

# The Planetary Accounting Framework: Understanding Your Environmental Impact

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## Video Abstract

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# Abstract

In 2009, 28 world-renowned scientists gathered on a mission: to figure out how to save the planet—or, at least, how far we can push the planet before threatening our survival. The result was a list of nine critical environmental limits below which the Earth’s future would remain safe—by keeping atmospheric carbon low, for example. Exceeding those limits would risk irreversible global damage. But despite providing good science-based measures for monitoring the Earth’s health, these so-called Planetary Boundaries fail to address one very important question: What can you— as a citizen, CEO, city council, or national committee—do to help? That’s where a new approach called Planetary Accounting comes in. The problem with the Planetary Boundaries is that they can’t be directly translated to figures that make sense at smaller scales. Whether it’s a national government figuring out how to meet science-based goals for reducing pollution or an average citizen mulling over her morning commute: How will her decision to ride the bus instead of drive to work affect the world’s extinction rate? To be fair, the Planetary Boundaries weren’t designed to be scaled. They were, for the most part, conceived as simple indicators of the state of the Earth—a gauge of the urgency of the situation, not a guide to resolving it. Planetary Accounting links the Boundaries to Quotas that we can act on. Where the Planetary Boundaries are the health check for the Earth, the Planetary Quotas are the prescription for a healthy Earth. Nine global budgets—such as for carbon, nitrogen, water, and forest land—can be divided up among the world’s population in measurable units. That way, nations, cities, businesses, and even individuals can begin to understand what their share of impacts might look like. The high resolution of this accounting system holds many promising implications. City-planning targets, corporate sustainability goals, and individual behavior change programs could be monitored by the same system. Additionally, much like nutritional fact labels keep food companies honest and the public informed, “Planetary fact” labels could help hold everyone accountable for their environmental footprint. And perhaps most importantly, Planetary Accounting provides a scientific basis for developing policy, models of governance and legislation at any scale. This approach certainly won’t resolve all of the complex problems our planet faces. But it could make it easier to answer that all-important question. . .“What can I do to help?”