

Sustainability Core Topics and “Big Ideas”

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<p style="text-align: center;">Intergenerational Thinking</p> <p>Considering the impact of each action on the generations that come after us.</p>	<p style="text-align: center;">Environmental Stewardship</p> <p>Caring for the environment that supports healthy ecosystems.</p>
<p style="text-align: center;">Human Population Growth and Carrying Capacity</p> <p>Carrying capacity is the maximum number of people the earth or one specific ecosystem can support indefinitely.</p>	<p style="text-align: center;">Global Warming and Climate Change</p> <p>The rise in the earth’s temperature as greenhouse gases in the atmosphere (e.g. carbon dioxide) trap heat -- and the resulting impacts on the world’s ecosystems and human communities.</p>
<p style="text-align: center;">Interconnectedness and Interdependence</p> <p>Parts of a system relate to and depend upon each other.</p>	<p style="text-align: center;">Bioregional Thought and Practice</p> <p>Conscientious attempts to live, work, and play in relation to naturally rather than politically defined areas...along with commitment to a citizenship of place.</p>
<p style="text-align: center;">“Cradle-to-Cradle” Design</p> <p>Products, services, and systems designed for a life cycle that is effective and lasting in terms of resource use and quality of life.</p>	<p style="text-align: center;">Ecological Footprint and Carbon Footprint</p> <p>Ecological footprint: The area of Earth’s productive surface (land and water) that it takes to produce the goods and services necessary to support a given lifestyle.</p> <p>Carbon footprint: the measure of the amount of carbon dioxide emitted through the combustion of fossil fuels. A carbon footprint is often expressed as tons of carbon dioxide or tons of carbon emitted, usually on an annual basis.</p>
<p style="text-align: center;">Good Governance: Three Parts</p> <p>Private (business), public (government) and civic sectors (individual citizens as well as community and non-profit organizations) collaborate and negotiate to effect governance.</p>	<p style="text-align: center;">Tragedy of the Commons – or Promise of the Commons</p> <p>When land or resources are held in common, there is both promise and peril with respect to responsible ongoing care – or abuse and neglect.</p>

<p style="text-align: center;">Ecosystems and Biodiversity</p> <p>Ecosystem: The combined physical and biological components of an environment, which function as a unit.</p> <p>Biodiversity: The variety of life in all its forms, levels, and combinations.</p>	<p style="text-align: center;">Water Quality and Quantity</p> <p>Population growth, global warming, and pollution threaten Earth's potable water supplies.</p>
<p style="text-align: center;">Renewable and Non-Renewable Resources</p> <p>Resources that can be renewed, such as forests, fish, wind, and solar energy, versus those that are finite, such as fossil fuels, metals, and minerals.</p>	<p style="text-align: center;">True-Cost Accounting</p> <p>The true costs of products and services that take into account environmental and social impacts.</p>
<p style="text-align: center;">Social Justice and Fair Distribution</p> <p>Equity between economic classes, ethnic and cultural groups, and the fair distribution of resources.</p>	<p style="text-align: center;">Cultural Diversity and Indigenous/Traditional Knowledge</p> <p>The human asset of traditional knowledge in areas such as language, the arts, family, medicine, ecological relationships, and sustainable economies.</p>
<p style="text-align: center;">Systems Thinking</p> <p>A way of thinking that gives primacy to interconnectedness; the whole as well as the parts; respect for limits; recognition that there can be unexpected consequences; and, an emphasis on identifying patterns, root causes of problems, and leverage points for change.</p>	<p style="text-align: center;">Food Security</p> <p>The reliable availability of a sufficient quantity and quality of nutritious food for a population.</p>
<p style="text-align: center;">Sustainability's "Triple Bottom Line"</p> <p>Meeting current and future needs in consideration of environmental, economic, and social/cultural factors.</p>	<p style="text-align: center;">Microcredit and Microenterprise</p> <p>Alleviating poverty by making small grants or loans to poor people for business projects.</p>

<p style="text-align: center;">Ecosphere Inputs and Outputs</p> <p style="text-align: center;">Atmosphere (air and its gases) Hydrosphere (water) Lithosphere (rocks, minerals) Biosphere (living organisms)</p>	<p style="text-align: center;">Biomimicry</p> <p style="text-align: center;">Designing products, services, and industrial systems to mimic biological design and cycles found in nature.</p>
<p style="text-align: center;"><i>These next concepts might require a bit more explanation; thus, each of the boxes below on the right offers a definition of the concept to its left. We usually paste the longer definition on the back side of the index card so that participants can look at a more extensive definition.</i></p>	
<p style="text-align: center;">Precautionary Principle</p> <p style="text-align: center;">Taking anticipatory actions that favor outcomes that err on the side of protecting human health and the environment.</p>	<p>PRECAUTIONARY PRINCIPLE: The essential elements of this principle are that 1) anticipatory actions are taken to address likely threats to human health and the environment, 2) such action is taken though there is scientific uncertainty, and 3) the burden of proof shifts to the proponents of the questionable product or action to establish relative safety (rather than the public needing to prove harm). This principle has been used recently to advocate restricting the expansion of genetically modified foods, eliminating potential endocrine disrupters in personal care products, and creating policy to curb contributors to climate change. The precautionary principle is a key tenet of environmental law in the European Union.</p>
<p style="text-align: center;">Cumulative Impacts</p> <p style="text-align: center;">The exposure of communities to multiple sources of toxics, and the incorporation of these additive environmental and health threats into regulatory policies and actions.</p>	<p>CUMULATIVE IMPACTS: A core environmental justice issue in the US, communities have long advocated for regulatory agencies and government to account for the cumulative impacts of multiple polluting facilities and combined emissions on human health and the environment. Overburdened populations are promoting the remediation and prevention of cumulative exposures through industrial pollution prevention, and revisions to the zoning, permitting, and regulatory processes. Cumulative impacts have also been framed temporally, relating to the additive impacts of burdens to a community from past, present, and future actions.</p>
<p style="text-align: center;">Just Transition</p> <p style="text-align: center;">The importance of equity in sustainability by focusing on how working people are involved in and impacted by shifts toward more sustainable production.</p>	<p>JUST TRANSITION: Emerging from the labor and environmental justice movements, JT promotes the importance of moving toward equity in sustainability by focusing on how working people are involved in and impacted by shifts toward more sustainable production. Key challenges are how alternative processes, substances, and products are introduced and how those directly involved in production participate in those decisions. A core value is the development of community-labor coalitions that promote green jobs and support workers making the difficult transition to alternative work. From the Sierra Club to the steelworkers, a growing array of organizations is involved.</p>

<p style="text-align: center;">Health Equity</p> <p style="text-align: center;">The elimination of differential health outcomes that are socio-economically and institutionally rooted.</p>	<p>HEALTH EQUITY: Currently, there are persistent differences in health and longevity between racial, ethnic, and income groups in the US. Concerns highlighted by health equity advocates include disadvantages in health outcomes and access to health care, disparities in the social determinants of health, and differential exposure to hazards. Health Equity is the absence of these health differences and supports the highest standard of health available for all people.</p>
<p style="text-align: center;">Environmental Justice</p> <p style="text-align: center;">Achieving the basic human right to a healthy environment and equal protection from environmental harm where all people live, work, and play - regardless of race, ethnicity, and socio-economic background.</p>	<p>Environmental justice in the US has broad goals for both impacted communities and government agencies including: the protection of all people, especially vulnerable populations, from the negative health and environmental impacts of pollution and environmental hazards; the elimination of discrimination and bias in the enforcement of environmental laws; and equal representation and meaningful participation in decision-making processes (e.g., policy creation, facility permitting, land-use, regulation, and community development planning).</p>
<p style="text-align: center;">Consumption and Consumerism</p> <p style="text-align: center;">How much, of what, is enough? How do we confront the cultures and structures of over-consumption?</p>	<p>Consumption and Consumerism: All humans must consume or die. Some of us also create meaning through shopping and the acquisition of possessions. What is the relationship between happiness and consumption? How much, of what, is enough? How do we confront the cultures and structures of over-consumption?</p>
<p style="text-align: center;">The Local-Global Nexus</p> <p style="text-align: center;">In a dialectical dynamic the local and the global shape each other through the interpenetration and mutual causality of social structures and cultural consciousness.</p>	<p>The Local-Global Nexus: This local-global nexus spans social institutions at local, regional, national, and global levels. Institutions at each level shape those at all other levels. One example is civil society, increasingly a global as well as local phenomenon, due to the technological compression of time and space.</p>
<p style="text-align: center;">Resilience</p> <p style="text-align: center;">The capacity for both natural and social systems “to remain healthy and productive in the face of disturbance, and to adapt with integrity in response to changing circumstances.” <i>[Mark Robinson]</i></p>	<p>Resilience: A “broad-spectrum agenda that, at one end, seeks to imbue our communities, institutions and infrastructure with greater flexibility, intelligence and responsiveness to extreme events and, at the other, centers on bolstering people’s psychological and physiological capacity to deal with high-stress circumstances.” <i>(Andrew Zoll)</i></p>

<p style="text-align: center;">Ecosystem Services</p> <p style="text-align: center;">Services of ecological systems that are critical to the functioning of the Earth’s life-support system, which contribute to human welfare both direct and indirectly.</p>	<p>Ecosystem Services: Services of ecological systems that are critical to the functioning of Earth’s life-support system, which contribute to human welfare both direct and indirectly. This represents part of the total economic value of the planet but are not fully captured in commercial markets. The annual economic value of ecosystem services has been estimated for different ecosystems by hectare.</p>
<p style="text-align: center;">Risk Assessment and Sustainable Behaviors</p> <p style="text-align: center;">Cognitive and behavioral psychology offer insight to our choices regarding sustainable and unsustainable behaviors.</p>	<p>Risk Assessment and Sustainable Behaviors: Why do we behave as we do and continue to negatively impact our environmental problems with our behavior? Sometimes we do so even when we have knowledge of the issues.</p> <p>Some of the questions involved include: (1) the perception of risk: <i>“Will this happen? What effect will it have? Will it affect me or something I care about?”</i> (2) our beliefs about the effect that our behaviors have on environmental conditions; (3) the costs and/or difficulties of adopting more sustainable behaviors; (4) the degree to which we care about the effects of our behavior.</p>