

# Introduction

By virtue of the size of our planet and the number of people sharing it, we’ve each got a finite environmental budget. It’s our most profound duty to decide how to spend it.

The goal of this handbook is to empower you to *practice sustainability wisely*—so you can improve practices in households, organizations, and communities to help create a better future for everyone. Our theme is “think globally and act locally” to go from good intentions to effective action. Inside you’ll find a “cookbook” of “recipes” breaking down projects into achievable steps on pathways to sustainability, plus a full complement of scientific, technical, engineering, and financial knowledge.

## What Is Sustainable?

Earth’s surface is the only habitat in the known universe that provides the air, water, food, goods, and everything else we require. Dividing Earth’s 15.77 billion acres of habitable land by 8.2 billion human inhabitants equals less than *two acres* (about three quarters of a *hectare*, or 75 meters by 100 meters). A sustainable future is possible if we meet our needs using 0.75 hectares of habitable land per person.

Science shows that our planet’s life-support systems naturally operate in a *global safety zone*. For instance, the Stockholm Resilience Centre has identified “a set of nine planetary boundaries within which humanity can continue to develop and thrive for generations to come.” Although excessive pollution and unwise consumption are causing climate change and **eight more global challenges**, choosing sustainable practices will protect and restore Earth’s ability to sustain human beings.

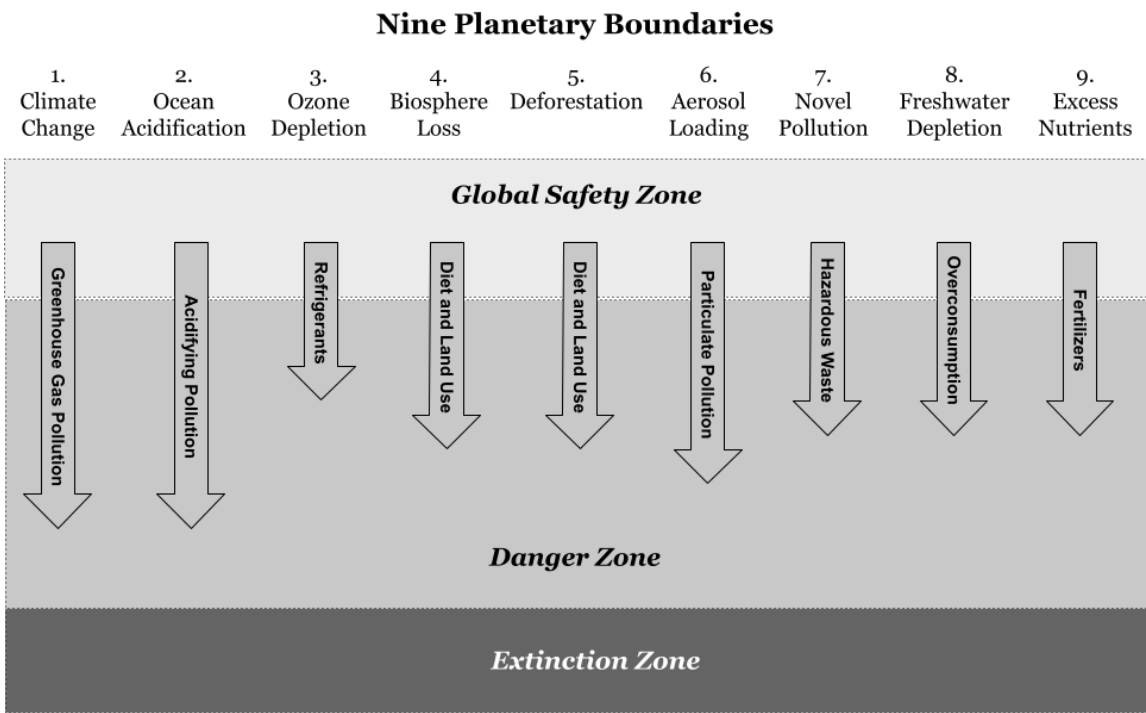


Figure adapted from the work of Johan Rockström et alia, as publicized by the Stockholm Resilience Centre

This handbook empowers you with practical, science-based strategies within your control that contribute to the collective shift needed to keep humanity’s impacts within Earth’s carrying capacity. Sustainable solutions to global challenges like deforestation are not political campaigns or corporate policies, but practices like eating more plant-based meals. Move beyond feeling helpless, hopeless, and

isolated by improving measurable indicators of your own sustainability. Take purposeful action for the benefit of your inner sense of agency, your immediate environment, and far beyond.

## How Do You Practice Sustainability?

The food you will eat, the air you will breathe, the fresh water you will drink, and all the goods you will enjoy are being made somewhere on Earth—mostly by a complex system of living organisms. By your practices, choose whether to save or degrade the small part of our planet's lifegiving ecosystem that sustains you. Choose not only *whether* to protect your planet, but *how*.

Much needs to be done to create a more sustainable future. Advocacy, protest, and lobbying to influence laws and regulations is important work that aims to create social change that enables sustainability. But it doesn't replace the need for people to step up with a direct approach, making immediate beneficial progress in their own spheres of influence without waiting for policy shifts. Be a sustainability *practitioner*; don't wait for politicians to act. Improve practices in households and organizations in your community to reduce negative environmental effects and increase positive impacts.

This handbook focuses on the practical "how-to" of sustainability—how to plan projects, implement improvements, and measure results. Whether you're already deeply engaged in advocacy work and want to see more tangible results or simply are ready to make positive changes in your everyday life, these practical skills will empower you to create environmental benefits immediately while building toward larger community transformation. We assume you want to be improving your own community step by step from the ground up—if so, you're reading the right book!

## How Affordable Are Sustainable Practices?

The more modest your needs, the easier to meet them in sustainable ways. The cheapest strategy is conservation: practices like turning down the thermostat or taking shorter showers conserve resources but sacrifice some comfort or convenience for the common good. Everyone can financially afford that.

A much harder challenge is to raise your standard of living while lowering your environmental impacts. That requires a different strategy: efficiency. Invest time or money in better techniques or technology. For example, an LED light bulb costs more than an incandescent bulb but uses less power to provide the same amount of light for much longer.

Many sustainable practices save money over the long run, but some don't. Whether you should spend to be more sustainable depends on your values. For instance, if you're burning fossil fuel, you are turning a valuable natural resource into pollution and not paying the full price of your pollution. Your emissions only cost you a guilty conscience—and you can sidestep even that moral burden if you ignore the consequences of your actions, convince yourself that your pollution does no harm, or point the finger at someone else who is burning more fuel than you are. You can decide whether you want to take steps to stop polluting, keep polluting yourself but pay someone else to stop polluting, or just keep on polluting and devote your time and money to other priorities. What you choose to believe and how you choose to spend your own time and money shows what you truly value.

This comprehensive handbook helps you practice sustainability wisely whether you want to *save* money, live more simply, and conserve resources, or *invest* money, enjoy more creature comforts, and use resources more efficiently. You'll find out which sacrifices really make a difference and which just make life more difficult for insignificant environmental benefit. You'll discover a comprehensive system for measuring your environmental impacts, so you can avoid the trap of tunnel vision: rather than myopically obsessing over devilish details that do little to improve your sustainability score, you can turn your attention to easy opportunities for massive gains. You'll learn which investments earn a financial return over time, and which are charitable gifts for future generations, not resulting in pecuniary rewards but creating lasting positive change in the world.