No generation can contract debts greater than may be paid during the course of its own existence.

*Thomas Jefferson, letter to James Madison, 1789*

Improving the quality of human life while living within the carrying capacity of supporting eco-systems.

*Caring for the Earth: A Strategy for Sustainable Living*  
(*IUCN – The World Conservation Union, United Nations Environmental Programme, World Wide Fund for Nature*)

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

*World Commission on Environment and Development, Our Common Future*

Sustainability is an economic state where the demands placed upon the environment by people and commerce can be met without reducing the capacity of the environment to provide for future generations.

*Paul Hawken, The Ecology of Commerce*

Long term social, economic and environmental health.

A sustainable society is one that can persist over generations, one that is far-seeing enough, flexible enough, and wise enough not to undermine either its physical or its social systems of support.

*Donella Meadows et al., Beyond the Limits*
In order to be socially sustainable the combination of population, capital, and technology in the society would have to be configured so that the material living standard is adequate and secure for everyone.

In order to be physically sustainable the society’s material and energy throughputs would have to meet economist Herman Daly’s three conditions:

- Its rates of use of renewable resources do not exceed their rates of regeneration.
- Its rates of use of nonrenewable resources do not exceed the rate at which sustainable renewable substitutes are developed.
- Its rates of pollution emission do not exceed the assimilative capacity of the environment.

*Donella Meadows et al., Beyond the Limits*

Diversity is both a cause of and a result of sustainability in nature, and it would be in human society as well.

*Donella Meadows et al., Beyond the Limits*

A sustainable society would not freeze into permanence the current inequitable patterns of distribution. It would certainly not permit the persistence of poverty. To do so would not be sustainable for two reasons. First the poor would not and should not stand for it. Second, keeping any part of the population in poverty would not, except under dire coercive measures, allow the population to stabilize. For both moral and practical reasons any sustainable society must provide material sufficiency and security for all. To get to sustainability from here, the remaining material growth possible—whatever space there is for more resource use and pollution emissions, plus whatever space is freed up by higher efficiencies and lifestyle moderations on the part of the rich—would logically be allocated to those who need it most.

*Donella Meadows et al., Beyond the Limits*
A condition of ecological and economic stability that is sustainable far into the future. The state of global equilibrium could be designed so that the materials needs of each person on earth are satisfied and each person has an equal opportunity to realize his individual human potential.

*The Limits to Growth*

Long-term cultural, economic, and environmental health and vitality.

*Sustainable Seattle*

Sustainability is not environmentalism. While the former grew out of the latter, “sustainability” and “environmentalism” are now very different causes. Many environmentalists distrust the word “sustainable,” while practitioners of sustainability (myself included) sometimes distance themselves from the environmentalist label—not because they don’t support green causes, but because activism to protect Nature from the ravages of the economy is different from working to redesign the economy itself...for environmentalism’s “No” to be effective, there must also be sustainability’s “Yes.”

*Alan AtKisson, Believing Cassandra*

We want all of our citizens to play critical roles in decision-making about our future. This is the essence of becoming a sustainable city—meeting our current needs without compromising our values, or the lives and health of future generations.

*Burlington Legacy Project*

In our every deliberation, we must consider the impact of our decisions on the next seven generations.

*Great Law of the Iroquois Confederacy*
Five major themes emerged in the common vision that Burlington residents hold for the future of the city.

These are:
- maintaining Burlington as a regional population, government, cultural, and economic center with livable-wage jobs, full employment, social supports, and housing that matches job growth and family incomes
- improving the quality of life in neighborhoods
- increasing participation in community decision-making
- providing youth with high-quality education and social supports, and lifelong learning opportunities for all
- preserving environmental health

*Burlington Legacy Project*

The 4 Es of Sustainability:
Environmental protection
social Equity
Education
Economic development

*Burlington Legacy Project*

Sustainability =

\[
\text{Fairness} \quad \frac{\text{Time}}{} \\
\text{Quality of Life} \quad \frac{\text{Time}}{} \\
\text{Well-being} \quad \frac{\text{Time}}{} \\
\text{Human and ecological health} \quad \frac{\text{Time}}{}
\]
Do all your work as if you had a thousand years to live, and as you would if you knew you must die tomorrow.

*Mother Ann Lee, Shaker saying*

### 3.9 Sustainability
Students make decisions that demonstrate understanding of natural and human communities, the ecological, economic, political, or social systems within them, and awareness of how their personal and collective actions affect the sustainability of these interrelated systems.

*Vermont’s Framework of Standards and Learning Opportunities*

Increasing incomes, improving public health, and sustaining critical natural systems.

*The National Academies Science and Technology for Sustainability Program*

United Nations Development Programme advocates the realization of human rights as part of sustainable human development, an approach that places people at the center of all development activities. The central purpose is to create an enabling environment in which all human beings lead secure and creative lives. Sustainable human development is thus directed towards the promotion of human dignity—and the realization of all human rights, economic, social, cultural, civil and political.

*James Gustave Speth, United Nations Development Programme*

No net per capita loss of natural or human capital.

*Christopher Juniper and L. Hunter Lovins, Natural Capitalism, Inc.*
A dynamic process which enables all people to realize their potential and to improve their quality of life in ways that simultaneously protect and enhance the Earth’s life support systems.

*Forum for the Future*

Society is indeed a contract…between those who are living, those who are dead, and those who are to be born.

*Edmund Burke, philosopher*

- connectedness
- interdependence
- community
- justice
- civic engagement
- future
- resources (not using resources faster than their ability to regenerate)

*Common elements of sustainability identified by the staff of the Sustainability Academy, Burlington, VT*

Sustainability is a 21st century word for justice.

*Matthew Fox, theologian*

Sustainability is another word for justice, for what is just is sustainable and what is unjust is not.

*Matthew Fox, theologian*
A view of community as three concentric circles: the economy exists within society, and both the economy and society exist within the environment.

Sustainable Measures
There are four primary types of capital that contribute to our wellbeing: natural capital, human capital, built capital, and social capital. When economic analyses, strategies, and policies understand the links and interdependencies that exist between these different types of capital, they are better able to meet the goals of sustainable human health and contentment.

**Natural Capital** refers to land and the many natural resources it contains, including ecological systems, mineral deposits, and other features of the natural world.

**Human Capital** includes both the physical labor of humans and the know-how stored in their brains.

**Built Capital** encompasses all the machines and other infrastructure like buildings, roads, and factories that compose the human economy.

**Social (or Cultural) Capital** includes the web of interpersonal connections, institutional arrangements, rules, and norms that facilitate individual human interactions.

*Gund Institute for Ecological Economics, University of Vermont*
Managing for the “Triple Bottom Line” of economy, society and environment.

*John Elkington, SustainAbility*

The difference between traditional environmentalists and “sustainability folks” is the ability [of the sustainability folks] to keep the welfare of both humans and the environment in focus at the same time, and to insist on both.

*Donella Meadows*

Thriving within the carrying capacity of the systems on which we depend.

*Cloud Institute for Sustainability Education*

Sustainability is the possibility that humans and other life will flourish on Earth forever.

*John Ehrenfeld, International Society for Industrial Ecology*

Earth Charter Principles:
- To preserve humankind in its integrity, unity and diversity must be reconciled;
- The recognition of others is the foundation of all relationships and all peace;
- Acceptance of the constraints imposed by the preservation of the common good is indispensable to the exercise of freedom;
- Material development must advance human development;
- Innovation is not an aim in itself; it is a means to serve human development and the safeguarding of the planet.

*Earth Charter Initiative*
The human community consists of 3 elements:
Those who went before us,
Those who are with us here and now,
And those who are yet to come.

*Traditional African concept, referred to in Bishop Desmond Tutu’s sermons*

![Diagram of the three intersecting circles: Social, Culture, and Environment.](image)

*UNESCO Bangkok (United Nations Educational, Scientific, & Cultural Organization)*

Walmart’s new Sustainability Index will provide data for every product in the following four categories:

Energy and Climate
Natural resources
Material efficiency
People and Community

*Wal-Mart Stores, Inc.*
Balancing human and economic well-being with cultural traditions and respect for the earth’s natural resources.

*UNESCO (United Nations Educational, Scientific, & Cultural Organization)*

Sustainability is seeing things whole and acting accordingly.

Sustainability promotes vibrant communities that are rooted in place and participation, celebrate diverse social and cultural landscapes, enrich learning, and stimulate both engaged scholarship and public discourse.

*University of New Hampshire, University Office of Sustainability*
Sustainability is not a problem, a condition, or a program; it’s a way of life, a relationship in which humanity and the rest of nature become, in the words of Thomas Berry, “mutually enhancing presences to each other.” In this respect, sustainability resembles love, health, or peace. Pursued with deliberate imagination, it becomes a life practice for both individuals and communities.

*John Tallmadge*

Think of sustainability as a type of infinite game, in which the goal is not to win (which would end the game), but to keep on playing forever.

*John Tallmadge*

In practical terms, sustainability must always manifest itself in some place with some people; it always has a local, personal flavor. And because conditions and people change, sustainability always appears dynamic and evolving. It involves learning and transformation: this is where creativity comes in. You can’t have sustainability without imagination.

*John Tallmadge*

System Conditions for Sustainability

In a sustainable society, nature is not subject to systematically increasing...

- concentrations of substances extracted from the Earth’s crust
- concentrations of substances produced by society
- degradation by physical means

and in that society...

- people are not subject to conditions that systematically undermine their capacity to meet their needs

*The Natural Step*
By sustainability we mean:

“improving quality of life—economic, social, and environmental—for all in current and future generations.”