

BRIGHT GREEN FUTURE

HOW EVERYDAY HEROES ARE
REIMAGINING THE WAY WE FEED,
POWER, AND BUILD OUR WORLD

by

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DOORWAY TO A BRIGHT GREEN FUTURE

I'D JUST WALKED INTO THE LAST DAY OF A SOLD-OUT SOIL CONFERENCE. I had come to glimpse a quiet revolution of farmers and ranchers who were quite literally growing fertile ground out of thin air.

But before the talks began, and with a few minutes to spare, I made my way to the concessions table. It was here, as I helped myself to a cup of artisanal breakfast broth, that someone approached me from behind.

"Paper cups!" she said. "And we call ourselves eco-conscious here, but we're using paper cups. I don't see anyone with a reusable mug." She brandished a blue-rimmed glass.

In an attempt at sarcasm, I said, "Give me convenience, or give me death."

She turned to me and frowned. "You know, I've toured paper factories. They are horrible places. Chemicals and acids, streams that get ruined forever. Think about that as you use your paper cup, or any time you use paper. I always carry this glass. It's been in my family for 40 years and it serves me well. You need to think about what you're doing to the planet."

Ouch. I wanted to explain that I'd forgotten to pack a travel mug on my flight from California to Colorado, but thought I might be called

out for not taking a horse-drawn carriage over the pass. I felt something familiar—shame. It was the shame that my everyday actions were destroying the planet. It was the shame that paper (not even plastic) cups weren't good enough.

The encounter reminded me why I was writing this book. It's an example of how ordinary people are often made out to be guilty for the destruction of the planet. We've somehow shifted the blame from polluters onto individuals. Meanwhile, the solutions we're given to remedy the massive problems in front of us are small actions, like remembering to bring our own personal cups to every event. These lifestyle changes are helpful. But there's a huge disconnect between the scale of small cups and the challenges of global waste and climate change.

Nick Tilson, a Lakota activist and community builder, put it well. "The solutions to our problems have to be at least as big as the challenges that we're facing." As individuals, we're stuck with small actions, while shaming ourselves for massive, seemingly unrelated global challenges that are largely out of our control.

Into our cocktail of shame, we mix in a healthy dose of fear. Many of the messages we hear about the planet obsess over everything that's wrong. They project a nightmare future—all the hypothetical worlds we don't want for our children. They're very good at keeping us up at night, but not so good at moving us towards a solution. Fear may motivate us to respond to immediate danger, like the threat of a pandemic. But in the face of a slow-moving disaster like climate change, this emotion backfires. When everything may seem relatively fine on the surface, even if conditions are slowly getting worse, most of us learn to tune out or deny the constant cries of crisis.

For many years, before this project began, I'd sunk deeply into a combination of guilt and dread that could only be relieved by straight-up ignoring the problem. I'd been largely on the sidelines, trying to distract myself from the impending doom that kept popping into my news feed.

At the time, I was working for a vacation rental company, writing descriptions of seaside resorts, trying not to think that one day they may be under the sea. Maybe if I ignored it hard enough, climate change might somehow ... not happen.

But then, something else happened. Through the magic dice of a Craigslist post, my partner, Lila, and I moved into an apartment with professor Gregory Schwartz. Though he was a generation ahead of me, he had more wide-eyed optimism than I ever did. It was a fearless and infectious optimism that mixed with a lifelong love for the planet.

One day, about a year into our time as roommates, I sat down on the couch. I was preparing to watch TV, but as I reached for the remote, I saw a manuscript on the coffee table. It was for a book Greg was writing about how to live more sustainably. I leafed through it, intrigued, not knowing what to expect. It wasn't the eco-friendly recommendations, but the shift in mindset that moved me. I'd been so caught up in the media of fear and shame that even a glimmer of hope had the force of a lightning strike. It blasted to pieces my doubt and doom, clearing a path for something new. When Greg walked in two hours later, I was still on the couch. I put the papers down. "I want to help you write this book."

This project began as an attempt to break free from the fear and shame that stifles us. It's a response to the idea that if we only focus on tragedy, if we only focus on all the things we don't want, then we'll never get a chance to work towards the world we deserve. Without that vision, the few with the power to forge our future will do it for us, and odds are, it won't be the one we want.

These words carried new weight in the wake of COVID and the rising Movement for Black Lives. It often takes major crises to realize the urgency of creating a better world.

Greg and I had spent the last four years searching for stories that go beyond "How do we fix this mess?" and focus on "How do we make

something better?” How can our human world live in harmony with nature? How can we create prosperity in our own backyard? What does the world we want to live in *actually* look like? Who’s building it? And how can I be a part of that effort?

This book explores such questions through the stories of people working to answer them. These changemakers seek responses that are as big as the problems they face, but grounded in the places they love. It’s a combination that melts through fear, shame, and inaction, and in doing so, reveals a blueprint for a better world.

HUMAN—NATURE

BEFORE I MET TREVOR, I DID RESEARCH DEEP IN THE COSTA RICAN rainforest. Every morning I awoke to an alarm clock of howler monkeys, followed by a crescendo of bird calls and buzzing insects—radio signals in secret languages. A vaulted tree canopy created a three-dimensional space teeming with the density and diversity of inhabitants that you might expect in the skyscrapers of New York or Hong Kong. Remarkably, this natural metropolis had been there, in all of its complexity and abundance, for millions of years.

In this surreal setting, I was investigating how the human population was thriving because they were protecting, rather than exploiting, this ecosystem. I came to see that the beliefs and feelings that locals had about nature profoundly affected their actions toward it. Those who were raised to notice and appreciate nature—and especially those who deeply understood nature—were measurably more likely to protect it, both in their personal and professional lives. I believe this is true for all of us.

Ultimately, I was exploring a fundamental question about the relationship between people and the environment. How can human beings respect the timeless cycles of nature while still providing for our own needs? Even more importantly, what can we learn from those natural cycles about surviving and prospering on a rapidly changing planet?

We still have a long way to go towards acting on that learning. For every pristine swath of rainforest I've seen across four continents, I've witnessed another destroyed. I remember the sickly sweet aroma that filled the cabin on a bus ride in a densely forested section of Malaysia. You often smell it before you see it. Coming around a bend, I saw smoke rising off a charred clearing in the forest. Farther down the road, I saw the final result—a monotonous grid of palm oil trees.

An ancient forest had been replaced with a plantation that, with the aid of massive inputs of pesticides and fertilizers, would produce oil for a few decades. The irony is that palm oil was originally seen as a step in the right direction. The global food industry used it to replace trans-fats, while the European Union used it as a biofuel for cars in order to meet their carbon-reduction targets.

It seemed bizarre that a major solution to climate change somehow involved destroying the rainforest. It only made sense in an industrial system whose ethos had drifted far from the logic of nature. Natural ecosystems are highly adaptive and have shown, over hundreds of millions of years, how to replenish resources in infinite, iterative cycles. Though our human economy assumes that resources will never run out, it's designed to deplete them as quickly as possible. We take, we make, we trash. This kind of thinking may have worked when there were only a few hundred million people around, but not in today's crowded world. It's become clear that updating our beliefs and long-held assumptions is just as important as updating our technology.

If we want to save the planet, we have to think like the planet. All species on Earth are part of a circular flow of energy and resources. Human civilization can and should start operating as *a part of* that flow, rather than *apart from* it. When we reimagine our economy like an ecosystem capable of regenerating all of the resources it uses, we flip the script on our future. Instead of seeing fear and scarcity, we find opportunity and abundance.

In writing this book, Trevor and I interviewed over 200 people who are building a future that heals the planet and enhances human prosperity at the same time. They're growing seeds of a new *regenerative* economy across four categories that account for essentially all the world's carbon emissions: energy, industry, cities, and farms. But these changemakers aren't just targeting carbon reductions. Their true aim is much bigger—a global renaissance.

They re-envision an *energy* economy that grows wealth for communities, emits nothing, and is organized around a symbiotic electrical grid. They reimagine *industry* as an ecosystem where materials replenish themselves. Steel, plastic, and concrete become nutrients in an urban environment that rebuilds itself, while unlocking millions of new jobs from the recovered value. In our *cities*, they show us how residents can use “tactical urbanism” to revive long-neglected main streets, and how dying malls can be reborn as walkable neighborhoods. On *farms*, they're creating a living infrastructure in the soil that becomes stronger with every harvest, reinvigorating and enriching farmers, while healing the land and ourselves.

Some people may think we need a great leader with a singular vision to master-plan these shifts. But agents of a better world are emerging from a million places. They're rising to the challenges we face at the local level, building small yet powerful parts of the larger whole. It's the same way that nature works, with different creatures forming communities in an ecosystem. This blueprint for change empowers us to create a vision for our own neighborhoods and cities, shaping our dreams for the next generation.

These concepts are not liberal or conservative. We offer no opinion on the merits of capitalism or socialism, or on whether the free market or the state is the righteous hand to seize the future. Nothing is supreme about either. Whether change happens through a government program, business venture, non-profit, cooperative, or some clever blend of them

all makes no difference. What matters most is that these entities reflect the needs and desires of the people they serve.

This is a book about ordinary people doing incredible things. While they may be presented as intimidatingly smart or even a tad eccentric, they may also live right down the block. None of these individuals on their own have the power to move markets or draft era-defining legislation. But taken together, they can do much more. They can give the rest of us the power to create the world we want to live in. They make all of us the heroes of this story.

Where our own experiences as authors are relevant, we highlight who's narrating each chapter. In ones that don't mention either of us, we share the role of co-narrators. At the end of each chapter, you'll find questions that can help you explore the ideas discussed in these stories in your own life. This book is not a definitive guide of recommended steps to take, but rather, evidence of world-changing actions that are already happening. It's a gateway to begin imagining a new future in the places you care about most.

While we've selected specific stories, we don't mean to endorse specific people or organizations over others. Most of these stories are set in North America, and many of the solutions focus on people's experiences in these places. But there could be a book like this one written for every region on Earth.

For each individual featured, there are many more doing equally inspiring work around the world. In tales of injustice, it's often said that for every villain defeated, there are 100 others waiting to take their place. In this book, for every person trying to build a better world, there are 1,000 more already doing the same.

PART ONE

Energy



“DON’T SEARCH, DIG, HOARD, AND FIGHT
FOR ENERGY. JUST PAUSE AND NOTICE
THE SUN WARMING YOUR SKIN AND THE
BREEZE BENDING THE TREES.”

— ANONYMOUS

ABOUT TWO DECADES BEFORE MY TIME IN COSTA RICA, I FOUND MYSELF on a trip in East Africa, walking through the savanna. After miles of open wilderness, I came upon a small home overflowing with people. Peering inside, I saw a crowd watching a soccer match on a television. But there wasn't a power line for miles. *How in the world do they have a TV out here?* I thought.

Then I noticed a modest, solitary solar panel on the roof. A few steps forward and I saw three more homes, each with panels and interior lights. I was amazed. If this remote, relatively impoverished village can be 100-percent solar-powered, then why can't we do the same in the United States?

The short answer is that it's possible for areas without electricity to entirely skip fossil fuels and go straight to renewables as they develop their economies. This is exactly what happened when much of Africa leapfrogged the expensive infrastructure needed for landlines and went straight to cell phones and cell towers.

In the US, however, modernization must confront the fossil-fuel industry. The conversion to renewables, while indeed happening, has been significantly slowed by the already entrenched energy sector and its broad influence.

An energy system has been created that is very good at two things: centralizing wealth and distributing danger. Most energy is delivered by utility monopolies or an oligarchy of oil. Protected from competition by the government and their sheer size, they have little incentive to modernize and can pass on the cost of not doing so to their customers and the general population. Yes, people can make a good living working for these enterprises, but ultimately they operate by sucking resources from a place until it's been exhausted and then moving on, leaving behind those they once supported. In every part of the system, from mining and burning to how the industry monopolizes markets and interacts with communities, the existing energy economy does little to respect the interests of ordinary people.

When South Carolina Gas & Electric spent \$9 billion on a nuclear plant that was never completed, they raised rates, calling on their customers to pick up the tab. When power plant emissions lead to the deaths of 10,000 people every year in the US, our healthcare system absorbs the cost. When Pacific Gas & Electric went bankrupt due to negligence in the deadliest wildfire in California history, they got the taxpayers to bail them out. As energy expert and entrepreneur, Jigar Shah observed, “It’s like all the upside profits I take and all the downside risks I socialize with the government.”

The challenge we face is not just how do we switch to renewables, but how do we create a better energy system?

In this section, we show what that better system might look like. We go through many parts in the process, from the way energy is generated and distributed to how it’s financed and how it’s consumed. We see that change at any of these stages begins with a shift in mindset—the realization that it’s possible to take back control over our energy production. We showcase how we might reverse-engineer the grid to create prosperity for the people and communities it serves. And we share the stories of next-generation energy providers, activists, citizen investors, and micro-grid savants working to build an energy future that respects and reflects the interests of everyday people.