**Sustainability**

**Read the text below carefully, extract the main ideas and translate it.**

Sustainability is the ability to exist constantly. In the [21st century](https://en.wikipedia.org/wiki/21st_century), it refers generally to the capacity for the [biosphere](https://en.wikipedia.org/wiki/Biosphere) and human [civilization](https://en.wikipedia.org/wiki/Civilization) to coexist.

It is also defined as the process of people maintaining change in a [homeostasis](https://en.wikipedia.org/wiki/Homeostasis) balanced environment, in which the exploitation of resources, the direction of investments, the orientation of technological development and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations.

For many in the field, sustainability is defined through the following interconnected domains or pillars: environment, economic and social.

Sub-domains of sustainable development have been considered also: cultural, technological and political. According to Our Common Future, Sustainable development is defined as development that "meets the needs of the present without compromising the ability of future generations to meet their own needs."

Sustainable development may be the organizing principle of sustainability, yet others may view the two terms as paradoxical (i.e., development is inherently unsustainable)

Sustainability can also be defined as a [socio-ecological](https://en.wikipedia.org/wiki/Socio-ecological_system) process characterized by the pursuit of a common ideal.[[11]](https://en.wikipedia.org/wiki/Sustainability#cite_note-Dr._Joel_Diemer-11) An ideal is by definition unattainable in a given time and space. However, by persistently and dynamically approaching it, the process results in a sustainable system. The study of ecology believes that sustainability is achieved through the balance of species and the resources within their environment. To maintain this equilibrium, available resources must not be depleted faster than resources are naturally generated.

Modern use of the term sustainability is broad and difficult to define precisely. Originally, sustainability meant making only such use of natural, renewable resources that people can continue to rely on their yields in the long term.

Healthy ecosystems and environments are necessary for the survival of humans and other organisms. Ways of reducing negative human impact are environmentally-friendly chemical engineering, environmental resources management, and environmental protection.

Information is gained from green computing, green chemistry, earth science, environmental science and conservation biology. Ecological economics studies the fields of academic research that aim to address human economies and natural ecosystems.

Moving towards sustainability is also a social challenge that entails [international](https://en.wikipedia.org/wiki/International_law) and national [law](https://en.wikipedia.org/wiki/Law), [urban planning](https://en.wikipedia.org/wiki/Urban_planning) and [transport](https://en.wikipedia.org/wiki/Transport), supply chain management, local and individual [lifestyles](https://en.wikipedia.org/wiki/Lifestyle_(sociology)) and [ethical consumerism](https://en.wikipedia.org/wiki/Ethical_consumerism). Ways of living more sustainably can take many forms from reorganizing living conditions (e.g., [ecovillages](https://en.wikipedia.org/wiki/Ecovillages), [eco-municipalities](https://en.wikipedia.org/wiki/Eco-municipalities) and [sustainable cities](https://en.wikipedia.org/wiki/Sustainable_cities)), reappraising economic sectors ([permaculture](https://en.wikipedia.org/wiki/Permaculture), [green building](https://en.wikipedia.org/wiki/Green_building), [sustainable agriculture](https://en.wikipedia.org/wiki/Sustainable_agriculture)), or work practices ([sustainable architecture](https://en.wikipedia.org/wiki/Sustainable_architecture)), using science to develop new technologies ([green technologies](https://en.wikipedia.org/wiki/Green_technologies), [renewable energy](https://en.wikipedia.org/wiki/Renewable_energy) and sustainable [fission](https://en.wikipedia.org/wiki/Generation_IV_reactor) and [fusion power](https://en.wikipedia.org/wiki/Fusion_power)), or designing systems in a flexible and reversible manner, and adjusting individual [lifestyles](https://en.wikipedia.org/wiki/Lifestyle_(sociology)) that conserve natural resources.

"The term 'sustainability' should be viewed as humanity's target goal of human-ecosystem equilibrium (homeostasis), while 'sustainable development' refers to the holistic approach and temporal processes that lead us to the end point of sustainability." Despite the increased popularity of the use of the term "sustainability", the possibility that human societies will achieve environmental sustainability has been, and continues to be, questioned—in light of [environmental degradation](https://en.wikipedia.org/wiki/Environmental_degradation), [climate change](https://en.wikipedia.org/wiki/Climate_change), [overconsumption](https://en.wikipedia.org/wiki/Overconsumption), population growth and societies' pursuit of unlimited [economic growth](https://en.wikipedia.org/wiki/Economic_growth) in a [closed system](https://en.wikipedia.org/wiki/Closed_system).

**Three dimensions of sustainability:**

The 2005 World Summit on Social Development identified sustainable development goals, such as economic development, social development, and environmental protection.

This view has been expressed as an illustration using three overlapping ellipses indicating that the three pillars of sustainability are not mutually exclusive and can be mutually reinforcing.

In fact, the three pillars are interdependent, and in the long run, none can exist without the others. The three pillars have served as a common ground for numerous sustainability standards and certification systems in recent years, in particular in the food industry

Standards which today explicitly refer to the triple bottom line include Rainforest Alliance, Fairtrade and UTZ Certified.

Some sustainability experts and practitioners have illustrated four pillars of sustainability or a quadruple bottom line. One such pillar is future generations, which emphasizes the long-term thinking associated with sustainability.

There is also an opinion that considers resource use and financial sustainability as two additional pillars of sustainability.

Sustainable development consists of balancing local and global efforts to meet basic human needs without destroying or degrading the natural environment. The question then becomes how to represent the relationship between those needs and the environment.

The simple definition that sustainability is something that improves "the quality of human life while living within the carrying capacity of supporting eco-systems",though vague, conveys the idea of sustainability having quantifiable limits. But sustainability is also a call to action, a task in progress or "journey" and therefore a political process, so some definitions set out common goals and values.

The Earth Charter speaks of "a sustainable global society founded on respect for nature, universal human rights, economic justice, and a culture of peace". This suggested a more complex figure of sustainability, which included the importance of the domain of 'politics'.

More than that, sustainability implies responsible and proactive decision-making and innovation that minimizes negative impact and maintains a balance between ecological resilience, economic prosperity, political justice and cultural vibrancy to ensure a desirable planet for all species now and in the future.

Understanding sustainable development is important but without clear targets, it remains an unfocused term like "liberty" or "justice". It has also been described as a "dialogue of values that challenge the sociology of development".

**History**

The history of sustainability traces human-dominated ecological systems from the earliest civilizations to the present day. This history is characterized by the increased regional success of a particular society, followed by crises that were either resolved, producing sustainability, or not, leading to decline.

In early human history, the use of fire and desire for specific foods may have altered the natural composition of plant and animal communities. Between 8,000 and 10,000 years ago, agrarian communities emerged which depended largely on their environment and the creation of a "structure of permanence".

The Western industrial revolution of the 18th to 19th centuries tapped into the vast growth potential of the energy in fossil fuels. Coal was used to power ever more efficient engines and later to generate electricity. Modern sanitation systems and advances in medicine protected large populations from disease.

In the mid-20th century, a gathering environmental movement pointed out that there were environmental costs associated with the many material benefits that were now being enjoyed. In the late 20th century, environmental problems became global in scale.

The 1973 and 1979 energy crises demonstrated the extent to which the global community had become dependent on non-renewable energy resources.

In the 21st century, there is increasing global awareness of the threat posed by the human greenhouse effect, produced largely by forest clearing and the burning of fossil fuels.

Au 21e siècle, la prise de conscience mondiale de la menace posée par l'effet de serre humain, due en grande partie au défrichement des forêts et à la combustion de combustibles fossiles, est de plus en plus importante.

There are at least 3 letters from the scientific community about the growing threat to Sustainability and ways to remove the threat:

1- In 1992, scientists wrote the first World Scientists' Warning to Humanity, which begins: "Human beings and the natural world are on a collision course." About 1,700 of the world's leading scientists including most of the Nobel Prize laureates in the sciences signed it. The letter mentions severe damage to atmosphere, oceans, ecosystems, soil productivity and more. It warns humanity, that the life on earth as we know them can become impossible and if humanity wants to prevent the damage, some steps need to be taken: better use of resources, abandon of fossil fuels, stabilization of human population, elimination of poverty and more.

2- In 2017, the scientists wrote a second warning to humanity. In this warning, the scientists mention some positive trends like slowing deforestation, but despite this, they claim that except ozone depletion, none of the problems mentioned in the first warning got an adequate response. The scientists called to reduce the use of fossil fuels, meat, and other resources and stabilize the population.

It was signed by 15,364 scientists from 184 countries, what made it the letter with the most signatures of scientists in history

3- In November 2019, more than 11,000 scientists from 153 countries published a letter in which they warn about big threats to sustainability from climate change if big changes in policies will not happen. The scientists declared "climate emergency" and called to stop Overconsumption, move from fossil fuels, eat less meat, stabilize population and more