applied to offset the severe economic damage from COVID-19. Strong public support was sorely needed following the extensive economic damage caused by the pandemic. But the unprecedented scale of fiscal and monetary stimulus generated a pace of demand that was well more than production capacity. U.S. budgetary stimulus amounted to more than $5 trillion–a staggering 25 percent of GDP–more than five times what was applied during the Great Recession of 2008-

09. Meanwhile, the Fed also went well beyond the historic monetary stimulus applied during the financial crisis: it bought $5 trillion worth of bonds in only two years versus $3.5 trillion over six years.

All that stimulus, and the historically strong economic recovery that ensued, produced a surge in prices of all kinds–from bonds to stocks to houses to goods and services. Moreover, it took more than a year for the Fed to shift toward monetary tightening after inflation began to accelerate, allowing it to gain a momentum that makes it hard to reverse. Costs of production continue to accelerate. Prices that producers pay for goods are running at a double-digit pace, while the U.S. labor market has never been tighter. The unemployment rate has declined from nearly 15 percent to around 3.5 percent in only two years, and job openings and quit rates are at record levels. There are almost two job openings for every unemployed person, a more significant gap than ever recorded. As a result, labor costs are rising at a pace not seen in 30 years.

The economy is already slowing down from the post-pandemic surge, but not enough to lower inflation. Higher prices are reducing consumer purchasing power, and financial conditions have tightened. But aggregate employee compensation, boosted by vital job and wage gains, is running well above the inflation rate, enabling consumers to continue buying at a healthy pace. Housing activity is weakening as prices, rent, and mortgage rates have soared but are still characterized by excess demand. While stock and bond prices have fallen, they are coming from historically supportive levels and are not close to being restrictive. Bond yields remain well below the inflation rate, and overall stock market valuations are not cheap; they have merely moved back to historical averages.

Most importantly, underlying economic fundamentals remain strong. Profits are holding up well, as companies can pass on higher costs to their customers. As a result, they continue to hire and increase capital spending. Household financials are also in very good shape: The hot labor market and massive government transfer payments have boosted income and savings. Consumer debt is not over-extended, and wealth has increased due to higher stock and house prices.

While this suggests that a recession is unlikely this year, it also implies that it will take considerable policy tightening to reverse the uptrend in inflation. That is unless something unexpected–like an adverse geopolitical event—knocks the economy down. Otherwise, the burden of slowing the economy will fall squarely on the Fed, as a sufficient tightening in fiscal policy does not seem to be in the cards. While declining, government spending remains well above what it was prior to the pandemic, and Russian aggression is likely to increase military appropriations.

The Fed will eventually have to get to a restrictive policy stance. Markets are still not there, despite having ratcheted up expectations for Fed tightening this year. Futures price at a policy rate of around 2.5 percent for year-end, which doesn't seem unreasonable. But they also suggest a peak Fed funds rate of under 3 percent in mid-2023, well short of restrictive since inflation is likely to remain considerably higher.

"There are almost two job openings for every unemployed person, a more significant gap than ever recorded."

The reappearance of high inflation presents a much more challenging environment for financial markets. Low and stable inflation allowed the Fed to cut policy rates to zero and flood the financial markets with substantial liquidity injections whenever an economic crisis appeared. Those days are over for the foreseeable future. The sharp drops we have seen in stock and bond prices this year thus seem appropriate, reflecting a new economic and policy reality. Financial asset prices were pushed to elevated levels by unprecedented policy support that is now beginning to be removed. The recent declines have taken much of the excess out of the markets and put them in a healthier position. There are now reasonable prospects for improved performance over the next several months, given the economy's underlying health and realistic expectations for Fed hikes this year.

But markets are not priced for a recession. If the Fed ends up hiking rates well above 3 percent next year and the economy gets hit hard enough to increase the unemployment rate, stock prices will eventually drop to much lower levels. Higher policy rates and inflation that prove difficult to bring down also suggest that bond yields will ultimately increase. The roughly 3 percent ceiling on 10-year Treasury bond yields that persisted for a decade before the pandemic will not hold through next year.

The bottom line is that this business cycle is likely to end in a recession: the price for the excessive government stimulus applied during the pandemic. But this will take many months to play out, and the path between now and then will not be straightforward.

Bob Diamond is the founding partner and chief executive officer of Atlas Merchant Capital. Larry Kantor is an pperating partner at Atlas Merchant Capital. Both are based in New York.

ESG Investing's Solid Returns

Making ESG a priority is good for business.

BY PAUL POLMAN AND ANDREW WINSTON

In the last few years, money has flooded into stock or bond funds labeled as "ESG" (environment, social, and governance). A debate is raging about the labels and whether the companies selected actually perform better environmentally or socially. But as those severe kinks in the system get worked out, we constantly hear an overriding question (and *Worth* suggested we answer): Is ESG good business?

That query is really two different, but related questions:

1. Are ESG funds a good place to put my money? (i.e., will those funds outperform?) and

2. Is it good for businesses to focus on sustainability? (i.e., does it drive profit and growth?).

The first question involves stock picking, at least in the short run. Many studies have looked at whether "ESG outperforms." The answer is increasingly yes, especially if you look at companies which manage their most material ESG issues. For example, manufacturers should focus on energy use and carbon emissions. At the same time, an apparel company may want to focus also on water use and human rights in the supply chain. In his January 2021 letter to CEOs, Larry Fink, CEO of Blackrock, wrote that 81 percent of ESG funds had outperformed their benchmarks in 2020. Of course, 2022 is a much-altered reality, with war and inflation driving oil prices, and thus oil stocks, up.

But these are short-term changes. Nothing has changed the reality of the fast-moving, low-carbon revolution; for example, all major auto companies are committing to sell only electric vehicles within about 15 years. The world has never experienced a transition of this magnitude; it won't be smooth, and those with vested self-interests will try to take advantage of the situation and squeeze profits out while they can. But the macro trends favor ESG. Before the war-driven oil spike, ESG funds were doing well and will do just fine over time. As a quick side note, why do ESG investments have to prove they will consistently outperform, a burden never placed on any other investment strategy?

Stock picking aside, let's look at the other question: is it good for businesses to aggressively manage environmental and social issues? Here we can give an unequivocal yes. First, long-term trends are highly favorable for companies focused on building a cleaner, more sustainable world. As we shift how we make things, get around, and power the world, multi-trillion-dollar markets are in play. Companies that innovate to serve these markets will do well.

"Investors, customers and consumers, communities, and employees demand that companies do better.

At the company level, signs are more than positive. Let's define ESG here not as investors but more broadly about how a company operates in service of larger societal goals. Sustainability has generally meant doing things that manage your environmental and social footprint to reduce the impacts of your business on the world. But that's not good enough in the face of more existential threats. Leading companies are already going above and beyond to create positive impacts, such as sequestering carbon or partnering to decarbonize a sector or value chain. Companies that solve the more significant problems move into "net positive" territory, which we describe in much more detail in our book, "Net Positive: How Courageous Companies Thrive by Giving More Than They Take."

Sustainability creates value in the same ways companies have consistently created value. A sustainability lens helps companies reduce costs dramatically, closely manage risks, innovate to drive revenues, and build a brand or intangible value. For example, managing your carbon footprint cuts costs, reduces human rights problems in the supply chain, slashes risk, creates brand value, and innovates to satisfy ever-more demanding business customers and consumers to drive revenues. The business case is shifting from defensive and reactive to proactive—from reducing risk to seizing tremendous opportunities. This work also demonstrates to stakeholders that you stand for something. You will attract more talent, especially Millennials and Gen Z-ers who care deeply about the values of the companies they work for and buy from.

These buckets of value don't come automatically—they can be difficult, and there are sometimes short-term tradeoffs. But the deal is real. And yet sustainability investments inside companies are often viewed purely as costs. Like with stock performance, this is a burden placed on no other capital investment. Nobody demands that spending on marketing, R&D, or building out AI capabilities will pay back immediately or only in clearly measurable ways. Companies make strategic choices. Why not make your business more sustainable and resilient?

But even with a solid business case aside, asking "Is it good for business?" isn't the right question, and it's almost rhetorical. The business has no choice for three interrelated reasons. First, the cost of inaction—at the societal level and company level—is now far greater than the cost of action. Climate change is costing the world trillions, and 88 percent of large companies say they've already seen assets damaged by extreme weather. Inequality is straining society and driving nationalism and attacks on democracy. These physical and societal costs keep rising while the cost of a more sustainable path keeps dropping (look at the exponential drop in the price of renewable energy).

Second, the pressure from stakeholders is intense and growing. Regulators like the U.S. SEC are mandating climate disclosure and action. Investors, customers and consumers, communities, and employees demand that companies do better. Third, a fundamental reality forces change: a business can't thrive on an unhealthy, poor, and environmentally degraded planet.

So, yes, ESG is good for business. The more important questions then are…how will we make business more sustainable and live within the thresholds of a finite planet? How do we do that in ways that enhance equality and justice? How do we move at the pace and scale that science and morality demand?

The best companies seek out net positive outcomes, where they improve the well-being of everyone they impact. They innovate and partner with others to tackle more significant, systemic issues like climate change and inequality. They attract loyal customers and talent and create the most value, rewarding their shareholders over time. These are some of the best returns you can get for your investment dollar. And it's the only path to a thriving future for your business and all, so embrace it.

Paul Polman, KBE, is a Dutch author, investor, and businessman. He was the chief executive officer of the British consumer goods company Unilever. Andrew Winston is a globally-recognized expert on megatrends and how to build companies that thrive by serving the world.

Comparison of S&P 500 ESG and S&P 500 Index Performance

Source: S&P Global

Bridging The Philanthropic Generation Gap

Boomers, Gen Xers, and Millennials have very different priorities regarding charitable spending

BY CRYSTAL THOMPKINS

Charitable giving is deeply woven into the fabric of wealth planning for most affluent individuals. According to BNY Mellon Wealth Management's recent Charitable Giving Study, 91 percent of survey participants agree that charitable giving was part of their overall wealth strategy. That figure jumped to 100 percent for Gen X.

While all generations are committed to philanthropy, each generation favors different causes and has a distinct vision of the best way to support those organizations. According to Cerulli Associates, the Great Wealth Transfer is projected to pass $68 trillion to the next generation over the next 25 years.

Preparing for this massive shift, it's essential to ensure that wealth and family values are preserved and transferred responsibly across generations. These three steps can put families on the right path:

Start the conversation: The first step is to open the lines of communication and speak frankly about philanthropy as a family. Be proactive about discussing legacy and values. Family meetings allow older generations to explain their giving philosophy and discuss how they've donated historically. The get-togethers also empower younger generations to have a voice and express their opinions on what causes are important to them and their charitable vision for the future. The aim is to encourage the sharing of ideas while showing commitment to understanding differing perspectives.

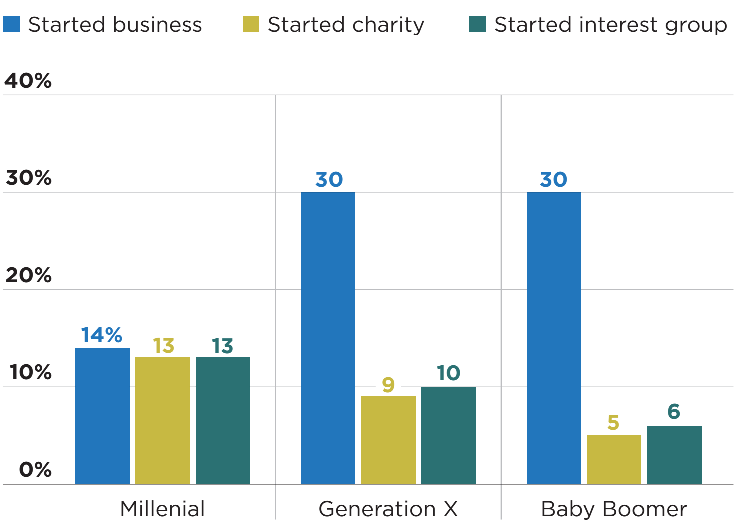
Identify common threads: A Bridgeworks study found that Baby Boomers are inclined to donate to churches, local social services, children's charities, and animal rescues, while Millennials tend to gravitate toward health charities, human rights, and international development. Rather than focusing on differences, families should coalesce around commonalities. Whether you are a Baby Boomer, GenX, or Millennial, everyone wants to make the world a better place, and all generations give for altruistic reasons. Our study found the top two motivators for giving were "a connection to a special cause" and "personal satisfaction." In addition, nearly all investors are at least somewhat engaged with the charities they support.

Put a plan in place: Once a family has identified shared beliefs and learned about various approaches to giving, the next step is to meet with their wealth advisor and create a plan. While nearly all affluent individuals agree that philanthropic planning is essential to wealth planning, roughly half currently have a charitable giving strategy, according to our recent HNW study. That figure drops to 39 percent for the Baby Boomer generation. Many vehicles facilitate philanthropy, such as charitable gift annuities and family foundations. A wealth advisor can present various options and help evaluate the best for a family's needs.

While it may seem like a giant chasm between generations, honest and open communication can bridge the divide. Ongoing conversations about philanthropy can maximize the impact of charitable giving and keep family values alive for future generations.

Crystal is head of Philanthropic Solutions for BNY Mellon Wealth Management.

Charity and Business Experience Varies by Generation



Source: Ipsos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How Richmond Works

The region's commitment to the principles of inclusion and sustainability is helping make it an economic success story.

BY RICHARD BRADLEY

PHOTO BY BILL DRAPER/GREATER RICHMOND PARTNERSHIP

In the economic development community, nothing is as newsworthy as when a company agrees to build a new facility in your city or state, and in June of this year, economic development officials in Virginia had some very big news: the LEGO Group, the Danish manufacturer of those iconic toy bricks, had agreed to build a manufacturing plant in Chesterfield County, not far from downtown Richmond. The brickmaker estimates that the $1 billion plant, the company's only factory in North America, will create more than 1,700 jobs over 10 years. Construction starts this year.

How did Greater Richmond, as the region is known, land such a huge win? First, it has several assets that the LEGO Group found compelling—a skilled local workforce, available land, and proximity to several transportation hubs, which will help the LEGO Group minimize supply chain issues and reach customers faster. But what may have tipped the scale is that Richmond is a leader in advocating the business principles of ESG (environmental, social, and governance), including DEI—diversity, equity, and inclusion— and sustainability. For the LEGO Group, that commitment was key; the company aims to make all its core products from sustainable materials by 2030. The toymaker is also committed to renewable energy and wanted to build a solar park to power its Virginia factory, which will be carbon neutral. The folks in Richmond said they could help make that happen. There was, pardon the pun, common ground.

This level of partnership doesn't happen overnight. In recent years, Richmond's business community, which includes eight Fortune 500 and three Fortune 1000 companies, has steadily fostered a culture committed to equity and sustainability. That culture matters more and more to employers, and it's become a major boost to the region's growing economy. "Investors want to invest in companies that care about people and the environment," says Jennifer Wakefield, president and CEO of the Greater Richmond Partnership, the lead regional economic development organization. "Richmond is well positioned for this." Not only is Richmond demographically more diverse than the average U.S. city, Wakefield points out, but it has a longstanding reputation for being LGBTQ-friendly, and it's become a leader in environmental sustainability.

In the past, Richmond's social and environmental progress has been overshadowed by an impassioned debate over the presence of Confederate statues on the city's Monument Avenue. But throughout the controversy, Richmond was working hard to address its history of slavery and racism, and the statues were removed following the height of the Black Lives Matter movement of 2020. In the aftermath, there remains a pervasive thoughtfulness about racial issues and a commitment to progress.

"I was born and raised in this region," says Victor Branch, market president at Bank of America, which has some 2,000 employees in Greater Richmond. "As a Black man coming from a low-income, under-resourced background, I know firsthand what this community has done and is doing. It's not the community that my parents or grandparents grew up in. My kids are going to have a much better chance at opportunity than they did."

Bank of America's work with the community advances that opportunity; among other efforts, it's a consistent donor to Virginia Commonwealth University as well as the area's historically black colleges and universities, Virginia State University and Virginia Union University. "We want to help keep local talent in Richmond," Branch says. "Everyone here realizes that we have been on the cusp of greatness, and we have to ensure that this time everyone who wants an opportunity can get that opportunity."

That's one definition of sustainability. Another is economic development that doesn't harm the environment, where Richmond has also become a national leader. The work of Dominion Energy, which provides electricity to about 2.6 million customers in the state, is a big reason why. "Dominion has set a goal of being the most sustainable energy company in America, making major investments in wind and solar power, as well as in a diverse workforce," says Charlene Whitfield, Dominion's senior vice president-power delivery.

The company, which aims to be net zero for carbon and methane emissions by the year 2050, takes pride in working with business customers who want to get their energy from renewable sources. It's helped to install 4,300 acres of solar panels in the region, including at Facebook's upcoming 2.5 million-square-foot data center outside Richmond, which opened in 2020 and relies entirely on solar energy. Now, Dominion is also developing the largest offshore wind project on the East Coast. "Companies are developing their own internal goals for sustainability, and they are coming to us to help make it happen," Whitfield says.

It all adds up to a region whose commitment to progress has left it well-positioned for economic growth and social equity. As Victor Branch puts it, "Richmond really is on track to be that shining star for the future."

Diversifying Your Portfolio May Be Hurting Your Retirement Plans

A well-informed retirement investment strategy based on proven systems for building wealth and reducing taxes will outperform simple diversification.

BY TOM WHEELWRIGHT

The key to a successful retirement investment strategy is to start early, invest slowly, and then diversify, diversify, diversify. At least, that's what most of us have been taught. The problem is this formula doesn't work if you want to retire before age 75.

Approximately 49 percent of U.S. adults ages 55 to 66 have no personal retirement savings, according to the U.S. Census Bureau's Survey of Income and Program Participation. The percentage of unprepared people is even higher; just 22 percent of women and 30 percent of men have $100,000 or more for their retirement.

What should we do instead? Replace diversification and an expectation for slow-and-steady returns with laser-sharp focus and a rate of return that will get you to your wealth dream earlier.

Set Clear Goals

Your first step is to get crystal clear about your financial goals. In my work with thousands of people, I've seen firsthand how those who don't have a specific plan in mind are unlikely to have much success.

After you have clarified your dream, you'll need an understanding of the basic principles of building wealth. This includes knowing how to specialize as an investor, ideally focusing on a single asset class that fits your desired lifestyle

Focusing on a single asset class only sounds risky because we're conditioned to equate diversification with risk mitigation. Mutual funds are deemed safer than single stocks. A portfolio of stocks is considered safer than real estate. A real estate portfolio is safer than a single business venture.

What this line of thinking leaves out of the equation is the value of education. Investing heavily in that area is risky if you aren't educated about a specific asset class. But if you take the time to learn about the sector and the particular markets and properties you plan to invest in, much of that risk disappears.

The Four Benefits of Real Financial Education

Four things happen when you increase your knowledge of a specific investment:

1. You increase the level of control you have around the investment. More control allows you to be a wise and active participant in asset management. In our multi-family housing example, more knowledge means you won't be beholden to a property manager for your decisions. You can confidently direct how your building is marketed and maintained.

2. Your rate of return typically increases. Wise investors use their knowledge and control to make decisions that will improve performance. As an apartment owner, for example, you would use your real estate market knowledge to plan upgrades to a property that will appeal to more affluent renters and add long-term value to the building.

3. Your taxes go down. What most people have learned about taxes is wrong. Taxes are not the government's way of "sticking it to the wealthy." The tax law sets a framework for what kind of money is taxed and at what rates. If you and I do precisely the same thing when it comes to money, we will pay the same amount of tax.But the tax law is packed with incentives the government has created to encourage people to do specific things with their money. The more knowledge you have about those incentives, the less you'll pay in taxes. One of the first things you'll learn is that the government favors investing in assets over increasing salaries. The more money you earn, the more taxes you pay. The more assets you acquire, the fewer taxes you pay.

4. Your risk goes down. When you combine a high level of control with higher returns and lower taxes, you will significantly reduce the risk associated with a specific asset class. Compare your average mutual fund to a multi-family housing property you control in a market you know like the back of your hand, which generates a high return rate with additional tax benefits. Which one feels like the more significant risk now?

The key to a successful retirement investment strategy is financial education that includes proven systems for building wealth and reducing taxes. It is a gift you can give yourself, your family, and future generations.

The Key to Effective Philanthropy

In challenging times, philanthropists must remain optimistic and realistic at the same time.

BY ERIC NONACS AND EHREN REED

Following the news these days is not an easy task for the optimist. In recent months alone, we have witnessed COVID's relentless march, the horrors in Ukraine, rampant inequality, and a global loss of faith in democracy, government, and institutions. All of this is against the backdrop of a world rapidly confronting the realities of climate change and the various calamities that flow from it.

Unsurprisingly, even the most well-intended and open-minded philanthropic efforts can seem inconsequential in the face of the numerous existential challenges we now face. And with this in mind, it's understandable that so many of us seek to ignore the bad news out there, or worse, fall into the trap of paralysis and inertia.

As earlier articles in this series have suggested, navigating the current landscape of humanity's challenges requires today's philanthropists to entertain ambiguity, embrace complexity and democratize their decision-making processes. It also involves hope and the belief that any problem can be solved through a delicate combination of passion, resources, cooperation, patience, and persistence.

At times like these, it's worth reflecting upon the experience of others who have confronted unimaginable hardship yet, somehow, managed to stay positive and avoid debilitating pessimism. U.S. Admiral James Stockdale was a prisoner of war during the Vietnam War; he was held for over seven years in the notorious Hỏa Lò Prison (aka the 'Hanoi Hilton') and experienced not only repeated and severe torture but also years-long uncertainty as to whether he would see his family again, or even survive. Yet, as he revealed in a conversation with the author Jim Collins, Stockdale was able to preserve his sanity and carry on by making a critical distinction between a steadfast, pragmatic belief in a positive outcome and baseless optimism: "The optimists. Oh, they were the ones who said, 'We're going to be out by Christmas.' And Christmas would come, and Christmas would go. Then they'd say, 'We're going to be out by Easter.' And Easter would come, and Easter would go. And then Thanksgiving, and then it would be Christmas again. And they died of a broken heart."

He continued, "This is a very important lesson. You must never confuse faith that you will prevail in the end—which you can never afford to lose—with the discipline to confront the most brutal facts of your current reality, whatever they might be."

Similarly, in tackling issues as nuanced as racial inequality, climate change, and immigration, today's philanthropists must move with the urgency these crises demand but must also rely upon patience and pragmatic long-termism, recognizing that progress may take a generation to realize. For example, the destructive potential of climate change mandates that we move quickly and decisively on implementing strategies for both mitigating and adapting to this threat while understanding that certain factors (the world's current energy needs, the existence of 'bad actors,' the amount of carbon and methane already in the atmosphere, etc.) will slow us down. In confronting this and other challenges, philanthropists must act with 'ferocious patience.' The ferocity to treat crises like the emergencies they are and the patience to stay in the fight for the decades it will likely require. This is one example of the cognitive dissonance–understanding and acting upon a set of paradoxical inputs and insights–that today's philanthropists must embrace.

> **"We must be clear-eyed about being 'approproriately small,' while being clear-eyed about our goals."**

Others include the suggestion that philanthropy should be pragmatic about its goals and modest in its expectations—especially in light of our divided and highly-charged cultural and political discourse. The profound depth of our problems requires us to be both optimistic and borderline irrational in defining our goals. Our efforts are both significant and insignificant.

While there is an imperative for all of us to confront the deep fractures in our societies, polities, and environment, there are limits to what one individual's (or a single foundation's) money can achieve. More fundamentally, there is a limit to what money–without the support sound policy, positive behavior change, and collaboration between people with differing points of view–can accomplish. Accordingly, we must be comfortable being 'appropriately small' while being clear-eyed about our goals and ensuring that we are meeting those goals.

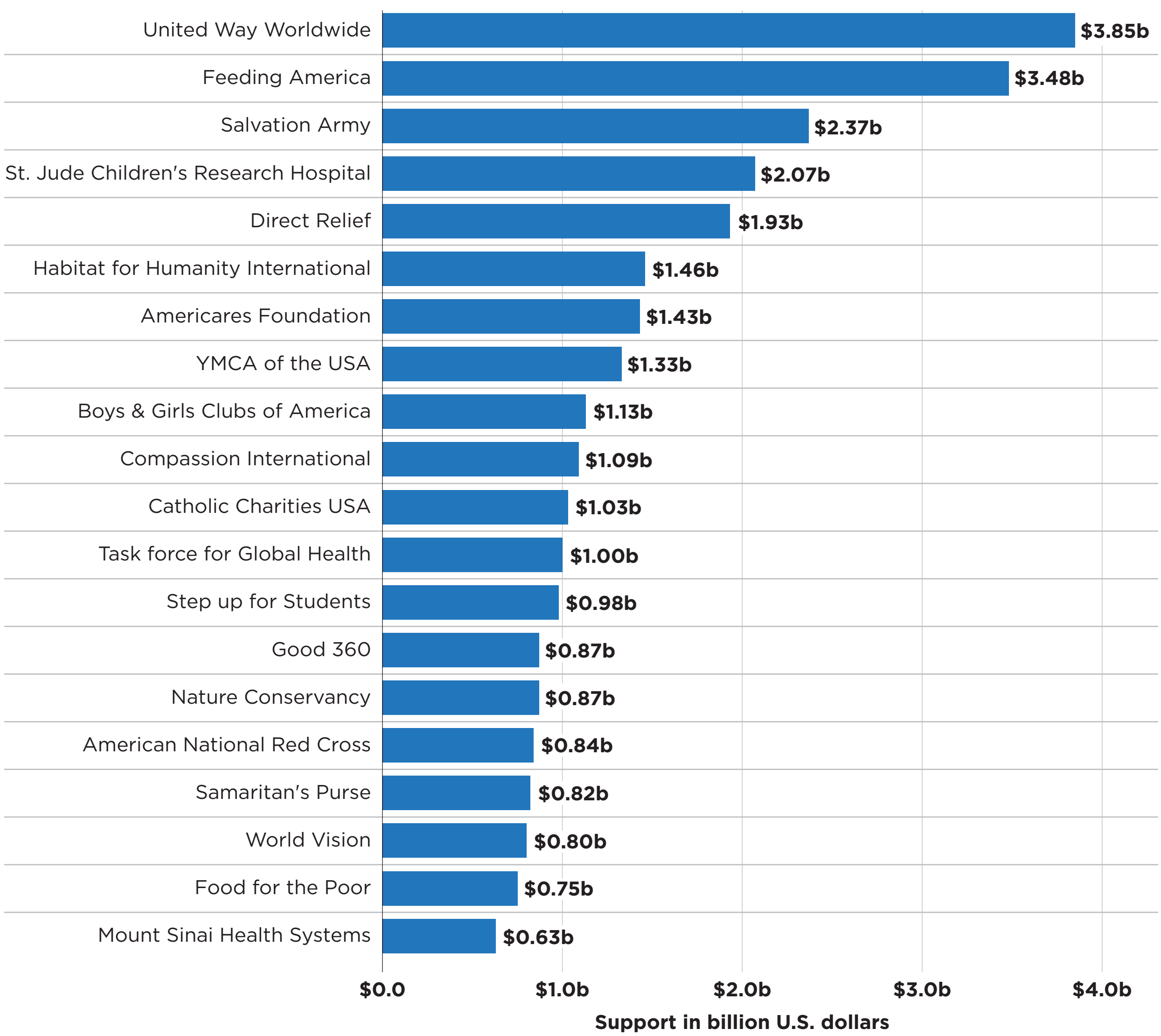
In grappling with these seeming contradictions, the work of the author and business strategist Roger Martin provides some helpful guidance. Across several articles and books, Martin advances the idea of 'integrative thinking,' which he defines as "a form of reasoning which allows you to face the tensions of opposing models constructively. Instead of choosing one at the expense of the other, you generate a creative solution. Your solution contains elements of the individual models but is superior to each."

Martin honed his ideas primarily through interviews with private sector leaders. Still, his concept of the 'opposable mind'–one that is flexible enough to hold and ultimately reconcile two contradictory ideas without retreating to simplicity when faced with complexity and uncertainty–should serve as an aspirational goal for the philanthropist seeking to support individuals and organizations engaged in addressing truly wicked problems.

So, where might integrative thinking–and Admiral Stockdale's lesson–lead us to meet the daunting challenges mentioned above? If nothing else, we need to realize that hope is a 'long game.' And that evidence-based optimism, wedded to patience and persistence, is not a failure of belief. It is, instead, a way to make peace between the philanthropic imperative, widespread uncertainty, and the practical limits on our ability to effect change.

Eric Nonacs is the principal at Golden State, a Nashville-based strategic consultancy. Ehren Reed has worked in and around philanthropy for over two decades, continually operating at the intersection of learning and improvement.

These U.S. Charities Received the Most Private Support in 2021 (in billion U.S. Dollars)



Source: Forbes

Vertical Farming Grows Up

Moving farms indoors may be the best way to protect the outdoors—and ourselves.

BY STEPHEN DOMBROSKI

Sitting atop Philadelphia's City Hall is a statue of William Penn. For years, an ordinance prohibited buildings in the city from being taller than the brim of Mr. Penn's hat. In the 1980s, the city was running out of real estate. They realized that something had to change. City officials soon reconized that if they "grew up," they could take advantage of a great deal of available open space in the sky. The ordinance was rescinded; giant skyscrapers were built, resulting in the growth of new businesses and an influx of people into the city. In addition, the city was able to collect additional tax dollars.

Over the last 25 or so years, society has been worried about the ability of agriculture and food manufacturing to provide enough food to feed humankind. Global warming and other natural events have fueled those concerns as available horizontal farming space decreases due to urban sprawl and other issues. So, similar to Philadelphia's story, but with the added benefit of science and technology, the agriculture and food industries are now looking up rather than out. A new technology for farming still in its early stages, Controlled Environment Agriculture (CEA) or Vertical Farming has the agriculture and food industries buzzing.

This revolutionary technology could be to the Food Industry what the Electric Vehicle (EV) is to the Automotive Industry.

How Does it Work?

The process of Vertical farming is twofold. It begins with growing crops inside buildings that act like greenhouses but are much more technologically advanced. Second, these buildings are multi-story facilities that take advantage of vertical space. With farmland at a premium, "growing up" will allow the agriculture industry to acquire much-needed real estate to grow crops. Vertical farming's goal is to optimize plant growth and be able to produce more natural food products. The technology uses soilless farming techniques and hydroponics to grow plants vertically in stacked layers in structures with controlled environments. This is in direct contrast to farming outdoors which is limited to regional land where weather and terrain are suited for growing crops. The internal environments are climate controlled and can minimize seasonality. Plants, vegetables, and fruits that generally grow in hot and dry climates can now be produced in cold weather climates in these modern greenhouses. They could be considered plant-growing factories.

The technology is so versatile and flexible that the structures could be a low or high rise. Skyscrapers, old warehouses, shipping containers, old factories, tunnels, and abandoned mine shafts are all examples of places that can be used to house these vertical farms. They could be located in any geographical area as well, urban or rural. The aftereffects of the pandemic have provided additional opportunities. Globally, urban areas are being transformed due to the increase in people working virtually, corporations closing urban offices, and people moving out of cities. Real estate that was always priced ridiculously high is now surprisingly affordable. Buildings previously housing other businesses can now be turned into Vertical Farms.

Reducing the Impact of Seasonality and Climate Restrictions

Seasonality is a common disruption to consumers, retailers and manufacturers, and producers of agricultural and food products. There are only certain times of year when many items can be grown, and there are only certain climates where some products can be produced. What if seasonality could be significantly minimized? Food manufacturers need to constantly manage a major issue of the availability of seasonal agricultural products and ingredients. Vertical farming can mitigate if not eliminate, many seasonal problems. With the indoor facility and technology, vertical growers can stagger the growing cycles of products and grow most products year-round regardless of season or geographical location. This will result in more food being grown in less time. In addition to year-round product growth, what about the impact on the labor market? Labor resources could be more consistently employed than seasonal shifts or sporadic layoffs. In addition to the agricultural benefits, this can also have a huge social impact.

Moving Agricultural Products Closer Consumers

A significant process constraint to food manufacturers is the location of the sources of their ingredients. Suppose a manufacturer in the United States has a component that is grown in another part of the world due to climate issues. In that case, their entire operation will be impacted, from the time it takes to grow to the cost of materials. Consumers face the same issue regarding products that can only be grown in other regions of the world. Product availability is limited; the prices are high, and due to prolonged and arduous transportation routes, the quality is often impacted. Today's consumer is demanding and wants everything yesterday. That does not always work when it comes to agricultural and food products. The distances and transportation issues mean wasted time and lost sales. Vertical farming takes up far less space than the traditional farm, and with growing products upward in structures. These can be located near the actual processing facility and to a large concentration of consumers. Food manufacturers might be able to source many of their ingredient needs locally. Another possibility is that manufacturers can build facilities right at the manufacturing location and source their products.

Reduction in Lead Times and Transportation Issues

Ingredients sourced closer to or at the manufacturing facility will significantly reduce lead times. Procurement and transportation lead times will be reduced as well as related costs for transportation, special handling, etc. This will allow for better demand, production, and procurement management to help minimize waste, maximize efficiencies, increase customer service, and improve profits. Moving the source of products closer to processing facilities could reduce the number of trucks needed, thus minimizing CO_2 emissions.

Better Traceability and Food Integrity

Food safety, quality, and integrity are the first priority in the agriculture and food industries. With less soil and more controlled growing environments, there will be reduced chances of damage from insects or negative effects of pesticides. Growers and manufacturers will have the ability to embrace technology for food tracing to maintain traceability and food safety throughout the supply chain. Given that vertical farming can simplify the supply chain in many cases, compliance with traceability, quality, and food safety regulations should be easier for all players.

GETTY

AeroFarms is growing produce in this verical farm in Newark, New Jersey.

The Next Great Industry Transformation

Almost every part of the food and beverage value chain could be affected by CEA. Where, when, and how products are grown could be revolutionized. The speed at which food products can be delivered to consumers could improve tremendously. The food manufacturing and agricultural marketplace could be reinvented and transformed forever.

As with everything in life, this new technology is not without its share of challenges. Most businesses and participants in the agriculture and food supply chain will need to adapt. And, there will be some costs. Constructing and maintaining these facilities will require additional large financial investments. However, the potential cost savings throughout the supply chain could significantly offset the initial costs. Manufacturers will have to embrace new systems to compete, trust technology, and move many environments to the cloud to be part of the revolution. This could be outside traditional agriculture, and food organizations' comfort zones. Still, to be a sustainable and adaptive enterprise, the initial risk and change management process should be worth the investments. Vertical farming allows for the sourcing of food products and ingredients to be expedited and greatly improved. The time from field or greenhouse to fork will be decreased, thus streamlining and improving the supply chain and individual manufacturing and farming organizations. The industry players will need to modify and adapt to new processes and systems to access and process information faster than ever. The rewards, however, could be limitless for organizations that provide food products and society as a whole. The benefits could be endless. Over the last half century, there has been a great deal of negativity in the agriculture and food industries. Finally, things are looking up!

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SEIA

How to Turn ‘Down Market Lemons’ Into Tax Lemonade

BY THEODORE E. SAADE

Theodore E. Saade, CFP®, CMFC®, AIF®

MANAGING SENIOR PARTNER

▶ When it comes to down-market “lemons,” the year 2022 at its midpoint has already served up a whole grove of them. From 40-year high inflation to war in Ukraine to yet another COVID variant, all these events and more have negatively impacted global markets, and in turn, investment portfolios.

First and foremost, making an overall plan and sticking with that plan is what really matters. But smart investors will also revisit their plans and look for ways to turn those financial lemons into tax lemonade. And here are three strategies to get you and your advisors started.

1. Converting Regular IRA Funds to Roth IRAs at Market Lows

Roth IRAs consist of after-tax dollars you contribute. When those dollars appreciate in value, the gain realized is nontaxable. Now, if you move funds from a traditional IRA to a Roth IRA, thereafter all appreciation on those funds is also tax-free. However, because the funds in a traditional IRA are pretax dollars, when you move them, you will be required to pay tax on them. But remember this: if the value of your traditional IRA account has declined this year, the amount of tax you owe on them will decline also.

2. Tax Loss Harvesting

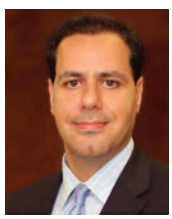
“Tax loss harvesting” means: 1. Selling securities that have dropped below their purchase price; 2. Taking that “loss” in value, or “harvesting” it, and using it to offset rising taxes on successful investments. This reduces your tax bill. In a perfect world, the “loss” you harvest would equal or exceed your tax liability on gains. And if 2022 sees significant losses in bonds and bond funds, you may have even more opportunities to turn an investment lemon into tax lemonade.

3. Accelerating Gifting as Part of Your Estate Plan

Currently, the IRS allows parents to annually “gift” each of their children, grandchildren, siblings, and nieces/nephews $16,000 per spouse, or $32,000 per married couple, all of which is tax-free to the recipient. But gifting stocks that have declined in value in a down market also allows more shares to be gifted within IRS limits. Meaning: 1. Those gifts, now at a low, will have a higher expected future return. 2. Accelerating gifting at these lower valuations may ease taxes by removing their future growth from the estate.

Of course, other options exist for downside protections such as alternative investments and structured notes. A savvy advisor will make the most of all these options and ensure that you turn financial lemons into tax lemonade.

ABOUT SEIA



Theodore E. Saade, CFP®, CMFC®, AIF® is a Managing Senior Partner with Signature Estate & Investment Advisors. Mr. Saade has been in the securities and insurance industry since 1995 maintaining a successful independent practice with specialties that include investment planning, retirement planning, and estate planning.

He has been published and recognized annually as a Leading Wealth Advisor in *Worth Magazine*. He was also voted Top 40 Under 40 as published in REP. magazine and recognized as a Top Wealth Manager for “Providing Exceptional Service and Overall Satisfaction” in Los Angeles magazine.

Mr. Saade received his degree in Economics with Honors from UCLA. He is a CERTIFIED FINANCIAL PLANNER practitioner and has completed the CFP® and Chartered Mutual Fund Counselor education programs. He has also earned the Accredited Investment Fiduciary® professional designation along with holding his insurance license (CA Insurance License #0B63654). Mr. Saade currently resides in Beverly Hills, California with his wife and 4 sons.

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SEIA

Your Real Financial Priorities Might Not Have Revealed Themselves Yet

BY THOMAS C. WEST

By Thomas C. West CLU®, ChFC®, AIF®

SENIOR PARTNER

▶ None of us can accurately project what life would be like tomorrow if we were less able. Less capable of cognitive functioning. Less sure of our decisions when confronting an uncertain future. COVID should have reminded us that our health's future is uncertain. However, demographic realities are quite certain–more of us are likely to need some care in our lifetime than not.

I empower my clients to make decisions that optimize and protect their financial future according to their priorities. Often, they have an early understanding that wealth is not an end but rather a means to secure a lifestyle and to support their relationships with people or organizations that are meaningful to them. However, they often are not initially aware that some of their financial priorities are likely to change.

I began my career serving families facing dementia. These new diagnoses made families throw previously important financial priorities out the window. I later learned that this was common. Even though aging was an entirely predictable process, most families were ill-equipped to adjust their financial priorities and adapt to new circumstances.

Families replaced "leave a legacy" with "whatever it takes, I want to stay at home." Clients committed to "impacting my charity" changed their priority to "I won't be separated from my ill spouse." Efficient portfolio stewardship took a back seat to significant spending on family experiences before an imminent death.

Most financial decisions are emotional ones first. They may involve money but are really about something else. I have lost count of how many times I have been humbled by families radically realigning their financial priorities during periods of care with hope, love and a newfound respect for the personal connections that bind them.

What would the priorities be if you were less able to communicate tomorrow? What if you need assistance for the first time in your life? Are you and your family ready for that shift of financial priorities?

Here's my closing advice on setting your financial goals: Start at the end of your story. It's the best foundation for all of your other financial goals and supports even the most sophisticated plans of the well-heeled investor. An emergency room is a terrible place to have an epiphany about what is truly important to you. And on a sincere and hopeful final note, know that you would very likely discover these true priorities on your own sooner or later.

ABOUT SEIA

Thomas C. West, CLU®, ChFC®, AIF®, a senior partner in SEIA's Virginia office, has worked in investment management for over 25 years. He has a robust wealth management practice that emphasizes cash flow in all stages of retirement with an emphasis on planning and asset management for families facing the challenge of health-related dependency due to disability, illness, or death. Tom is the creator of Lifecare Affordability Plan®, a proprietary healthcare-driven financial planning tool from SEIA.

Tom has been interviewed by the *Wall Street Journal, Washington Post, InvestmentNews*, and *New York Times.* Tom's non-profit community service in aging services has stretched for decades. He previously served in leadership positions on the boards of Insight Memory Care Center and the National Capital Alzheimer's Association. Tom currently serves on the board of the Jewish Council for the Aging and is the Vice-Chair of the Board of Goodwin Living.

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SEIA

Sell 50 Percent of Your Concentrated Position to Achieve a Predictable Outcome

BY ERIC PRITZ

Eric C. Pritz, CFP®, CMFC®

SENIOR PARTNER

▸ Liquidating a portion of a large, concentrated position and using the proceeds to diversify a portfolio is not a difficult concept to understand. Still, for many investors, it is a very difficult strategy to accept, let alone execute.

As a starting point, we often advise our clients who have emotional or behavioral attachments to a large, concentrated position to sell half and use the proceeds to create a more diverse set of holdings. Selling half can typically solidify their financial lifestyle and leave the remaining half as gravy to provide for charities or future generations.

Simply put, having highly concentrated investments in a limited number of stocks or sectors means you not only have a less predictable outcome, but an outcome you may not want.

Over the past decade-plus, the market has produced a lot of prosperity for investors, sometimes at record levels. Then came 2022 and a market dealing with everything from the highest inflation in 40 years, to a seemingly omnipresent pandemic, to a war in a small country with global reverberations.

Amidst this turmoil, some seriously high-profile stocks have just plunged in the first half of 2022. That includes the likes of Netflix (-71 percent) and Amazon (-36.3 percent) and Apple (-23.0 percent), Home Depot (-33.9 percent), and Tesla (-36.3 percent). Now imagine a high percentage of your stock holdings are concentrated in any one of those companies. Because of that concentration, your entire portfolio is going to take a significant hit.

One might argue, "Well, yes, they are down now, but they'll come back." Or, maybe not. A 2014 study found that "... since the early 1980s, 40 percent of all companies experienced a severe loss and never recovered." Think of companies like GE, a true American icon, that is now around a quarter of the size it was 22 years ago. The world is changing faster than ever and the leaders of today will not necessarily be the leaders of tomorrow.

The one thing that most likely won't change (and one of the reasons investors are gun shy to sell) is capital gains tax. We have solutions in place to reduce and in some cases eliminate this mental and monetary roadblock.

To sum up, carefully planning a strategy that moves you from a large, concentrated position to a diversified portfolio spreads outcomes, good and bad, across a diversified group of accounts. And that achieves the ultimate goal: predictability.

ABOUT SEIA

Eric C. Pritz, CFP®, CMFC® is a Senior Partner with SEIA. He has provided financial advice and wealth management services to high-net-worth individuals, organizations, and companies for over 18 years and has been active in the financial industry since 2001.

His ongoing success is attributed to his passionate commitment to the financial well-being of his clients. He is also an executive member of The LA25, an entrepreneurial group of wired South Bay professionals. Additionally, Eric serves on the board of directors as treasurer of The LA25 Foundation, a charitable organization, dedicated to improving the lives of children through education and the arts. He has been a resident of Manhattan Beach since 2003 along with his wife, daughter, and son.

Eric received his Bachelor of Arts degree in Business Economics from the University of California, Santa Barbara. He is a CERTIFIED FINANCIAL PLANNER and Chartered Mutual Fund Counselor.

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SAUGATUCK FINANCIAL | WESTPORT, CT

Investing Amid "Stagflation"

BY LUKE ANDRIUK, CFA®

In 2021, U.S. investors experienced a phenomenon they hadn't seen in 40 years: high inflation, which rose 8.5 percent year-over-year in July.

Uncharacteristically, this dramatic rise in prices came amid slowing economic growth. Data released in July confirmed the U.S. economy just experienced two consecutive quarters of negative GDP growth, which meets the technical definition of a recession, even though inflation-adjusted consumer spending is roughly flat and the job market remains strong.

Regardless of the debate around whether the U.S. is already in a recession, the combination of higher prices and slower growth, termed "stagflation," should prompt investors to consider potential adjustments, which might include:

Asset Diversification Across Economic Drivers

Many portfolios are positioned to prosper during boom times, with little consideration given to periods of economic malaise. Diversifying beyond stocks, which form the backbone of the average investor's portfolio and are highly correlated with global growth, might provide important benefits such as lowering portfolio volatility and improving risk-adjusted returns. This diversification can include:

1) Owning Commodities: Commodities are one of few asset classes to produce positive returns in 2022. Commodities typically behave cyclically, experiencing booms alongside global economic growth and busts during slowdowns. Today, supply-side constraints resulting from structural underinvestment have improved the return outlook for commodities despite slowing global growth.

2) Owning High-Quality Fixed Income: Fixed income has a long track record of effectively diversifying stocks due to their low return correlations. This is particularly true in risk-off market environments. Should recession concerns outpace inflationary ones, we would expect the Federal Reserve to pause or even reverse recent rate hikes to help re-ignite economic growth. When interest rates decline, sovereign debt and high-quality corporate bonds have historically benefited and are preferable to gold or cash as alternative safe-havens.

3) Owning Value Stocks: Value stocks outperformed Growth stocks in the 1940s, 1970s, and 2000s, all decades characterized by above-average inflation. Meanwhile, low inflation regimes in the 1930s and 2010s saw Growth outperform Value. We've already seen U.S. Value beat U.S. Growth by nearly 10 percent year-to-date. Value's lower valuations and higher dividend yields continue to make it stylistically attractive relative to Growth.

Investing vs. Maintaining Cash

It may seem enticing to hold more cash in an economic slowdown, but elevated inflation will erode the purchasing power of cash much faster today than in the past. "Timing" the market with respect to re-deploying sidelined cash can also result in missing market rebounds, which tend to happen in close succession with drawdowns.

Look Beyond Market Corrections to Take a Long-Term View

Despite the challenges presented by the macroeconomic environment, investing in a diversified portfolio has proven to be a resilient strategy time and time again. Since 1950, there have been 24 market corrections, and roughly 80 percent of those corrections recovered in less than two years. Long-term investors require that their portfolios perform over decades, not years. Those decades will bring varying macroeconomic and geopolitical shifts, making diversification across low-correlated asset classes important to achieving acceptable risk-adjusted returns.

In today's low growth/high inflation environment, investors may benefit from non-correlated diversification, select tactical portfolio tilts, and remaining invested rather than moving to cash both to avoid losses and principal erosion during periods of high inflation. Individual investors should consult a knowledgeable financial advisor to ensure any strategy is aligned with their financial situation.

ABOUT LUKE ANDRIUK, DIRECTOR OF INVESTMENTS

Luke is responsible for investment idea generation, portfolio performance monitoring, and leading the Saugatuck Financial Investment Committee. He has his Chartered Financial Analyst designation and is a graduate of Cornell University.

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Drinking Green Doesn't Just Mean Chartreuse

Zero-waste rums, employee-owned tequilas, and vodka made from leftover dairy waste.

BY KATE DINGWALL

With the state of the world right now, there are so many reasons to reach for a drink. But to pile onto the problems, wine and spirits are wildly wasteful to produce. On average, every liter of alcohol produces an additional 15 liters of waste material. One bottle of bourbon whiskey requires a whopping 13 liters of water. That's not considering the water needed to grow barley, corn, grapes, and other crops, clean them, and cool them to the correct temperature. After you've finished the last drop of drink, each bottle leaves a trail of detriment from undrinkable wastewater, spent grains and grapes, and byproducts of labeling and bottling. Factor in the energy needed to harvest, process, store, bottle, brew, distill, or ferment, and distribute the bottle to shelves and the actual cost of spirits can be sobering.

But don't let this put a damper on your happy hour. Producers are becoming increasingly aware of their impact, and many of the world's best booze makers are cruising towards carbon neutrality.

What makes a spirit sustainable? Is it the quality of raw ingredients? Do they use pesticide-free grapes or locally grown grains? What about the brand's philanthropic efforts? Are the employees paid a fair wage, and is the local community considered? What about energy sourcing?

It's a lot to consider, but ideally, it's a bit of everything. "Alcohol starts its life in orchards, fields, and farms, so sustainability has to start there," says Tim Etherington-Judge, a former national brand ambassador at Diageo and now-founder of Avallen.

"Sustainability is a spectrum," says bartender McLain Hedges of Manhattan's Hidden Leaf. "It can involve any number of reflective practices to lessen the negative impact on the earth and the people involved. Farming practices, bottle and label sourcing, water usage, type of adhesives used, C02 emissions, shipping, and transportation, paying employees a livable wage, fighting for social changes that impact the lives of their community, and reinvesting profits in the communities from which the spirits originate, water usage. All of these factors contribute to sustainability."

The International Wine and Spirits Competition (IWSC) asks sustainable brands to hire from nearby, support the local supply chain, repurpose raw materials (reducing single-use plastics, recycling casks, and using alternative energy sources), and source ingredients consciously.

Essentially, it's up to a brand how they want to pursue sustainability—there's no copy-and-paste solution to a cleaner planet.

In Mexico, tequila creates 5 kilos of agave pulp and 11 liters of waste per liter. Traditionally, this is dumped into local waterways, polluting community water supplies. Sombra Mezcal takes the pulp and waste and dries it in the sun. Once cooked, the bricks are used to build homes for locals displaced by local earthquakes.

Tequila Cazadores uses its waste, sawdust, coconut shells, and tree cuttings to fuel its carbon-neutral distiller. If they have excess, it's repurposed into fertilizer.

Beyond raw materials, Patron hires hyper-locally and offers a robust education fund for staff pursuing degrees or certifications. Tanteo Tequila—a chipotle and jalapeno-spiked tequilas producer—provides music lessons and daycare for children, English lessons for adults,

GETTY

vocational training, and free primary medical care. The distillery is owned by a cooperative of local (primarily female) farmers.

(Curious about your favorite tequila? Website and app Tequila Matchmaker catalogs responsibly-produced bottlings.)

If martinis are more your staple, Air Vodka is completely carbon-negative, made via a distillation system fueled entirely by solar energy. The silky vodka is made with just two ingredients: carbon dioxide (CO_2) and water—no grains, no potatoes, no flavoring. The company does this by using electrolysis to remove the hydrogen from the water, releasing oxygen. The hydrogen is then fed into a "carbon conversion reactor" to create ethanol without any organic component. For every bottle produced, a pound of greenhouse gas is removed from the air.

Canada's Vodkow makes vodka out of leftover whey from local cheese makers. It's gorgeous in a martini, with subtle, creamy undertones. British-based Black Cow Vodka also calls for cheesemaker's leftovers, translating what would be discarded into a rich base for an espresso martini.

In the rum world, Diplomatico focuses its sustainability on the local rainforest, zeroing in on replanting native tree species with funds generated by their rum sales. Since the program started, the brand has replanted over 16,000 species of trees in the Venezuelan rainforest. The distillery runs on self-sustaining energy and transforms all liquid waste into fertilizer for its fields and for all surrounding farms and families.

In the wine world, sustainability is just as wide-sweeping. Some producers skip sulfites; others use sheep to control pests and weeds rather than pesticides. Producers like Iuli and Envinate work to rehabilitate almost-extinct grapes to preserve a wine region's heritage. At the same time, Ashanta in California will forage wild fruit around Los Angeles to make expressive, singular, slightly experimental wines.

Martha Stoumen grows organic grapes and makes natural wines out of California. The commitment to land stewardship means she spends much more time in the vineyard, pruning and caring for the vines to ensure they thrive without synthetic fertilizers. Still, that time translates into joyful wines with a very distinct identity.

With all these different factors, how do you figure out if brands practice what they preach? "It's tricky!" says Holly Berrigan, the founder of MYSA Wine shop. "How will you know when you're in a wine store and see a bottle on the shelf?" She tracks importers and retailers who work with sustainable and thoughtful products and looks for vegan, organic, or biodynamic labels.

Although, greenwashing—where a company touts sustainability initiatives but lacks genuine efforts—is rampant. "Limited edition paper bottles won't make a dent in CO_2 emissions, just like banning plastic straws won't change the vast quantities of plastic in our oceans," says Etherington-Judge. It's about real, holistic change.

"Not to mention certifying your product as USDA Organic costs a ton of money for small businesses," says Hedges. Many organic products may forgo the official label in favor of financing other sustainable initiatives. Berrigan notes that "almost all natural wine producers are self-funded. They're doing the work themselves. That typically means they make less margin and work much harder to ensure quality and avoid the shortcuts that can hurt the environment or be less than natural for the consumer."

When Remy Drabkin set out to set up the sustainability measures at her Oregon winery, she knew she couldn't finance everything at once. So she built the framework for future endeavors, like a roof designed to support a solar panel system one day.

"Long-term sustainability is setting yourself, and ourselves, up for the future," says Drabkin.

Clean Spirits

NOVO FOGO CACHAÇA

"Novo Fogo has been a beacon of sustainable practices in our industry since first hitting the market," says Hedges. "They use organically grown sugarcane with no herbicides & pesticides and gravity fed systems, plus the use of cane byproduct to fuel the fires that heat the stills and reusing unwanted parts of the distillate itself for things like fuel and reforestation of the local lands. Not to mention the Cachaças themselves are absolutely delicious!"

REMY WINES

While winemaker Remy Drabkin may seem California casual cool, she focuses on elegant Italian varietals at her Oregon winery. Think a mineral-driven Arneis—one of Piedmont's most expressive white wines— and a fleshy, juicy Dolcetto that Barbera fans will love. Her brand-new winery is the first commercial winery on the continent to be built from carbon-neutral concrete made from carbonized organic materials. Wine aside, she's a keen advocate for diversity in wine, spearheading Wine Pride Week and founding the world's first Queer Wine Festival.

EMIDIO PEPE

Few words aptly describe this Abruzzo winery better than 'iconic.' In 1964, Emidio Pepe set up the winery to convince the world that Abruzzo wines can outmatch any of the world's best reds. He's done just that with elegant, artisanal, highly age-worthy, and all-natural wines. Both reds (Montepulcianos) and whites (Pecorino, Trebbiano) are well worth a cellar, though don't skip out on the Cerasuolo: a cherry-hued dark rose made with Montepulciano.

DIPLOMATICO

Diplomatico's rums are versatile, lending themselves to killer cocktails and excellent after-dinner sips. Their idyllic distillery in the Amazon sits on miles of rolling pastures, where almost 1,000 dairy-producing water buffalo and cows feed on used grains from the distilling process.

AVALLEN

Avallen is an incredibly elegant, carbon negative Calvados with beautiful apple tones and a touch of cinnamon and oak. Every bottle not only lessens the impact but also removes 2.7 kilos of carbon dioxide from the atmosphere. Bottles are shipped without plastics, and calvados is made entirely with apples.

GOOD VODKA

The brainchild Tristan Willey and Mark Byrne, Good Vodka partners with the Federación Nacional de Cafeteros (National Federation of Coffee Growers of Columbia) to buy overripe coffee fruit from farms all over South America, compensating farmers for their fruit waste. The discarded fruit is concentrated then turned into vodka.

Rethinking Design

Supply-chain problems shine a light on the inherent unsustainability of the design industry. Flourish Spaces responds by going local—sometimes as close as your attic.

BY STEVIE MCFADDEN

We waited for months. Summer turned to Fall. Thanksgiving passed, then Christmas. It was well into 2022 when we finally got the email that my client's dining room chairs, the final piece of a home redesign that was years in the making, were finally shipping.

At this point, the missing pieces, a set of Layton Chair's with Rattan in Dusk, still have a long way to go. They are coming from Asia, where most high-end furniture is made. They have to make it onto a loading dock and then be put into a shipping container, hopefully without too much delay. It could take weeks to make it across the Pacific. Arriving at the Port of Long Beach, they will sit (in an unconditioned crate) until the shorthanded workers can unload them. Then my beautiful chairs sit

on a truck, making their way across the country. If, that is, we can find a transportation line with available drivers.

Finally, the moment arrives. Those gorgeous chairs we have been dreaming of for almost a year are carried across the threshold of my client's home, into the dining room, and around the custom table, where they look even more stunning than I'd imagined. I'm happy, the client is happy, and all is well.

Almost.

Within a month, I get a call that those lovely, expensive, unique chairs that should last many lifetimes are starting to break. The beautifully caned seat of one chair snapped when the family's 12-year-old girl sat on it—followed by another. And still another.

It turns out that those chairs, while stunning, were fabricated from a non-native species of tree whose wood is not made for our hot, Southeastern climate. Also, they were never intended to sit in unconditioned containers while they made their many-month-long journey to their final resting place. The shrinking and swelling across the miles and locations had weakened and eroded the quality of these pieces before anyone actually sat in them.

I would love to tell you that this story is an anomaly, but I can point to many others (and probably start a support group with my fellow interior designers who have similar battle stories from the past two years).

When the pandemic forced me to close the doors of my interior design studio in early 2020 and send my team to work from home, I panicked. Our commercial and hospitality projects halted, and our residential clients told us to pump the brakes.

Luckily, sooner than I could pop a Xanax or take some deep breaths, the phone was ringing off the hook for residential design services...home offices, new kitchens, whole house renovations, second homes! It was a dream for a boutique design firm like ours to have more business than we could handle. But before long, we realized this dream also had the makings of a nightmare. Many clients were eager to buy beautiful products, but those products were impossible to get.

Anyone brave enough to undertake a renovation project since 2020 is painfully aware of the supply chain challenges brought to us by COVID, labor shortages in shipping and logistics, a foam shortage due to the 2021 deep freeze in Texas, and a war in Ukraine (Did you know that 10 percent of the U.S. lumber supply comes from Russia?), and now volatile gas prices. How many collective hours have been spent on the phone by eager purchasers of furniture, only to learn that their product continues to be delayed or back ordered indefinitely?

I thought much of this could be avoided by sticking with high-end, trusted brands. These trade-only luxury sources were not in demand at the same level as more accessible retail brands, so I thought I was relatively safe. I was able to order my product and get it here, albeit with a more extended timeframe than my clients and I would have liked. But long lead times were only one part of the nightmare.

Experiences like this have me rethinking what sourcing luxury goods for design projects look like. For starters, this is a terrible experience for my clients. But it is also repellent to conscious consumers for whom the materials used for manufacturing and their impact on the environment matter as much as their quality. To say nothing of hidden environmental costs for transporting materials across the globe. And as the pandemic opened many of our eyes to income disparities, issues of equality and inclusion, and other injustices, practices around supplier diversity matter more and more.

Notably, there are design benefits to thinking responsibly about sourcing. I have found a richer well of more unique, better quality and more readily available sources. We have found ourselves sourcing more regional, small, and custom fabricators. I had historically relied on a bevy of artists and makers where I am in Richmond, Virginia, to bring special custom touches to my projects. The unavailability or unreliability of products critical to a project drove me to depend on those trusted partners and encouraged me to explore and discover new ones.

That is why I opened The Flourish Collective, showcasing the products and potential of these local fabricators on the first floor of my

design studio. This could be where my clients could come in and create or co-create a bespoke, custom space with anything and everything from lighting to wallpaper to dining room tables. My experiences with my partners in The Flourish Collective, like Umanoff Designs or Alicia Dietz Studios, lead me to similar sources like The Mill Collective, who are curating and showcasing small, domestic fabricators across the country. And an exploratory shopping trip to Charleston landed me at The Fritz Porter Design Factory, where clients can access beautiful and unique goods from boutique textile makers and domestic, customizable furniture purveyors.

The supply chain crisis also made it easier to get my clients on board with repurposing interesting but tired or well-worn pieces. As a designer, I've always encouraged my clients to let us incorporate family pieces and meaningful objects into our designs—it imbues a space with story and meaning, elevating any plan to create a more acquired or curated feel. The alternatives to the pieces we wanted and couldn't get in a timely or guaranteed fashion were already hiding in plain sight in my clients' homes. Lacquering that ubiquitous brown furniture in an unexpected color and adorning it with updated hardware (the jewelry of case goods) or reupholstering that old Chippendale sofa with a modern fabric not only addressed issues of availability but became the piece de triumph of the design. Reuse—Recycle never looked so good.

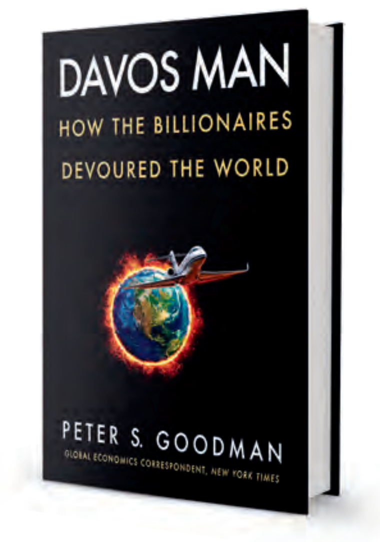
Of course, not all my clients have a treasure trove in their attics to pick from. I've turned to vintage sources like Chairish or First Dibs when I can't find that particular item at my favorite local spots like Verve Home Furnishings. Visits to The Scott Antiques Market have helped us layer and complete projects and offerings in our showroom with unique décor and artifacts. We ditched Market in High Point this year in favor of attending The Round Top Antiques Fair in Texas to load up on beautiful, available goods. In the process, I discovered even more small makers and artists offering bespoke and heirloom quality goods.

If I can make one recommendation for when you are dreaming about the next project or purchase for your home, think small and hyper-local (and nothing is more hyper-local than your attic!) It's a beautiful way to minimize your carbon footprint, support local tradespeople in refinishing and repurposing, support small and regional artists and businesses (including female and minority-owned businesses), and yield a beautiful product in the process. ⓦ

Photos by Ethan Hickerson. Featured products: Blanket ladder by Alicia Dietz Studio displays handmade Kantha blankets, a repurposed vintage chinoiserie credenza pairs with a new rattan chair from Red Egg, who has a commitment to sustainably made furniture.

Mixed Media

BY JASON ASHLOCK



BOOKS

Davos Man: How the Billionaires Devoured the World

CUSTOM HOUSE
BY PETER GOODMAN

At some point, things were looking up. Steven Pinker declared that we had listened to our better angels and defeated violent tribalism. Hans Rosling insisted that—our feelings be damned—the facts support the celebration of our humanistic project. Yuval Noah Harari made it evident to anyone with a pulse and an Audible account that since humans had triumphed over all mechanisms of apocalypse, it was time to invent some new horsemen. It was good while it lasted.

On the boomer apologists, Goodman calls bullshit. And not so gently. Discarding specious data and curated optimism for a no-punches-pulled indictment of the avatars of late-stage capitalism, the *New York Times's* Global Economics Correspondent suggests that, if we did accomplish some great Pax Whatever, we enabled a tremendous "looting of the peace" along the way.

In Goodman's dim view, the thieves are Davos Men: a cohort of condemnable caricatures whose puppeteering and profiteering is masked by philanthropy and perfumed by performances of virtue. Their muscles pull the levers that ensure a permanent underclass is held outside the castle grounds by the looming hedgerows of income inequality, earnings gaps, homeownership rates, retirement savings, student loan debt, lopsided educational opportunities, skewed asset-building subsidies, and dozens of other structural thickets.

Goodman's as funny as he is angry, with an ironist's touch that must be necessary when covering economics. And he lacks even a drop of the moralistic. His complaints aren't petty, nor a lamentation of the world's endemic unfairness. The crime for Goodman isn't wealth, greed, or a pseudo-intellectual obsession with Friedman of Mandeville. The real enemy isn't the Davos Man or the free market sunshine that gave him his powers. The enemy is bad policy, poor logic, a lack of second-and third-order thinking, and a fundamental miscalculation that capitalism, in Scott Galloway's words, could ever thrive when not atop a bed of empathy.

To recover that empathy is to find the modest, sensible solutions that combat the collective fecklessness that has plunged tens of millions into poverty and relegated their progeny to an economically immobile society on the brink of breakdown. Meanwhile, its kings board rockets to the stars, above a republic so enthralled by its own mythology of wealth that its better angels are now privately owned, waiting to be gilded by the gates.

PODCAST

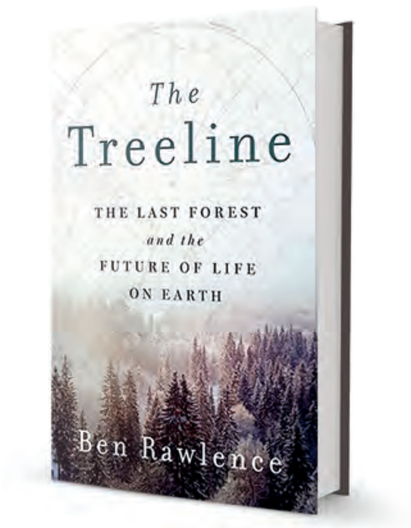
Mothers of Invention

MARY ROBINSON, MAEVE HIGGINS, AND THIMALI KODIKARA

Trying to talk about climate change and the human adaptations necessary to combat it in a productive, engaging way is a riddle of epic proportions. So, the podcast that's so far managed to generate some of the most effective discourse on the topic should be created and hosted by Irish voices.

Mary Robinson, the first female president of Ireland and a former UN high commissioner, sits with surprising ease alongside comedian Maeve Higgins to host a series of conversations with primarily female innovators. They work across sectors as diverse as agriculture, human rights litigation, biodiversity, new economics, and beyond. Their topic? How climate change solutions are emerging most vibrantly among the community most impacted by the devastation: women, and often women of color. Bringing these voices, bodies, and brains onto the stage is not only an exercise in centering the margins but in shining the bright light on those working on refining the art of the possible in diligent and creative ways that may save us all.

Maintaining a sense of joy and progress in a space dominated by fatalism, blame, and avoidance is a feat most difficult. Yet, somehow the hosts pull it off with admirable consistency. Joined occasionally by the show's producer Thimali Kodikara, the show is a tireless intersectional exercise that never feels tiresome. Honest humor, perfect irony, and even exuberance lace every episode, leveraging what neuroscientist and comic Sophie Scott teach: laughter is as much about belonging and connection as it is about the quality of the joke. Still, the jokes are legitimately funny, a perfect countermelody to Robinson's deep expertise in navigating systemic power. Together, the wry dot-connecting and intelligent synthesis, the playful and pugilistic, the endearing and eviscerating, make progress seem possible within even the tightest constraints.



BOOKS

The Treeline: The Last Forest and the Future of Life on Earth

ST. MARTIN'S PRESS
BY BEN RAWLENCE

If one hero has emerged from the shared social trauma of climate change, it is the tree. Reforestation, with its enormous potential for global carbon capture and its promise to buy us some time in our efforts to reach carbon neutrality, seems one of the few concepts that can shift communities from apathy to action.

Corporations plant trees to celebrate employees' birthdays. Ecosia plants a tree every time you use their web browser. Aspiration plants a tree every time you use their credit card. TenTree bests them all by planting—you guessed it—ten trees for every tank or tee. The books in Peter Wohlleben's bestselling series have introduced millions to the sophisticated inner lives of the towering organisms. Suzanne Simard's viral TED talk invites us to imagine how forests form harmonious societies. We've come a long way from chaining ourselves to sequoias in protest. Our inner dendrophile awakens.

If we are going to give the trees such attention, Ben Rawlence would like us to grapple with the fact that there's at least one place on earth we don't need any more of them: the boreal forest, Earth's largest land biome. Looking down on Earth from above the North Pole, the boreal forest forms a set of asymmetric parentheses, a ring split by oceans, hosting an agro-multitude, an incalculable multitude of trees that grow atop permafrost preserved by long months of freezing temperatures. The treeline stops at the tundra's edge, tracing what we've long called the Arctic Circle.

That circle is contracting at an alarming rate. The white tundra is turning green. As temperatures rise, Rawlence writes, "the trees are on the move. They shouldn't be." Why does it matter if young pine, spruce, and fir leave their forests to encroach upon the ice? Because "even more than the Amazon, the boreal is the lung of the world,"—the patterns of atmospheric circulation, cycles of water and oxygen, ocean currents, and polar winds are shaped by the functioning of this forest. And the forest has lost its way. We are all of us Macbeth, watching an unnatural movement of woods and wondering what ill the proceeding pines portend.

Across 300 pages, Rawlence travels the circumboreal belt, mining the geological history of these ancient, impenetrable regions and seeking to understand the odd behaviors of the trees in each location. Scots pine in Scotland. Birch in Scandinavia. Larch in Siberia. En route, he blends adventure chronicle, science journalism, nature writing, and meditation on Earth, both past and future.

He is a generous guide. On one page, an expansive, poetic flourish in the tradition of Annie Dillard dilates the pupil of your imagination. On the opposite page, he's Bill McKibben, leveling a devastatingly clear-eyed description of the fate that awaits on the other side of 1.5 degrees global temperature rise. Everywhere, he sways like a documentary filmmaker: in frame just long enough to nudge the narrative before disappearing behind the camera to center those who live among the forests.

In those portions, the book shimmers like ice in the sunshine. In the stories of humans on the edge of the world, Rawlence welcomes the wise histories and prophetic visions of Indigenous and First People accounts. Alongside scientists and explorers, these voices serve Rawlence's larger rhetorical aim: to position the humans of our epoch in our geological arc. This is not, as advertised, a book about trees. Instead, this a story of wonder and ingenuity, the drive to know, and the limits of understanding. It is a book about time and how much we humans have of it, of the unfathomable millennia that shaped this blue and green and white dot, and the barely unimaginable future that may one day see the boreal ruling over a planet they have primarily to themselves.

DOCUMENTARY

Navalny

STREAMING ON HBOMAX

Essayist Rebecca Solnit says the definition of hope is simpler than we think: since we do not know how things will turn out, we might as well act. One wonders if Alexei Navalny, the jailed leader of the opposition movement in Russia, believes this to be true. Followed and harassed for years, poisoned with Putin's trademark nerve agent, detained upon recovery and return, and now imprisoned in a brutal maximum security prison, Navalny may suggest to Solnit a revision: even when you know exactly what will happen, hope suggests you should act anyway.

That defiance is displayed in the documentary "Navalny," directed by Daniel Rohrer. Filmed in secret in 2020 and early 2021, the film works across two scales: Navalny's steady rise and public labor to build a coalition that dared imagine a toppled Putin and the investigation into his poisoning in the weeks that followed the attempted assassination.

In nearly every scene, Navalny appears fully present, comfortable in the frame and his story, and yet already elsewhere. Self-promoting and masterful with media, he also embraces his own diminishment, establishing the Anti-Corruption Foundation, whose gears will keep turning whether or not his hand is on the crank. At turns warm and icy, blending gravitas with gravel, he is a man who somehow sees past his lifetime.

Specters of death are everywhere in the film, a thriller haunted by its inevitability. As the investigative team uses novel techniques, cutting-edge technologies, and good old-fashioned sleuthing to track the assassins, the camera captures Navalny on more than one occasion reminding the crew that the viewing of the final cut may well be at his funeral.

That day has not yet come. Perhaps the end isn't yet written, and hope can still surprise. The film delivers the unexpected. Without spoiling the film's jaw-dropping shocker, take this quote from Rohrer: "Spies whose job it is to go around the world and poison people don't just pick up the phone and blab about what they're doing. Except they do." W

EVENTS

FROM TECHONOMY 2022 TO TED WOMEN, THIS FALL IS LOADED WITH LIVE EVENTS YOU WON'T WANT TO MISS

SEPTEMBER

Techonomy Health + Wealth

SEPTEMBER 20, 2022
NEW YORK, NY

Business often gets blamed, often correctly, for causing our climate problems, but the solutions must come from business as well. This one-day event will explore systemic solutions to the crisis. Notable guests include Seth Godin, Richard Fruehauf of US Steel, City Winery Founder Michael Dorf, and Julia Jackson of Kendall Jackson Family Wines.

Unfinished Live

SEPTEMBER 21-24, 2022
NEW YORK, NY

Hosted by writer, commedian, and commentator Bartunde Thurston, Unfinished Live invites leading experts and engaged citizens to help to shape our digital future. A future where new technologies and policies enable a stronger democracy, a fairer economy, and a more just society. More than 2,000 technologists, artists, journalists, advocates, and boundary-breakers will assemble in September, creating an unparalleled community of disruptive thinkers committed to shaping what's next. Notable speakers include Tristan Harris of Center of Humane Technology, author Cory Doctorow, and author Shoshanna Zuboff.

OCTOBER

Money 20/20

OCTOBER 23-26
LAS VEGAS, NV

Founded by industry veterans from Google, TSYS and Citi. Money20/20 is where the payments, banking, fintech and financial services community unite to create new and disruptive ways to move, manage, spend, and borrow money. Speakers at the four-day conference include Vinod Khosla, B Generous Founder Dominic Kalms, and FTX President Brett Harrison

PopTech

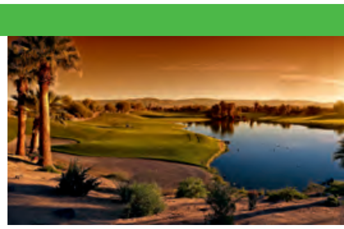
OCTOBER 27-29
WASHINGTON, DC

One of the longest-running thought forums in the U.S., the PopTech Conference serves as an annual gathering place for scientists, artists, humanitarians, and activists. It is a future-looking playground that serves as a catalyst for what's next. Speakers to be announced.

TEDWomen Presents

OCTOBER 24-28
ONLINE

This week-long online festival will offer interviews with leading women on change, work, rights, joy, and the future. The festival will feature both Gallery passes and Connector passes, that enable attendees to network and build their social networks. .



Summit Series

NOVEMBER 11-14
PALM DESERT, CA

Summit Palm Desert is a multidisciplinary experience designed to foster deep connections within our community of amazing like-minded people. Notable speakers include Tony Fadell, Mark Hyman, Esther Perel, and Ray Kurzweil.

Techonomy 22

NOVEMBER 13-15
SONOMA, CA

Digital tech and science are advancing rapidly, but so are the crushing forces of climate change, economic inequality, and political instability. Can Technonogy really solve the worlds problems? Techonomy 2022 takes that question. Notable speakers include Larry Brilliant, Jeffrey Katzenberg, Waymo CEO Tekedra Mawakana, and Vivienne Ming.

NOVEMBER

Aspen Institute Cyber Summit

NOVEMBER 16
NEW YORK, NY

The Aspen Cyber Summit brings together leaders from business, government, academia, and civil society to discuss the world's urgent cyber threats and drive action to help secure the future. This nonpartisan summit is one of the most significant stages for cyber policy discussion, helping to spur dialogue and momentum on today's challenges. Past speakers included Deputy Attorney General Lisa Monaco, U.S. Senator Angus King, and Wael Mohamed CEO Forescout.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