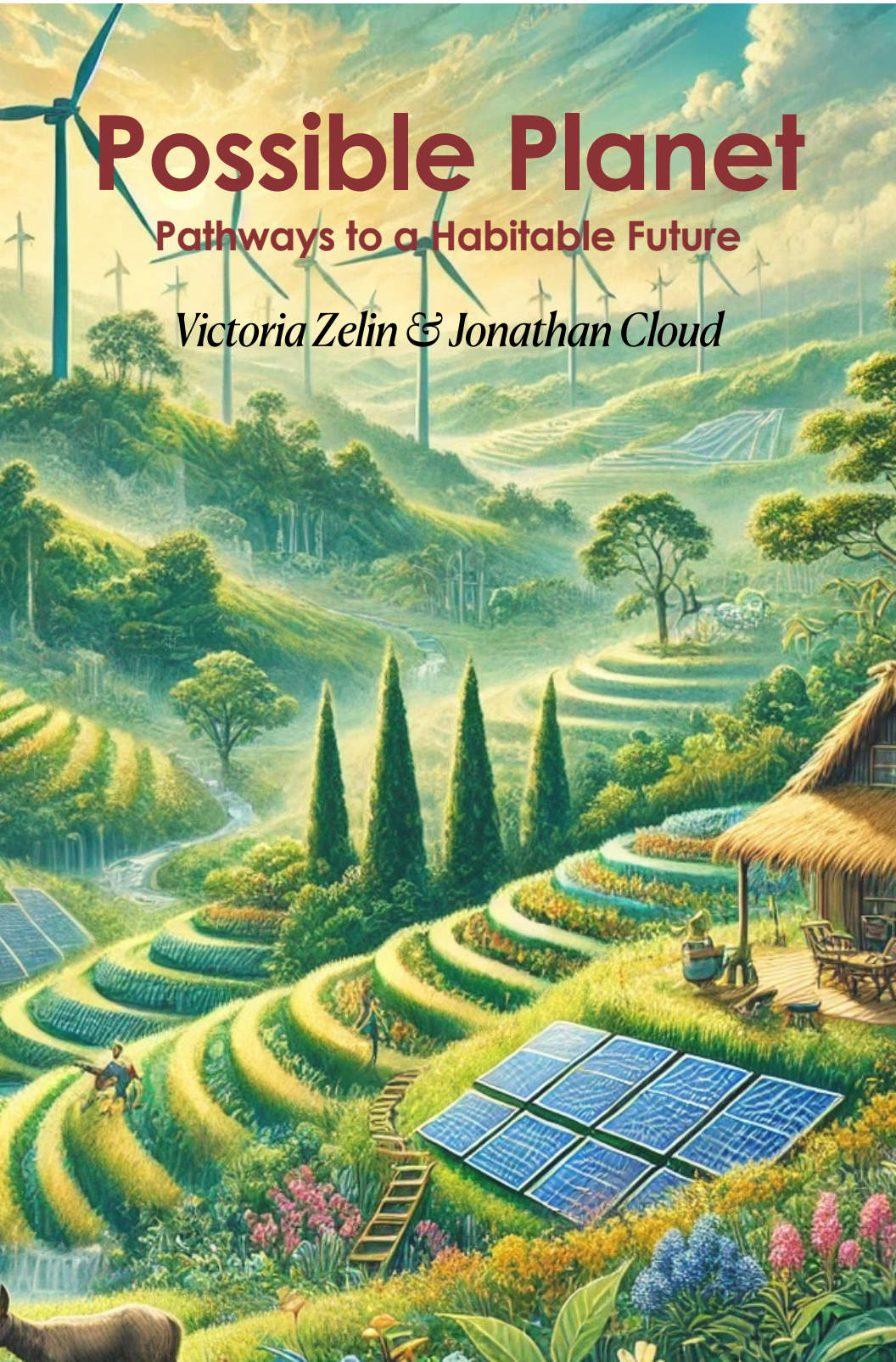
Possible Planet

Pathways to a Habitable Future

Victoria Zelin & Jonathan Cloud



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Composed in Canela Text using Pages.

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“Another world is not only possible, she is on her way. On a quiet day, I can hear her breathing.”
— Arundhati Roy

Of course, what we’re truly seeking is not another Earth but the one that already exists here—damaged and degraded, yet alive and still sustaining us. Our vision is for her to return to the paradise that existed before humans bought into the story of separation that divides us from nature and each other.

Dedicated to our Granddaughter Amira, in the hope that her generation will create a better world than the one we are leaving her.

Prologue

We've considered writing this book for a long time, but life always seems to get in the way. We're not primarily writers but rather activists and organizers. We began collaborating (for the second time—we worked together in the 1980s building passive solar homes) after Superstorm Sandy, determined to tackle the impacts of the climate crisis at a local level. Before that, we had multiple overlapping careers—Victoria's was in the corporate world, in the U.S. and Canada, while Jonathan's was more international and entrepreneurial.

Like many others, we came to realize that in these roles, we were not really making the difference we wanted to make. Both of us were early achievers. Victoria had an Ivy League education, initially studying anthropology at Duke and later pursuing organization development at Yale's School of Management. Jonathan graduated at the top of his class in sociology from Victoria University of Wellington, NZ. He received a Commonwealth Scholarship, which led him to a graduate program at York University in Toronto. From there, he was recruited into the Canadian federal government, where he spent nearly a decade on

energy and environmental policy. This was followed by a year at the *Institut National D'Administration* and the *Ecole des Hautes Etudes en Sciences Sociales* in Paris.

Notwithstanding these early advantages, our subsequent careers have had plenty of missteps, and reflecting on these setbacks and failures has led us to accept more modest goals.

Our nonprofit, originally the Center for Regenerative Community Solutions and subsequently renamed Possible Planet, was founded in 2012 and soon took on a life of its own. Along with our partner Gus Escher, we undertook to bring PACE (Property Assessed Clean Energy) to New Jersey. A dozen years later, and after many adventures, we finally got the legislation passed and signed by then-Governor Phil Murphy. Three and a half years later, the program was finally rolled out by the New Jersey Economic Development Authority.

The first part of this book discusses cutting carbon emissions, a task that now seems too little, too late. The second part discusses the alternative—regreening the Earth—and the emerging movement toward bioregionalism.

The idea of a "Possible Planet" has been a guiding principle for our work, representing a vision of a

thriving human future. This book explores that vision not as a distant aspiration but as a potential reality that can be achieved through a fundamental shift in how we perceive ourselves and the world. It's an exploration of how we can move beyond current paradigms and create a world that works for everyone without harming nature.

This involves examining the challenges we face and the solutions that can bring about real transformation. The book is something of a personal journey as well, reflecting on the questions we need to ask ourselves to shift our paradigms. It moves beyond a focus on problems to explore regenerative and innovative solutions.

Introduction:

A Planetary Perspective

This is a book about where we choose to stand, which determines both what we can see and what remains hidden. Some people see the world as merely a storehouse of economic resources, a view that has led us to the brink of ecocide. By contrast, we choose to view the world as a living system—deeply harmed by the actions of humanity and, above all, those of our generation—but nonetheless continuing to sustain us.

When we look at the Earth as a planet, it becomes clear what an extraordinary phenomenon life is—an intricate, dynamic force that has shaped the atmosphere into a delicate balance of oxygen and nitrogen, cycled water through vast oceans and rivers, and created ecosystems brimming with biodiversity. Regardless of one's opinion on the Gaia hypothesis—the idea that the Earth functions as a self-regulating organism—it is evident that our biosphere is an interwoven, self-renewing system. Without our interference, nature finds its equilibrium, recycling nutrients, regulating climate, and sustaining the conditions for life itself. From the perspective of outer space, Earth appears as a single, living entity, pulsating with the rhythms of life.

Yet, in the last several hundred years, we humans have truly made a mess of things.

Beginning with the advent of agriculture, we altered the land to suit our immediate needs. We cleared forests, plowed grasslands, and diverted waterways, turning once-lush regions into arid landscapes. The Fertile Crescent, the birthplace of civilization, is now largely desertified, a stark testament to our capacity for ecological transformation. As we spread across the planet, we continued this pattern, eventually reshaping or degrading over 70% of the Earth's natural ecosystems.

Then came the Industrial Revolution, a turning point in our relationship with the planet. Fossil fuels became the engine of progress, driving unprecedented economic growth but at a tremendous environmental cost. We filled the atmosphere with carbon dioxide, the rivers with chemical waste, and the oceans with plastic and other pollutants. As early as the 1800s, scientists recognized that rising levels of greenhouse gases could warm the planet, yet we ignored these warnings. Over the last eighty years—within a single human lifetime—these trends have accelerated dramatically. Geologists now suggest that we are entering a new epoch: the Anthropocene, an era in which human activity has become the dominant force shaping the Earth's systems.

In response to these alarming changes, scientists have developed the concept of "planetary boundaries"—a framework that identifies the ecological limits within which

humanity can safely operate. These boundaries delineate the thresholds beyond which Earth's systems may become unstable, potentially leading to catastrophic changes. Climate change, biodiversity loss, ocean acidification, and deforestation are among the crucial areas where we are surpassing safe limits. Current research indicates that we have already breached several of these boundaries, pushing ecosystems toward irreversible tipping points.

In fact, scientists have identified at least 27 critical tipping points where disruptions in climate, biodiversity, and ecosystem integrity could lead to cascading effects, making large parts of the planet uninhabitable. These include the melting of polar ice caps, the collapse of rainforests, and the weakening of ocean currents. Once these thresholds are crossed, the Earth's ability to self-regulate diminishes, and the damage may become irreversible.

In the end, we must recognize what astrobiologist David Grinspoon has pointed out: the Earth is now in human hands. We have altered its atmosphere, landscapes, waters, and climate to such a degree that we can no longer avoid our responsibility for managing it. The question is no longer whether we should intervene but how we must intervene to restore balance.

This means a fundamental shift in our approach. We need to stop the destructive practices that have driven us to this point—deforestation, pollution, over-extraction, and carbon emissions—and instead embrace regenerative

solutions. We must actively restore degraded lands, replenish biodiversity, rebuild soil health, and transform our energy and food systems to work with nature rather than against it.

This is not a matter of ideology or politics; it is a matter of survival. If we are to ensure a habitable future, we must become stewards of the Earth, not just for ourselves but for all life. The time for incremental change is over. The time for planetary regeneration is now.

Part 1

Cutting Carbon

We are at the midpoint of what could be the most consequential decade in human history. It's clear that we have already surpassed the 1.5°C mark.

Developing a narrative is important for both novelists and nonfiction writers, but it can be daunting. Here are some ideas and strategies from experienced authors.

It can be useful to ask yourself a few questions:

- **What is the engine of my book?** What gives your story momentum and compels readers to keep turning the pages? Is it a tense, dramatic plot, or is it emotional investment in the fate of a character who evolves over the course of the story? In nonfiction, this might be your key argument or a shocking revelation. Where is the climax?

- **How do I want things to end?** How do you want readers to feel when they finish your book? What needs to be resolved to deliver a meaningful, satisfying conclusion to your narrative?

- **What are the qualities of popular books in my genre and how does mine stand out?** Is it the way the characters are developed? Unforgettable narrators? Suspenseful plots? Or maybe it's the accessible way sophisticated concepts are explained, or the memorable way past events are reconstructed. How can you bring that same power to your book?

Once you understand the basics of narrative, you don't have to follow all of the rules. In fact, some of your favorite books that you enjoy as a reader might break away from typical narrative structure. As the writer, you have the freedom to structure your book in whatever way feels most powerful and effective, even if that means breaking some of the rules.

"Every book needs a structure, but that structure is going to be very different depending on whether you're talking about fiction or nonfiction. Also, depending on which genre of fiction you're talking about," said author and publisher Noah Lukeman. "Romance might have its own demands versus mystery versus thriller versus science fiction."

Part 2

Regenerating the Earth

Reordered List for Section Two of the Book
Section Two should serve as an in-depth exploration of interconnected topics, challenges, and actionable pathways. A narrative flow might begin with challenges, build to a vision for transformation, and culminate in practical strategies.

The Context: Challenges and Realities
1. The Anthropocene
2. The climate crisis
3. Biodiversity loss
4. Overshoot and collapse

5. Nature in decline
6. Sixth Mass Extinction
7. Insect apocalypse
8. Fire, flood, drought, heat, and cold
9. Sea level rise
10. We have surpassed 1.5C
11. We have lost 65% of wild species

Visionary Thinking and Frameworks
12. Gaia and James Lovelock
13. Earth systems science
14. Planetary boundaries
15. Collective consciousness
16. Restoring paradise

Bioregional Solutions and Organizing
17. Bioregional governance
18. Bioregional financing
19. Agroforestry
20. Regenerative economies
21. Permaculture
22. Foodsheds
23. Watershed management
24. Bioregional learning centers
24a. Bioregional Mapping