Sustainability Indicators

Everyone who becomes serious about practicing sustainability wants to know the same thing: what more can we do? The answer depends on what you're already doing. The best next step for you depends on where you are now on your journey and how far you want to go. We're always learning new science and inventing new technology, so there's always something practical we can do to help create a more sustainable future–effective action is the best antidote to eco-anxiety.

You can *manage* what you can *measure*. You can't directly measure all of your environmental impacts, but you can measure how much energy, water, and goods you consume–data that *indicate* how your practices affect natural systems. Measuring and evaluating sustainability indicators along all seven pathways shows where you are having a *positive* or *negative* effect–and they all add up to a meaningful sustainability score. Then you can make a well-informed decision about what to do next.

Be careful about measuring just one or two sustainability indicators, since doing that can lead to unwise actions. Many "carbon footprint calculators" try to consider more than just carbon dioxide emissions–after all, carbon pollution is just one facet of your environmental impact. Measuring more indicators paints a more complete picture. Consider how "reduce, reuse, and recycle" are three effective strategies for improving your sustainability score. Knowing how much you buy, how much is second hand versus brand new, *and* how much you recycle versus landfill yields more useful insight into how to improve your practices along the goods pathway than knowing just your carbon footprint.

If you have solar modules but you grill all-beef hamburgers every night, your energy practices may be very positively sustainable (i.e. Earth *can* sustain everyone generating electricity like you do), while your food practices are unsustainable (i.e. Earth can *not* sustain everyone eating like you do). An easy step for you might be to substitute ground turkey for ground beef. Or you might decide that eating beef is a really important family tradition, so even though that practice lowers your overall sustainability score, you'll make up for it by not owning a car.

As eight billion–and counting–people share one planet, we must accommodate each other's preferences to some degree. I might be willing to eat a vegetarian diet so you can eat more meat, if you'll accept me flying to visit my mom on her birthday while you minimize air travel. Observing a full series of sustainability indicators reveals which collection of practices are within our environmental means, and which borrow more of Earth's resources than is available for everyone to enjoy. Measuring science-based sustainability indicators is the key to know how to achieve our sustainability goals–how much better we need to do along a pathway that's easy for us to free up enough slack so we can afford to do worse on another pathway that's harder. 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.

Measuring the Suspra Indicators

If you're not yet ready to set your sustainability goals, just quickly skim through this chapter. Keep these indicators in mind as you start improving practices. When you're ready to set attainable goals and evaluate your results, come back to this chapter. Measure these Suspra Indicators (our nickname for this complete set of Sustainable Practice Indicators) before and after you take action so you know what progress you are making toward your next sustainability milestones.

An easy way to measure Suspra Indicators is to use the evaluation tools available on this handbook's free companion website at www.suspra.com. When you do, your indicators will automatically factor into a single Suspra Score that will be *negative* if your practices, taken as a whole, are *unsustainable* and *positive* if your practices are *sustainable*. The tools on our website will also provide a personalized action plan for you to consider if you'd like to improve your Suspra Score.

Community Indicators

Sustainability Indicator	Measures
Scores on sustainability knowledge tests	How well you understand sustainability
Surveys of sustainable practices	Your community's level of sustainability
Number of people taking tests and surveys	How well you are interacting with others
Volunteer hours log	How well you are interacting with others

Take knowledge tests to measure your own knowledge, and then invite other people in your community to take quizzes so you can better understand what your community knows about sustainability.

Count and record the number of sustainable practices you are demonstrating in your own household and organizations. Survey other people in your community about their practices to better understand your community's level of sustainability.

Keep a log of volunteer hours for yourself and other people in your community. Volunteering is one of the key sustainability indicators that shows how well people in a community are interacting. High levels of volunteering indicate that people are interacting, which makes it easier to share knowledge and to implement best practices for sustainability across a community.

Evaluation Tools
www.suspra.com

Suspra Knowledge Tests
Suspra Practice Survey
Suspra Volunteer Hours Log

Food Indicators

Sustainability Indicator	Measures
Food budget	How much food and drink you buy
Meal log	What you eat and drink, and how it is produced
Food waste log	How much food and drink you waste

Your food budget (average dollars per day over the course of a year) indicates how much and what type of food you buy. You can fine tune this indicator by measuring additional indicators. Although a lower food budget generally indicates wasting less food and eating more plant-based meals, logging the number of plant-based meals you eat verifies this indicator of the sustainability of your diet.

A meal log allows you to note specifically which types of food you are eating, and whether you are buying organic food. Although your food budget indirectly indicates how much food you waste, directly measuring the amount of food you buy or grow but do not eat provides more insight into how well your practices to reduce food waste are working.

Evaluation Tools
www.suspra.com

Suspra Meals Log
Suspra Food Waste Log

Water Indicators

Sustainability Indicator	Measures
Average flow rate	How much water you consume
Pollution prevention log	How well you are protecting water quality

Using less water is more sustainable. You can calculate your average flow rate by adding up all the water you buy per 365 days (one standard calendar year), converting that amount to gallons, and then dividing by 8,760, the number of hours per standard calendar year. You can evaluate your impact on water quality by logging your pollution prevention practices, such as picking up litter and pet waste.

Evaluation Tools	Suspra Flow Rate Calculator
www.suspra.com	Suspra Pollution Prevention Log

Movement Indicators

Sustainability Indicator	Measures
Average speed	How fast you move
Travel log	Which modes of transportation you use

Living a lower-speed life is more sustainable. You can calculate your average speed by adding up all your trips over 365 days (one standard calendar year) to find out how far you went in miles, and then dividing by 8,760, the number of hours per standard calendar year. From your average speed, you can indirectly infer how many trips by plane you take per year and how far you drive on a daily basis. But to really dial in and measure your environmental impacts more precisely, keep a travel log.

Evaluation Tools	Suspra Speed Calculator
www.suspra.com	Suspra Travel Log

Energy Indicators

Sustainability Indicator	Measures
Average power	How fast you consume energy
Electricity percentage	How much electricity versus fuel you use
Solar power percentage	How much clean energy you use

Using less power (energy per time) is more sustainable. Calculate your average power by adding up all the fuel and electricity you consume over 365 days (one standard calendar year), convert customary units (gallons, BTUs, therms, etc.) to joules (the standard scientific unit of energy), then dividing by 31,536,000, the number of seconds per standard calendar year. Harnessing clean solar power is more sustainable than burning fossil fuel. The lower your average power, the easier it will be to raise your solar power percentage to 100%. Calculate your electricity percentage by dividing the joules of electricity you use by the total number of joules, and calculate your solar power percentage by dividing the joules of solar energy you use by the total number of joules.

Evaluation Tools www.suspra.com	Suspra Energy Calculator

Goods Indicators

Sustainability Indicator	Measures
Goods budget	How many tangible goods you consume
Consumption log	Which materials and substances you are buying
Waste management log	How well you are managing your waste

Buying fewer goods is more sustainable. Your goods budget (average dollars per day over the course of a year) indicates how much and which types of goods you buy. Fine tune this indicator by measuring additional indicators. A consumption log allows you to note which types of materials and substances you are bringing into your home or organization. Although your goods budget indirectly indicates the amount of solid waste you are producing (i.e., a lower goods budget correlates with less solid waste), directly measuring how much solid waste you produce, and what you do with it (compost, recycle, landfill, or divert) provides more insight into whether your waste reduction practices are working.

Evaluation Tools www.suspra.com	Suspra Consumption Log Suspra Solid Waste Log

Habitat Indicators

Sustainability Indicator	Measures
Occupancy rate	How many people your land sustains
Building choices and certifications	How you are building and maintaining structures
Conservation budget	How much land you are helping to conserve
Land use	How much of your land is growing wild
Yard care log	How you are managing your landscape

Conserving land is sustainable. To conserve natural ecosystems on land that other people own, donate money to land conservancies. If you own or rent real estate yourself, you control how that land is being used. In general, a higher occupancy rate (i.e., number of people living or working per acre) is more sustainable than a lower rate. Choosing green building products and techniques and obtaining green building certifications indicate building practices with better environmental impacts. Allowing land to grow wild protects our biosphere and promotes biodiversity. Your yard care practices, such as pesticide and fertilizer applications, indicate your impact on soil health and water quality.

Evaluation Tools www.suspra.com	Suspra Conservation Report Suspra Real Estate Report Suspra Land Care Log