

# SUSTAINABILITY



Issue 2 / November 2023

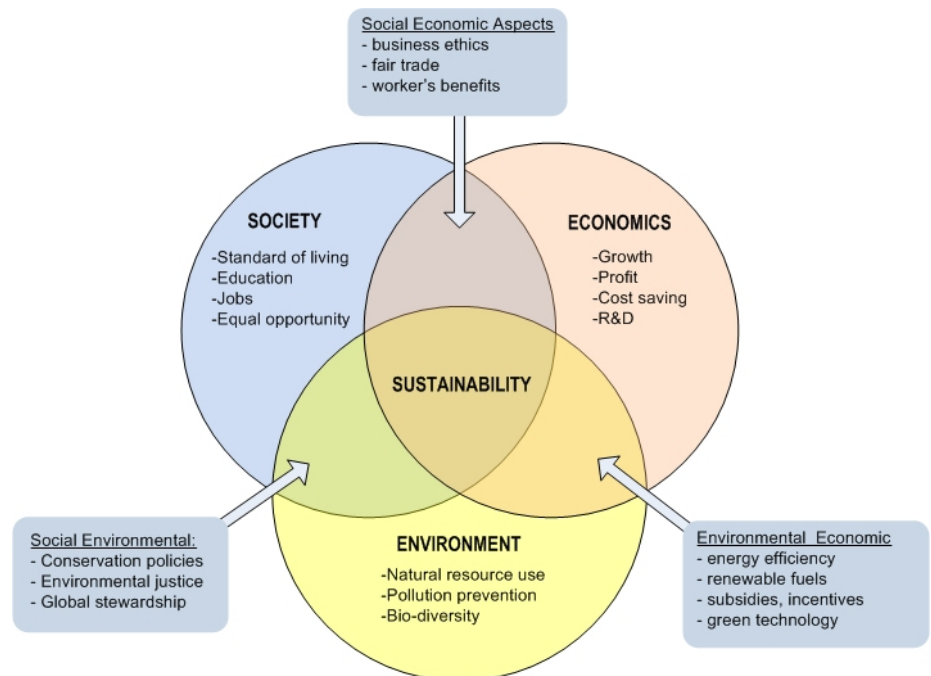
## NEWS

The Mississippi River is experiencing historically low water levels due to drought via climate change. Drinking water in New Orleans and shipping traffic have been disrupted as a result. The Lower Mississippi River Conservation Committee estimates the economic impact of the lower Mississippi River to be ~\$151 billion in revenue and 585k jobs.



## WHAT IS SUSTAINABILITY?

**Sustainability** means meeting the needs of the present without compromising the ability of future generations to meet their own needs. **Sustainable Development** calls for building an inclusive, sustainable, and resilient future for people and the planet. Economic development, social development, and environmental protection are independent and mutually reinforcing components of sustainable development and have been called the **Triple Bottom Line**.



## United Nation's 17 Sustainable Development Goals (SDG)

In September 2015, the UN adopted the [2030 Agenda for Sustainable Development](#), establishing 17 **sustainable development goals**. The goals have become a standard framework for governments and organizations developing sustainability plans. **Sustainability Plans** assess new initiatives, emerging technologies, and business strategies focusing on sustainable development. New processes that harm the environment via carbon emissions, hazardous air pollution, toxic waste, or single-use items must be improved to reduce their environmental impact.

Renewable resources can support human activities indefinitely if we do not use them more rapidly than they can regenerate. Our **ecological footprint** is the demand placed on nature for resources consumed and wastes absorbed. In other words, the Earth has a **carrying capacity**. The Earth's **Natural Capital**, such as food, shelter, and water, is limited. [The World Counts](#) estimates we need 1.8 Earths to sustain our current consumption patterns.

Shifting away from fossil fuels, powering our lives with renewable energy, using energy more efficiently, reducing per-capita resource consumption, developing zero-waste circular economies, reducing population growth, increasing food production

without converting additional land to agriculture, and protecting biodiversity and ecosystem services, are foundational measures that can help reduce our ecological footprint and live within the carrying capacity.

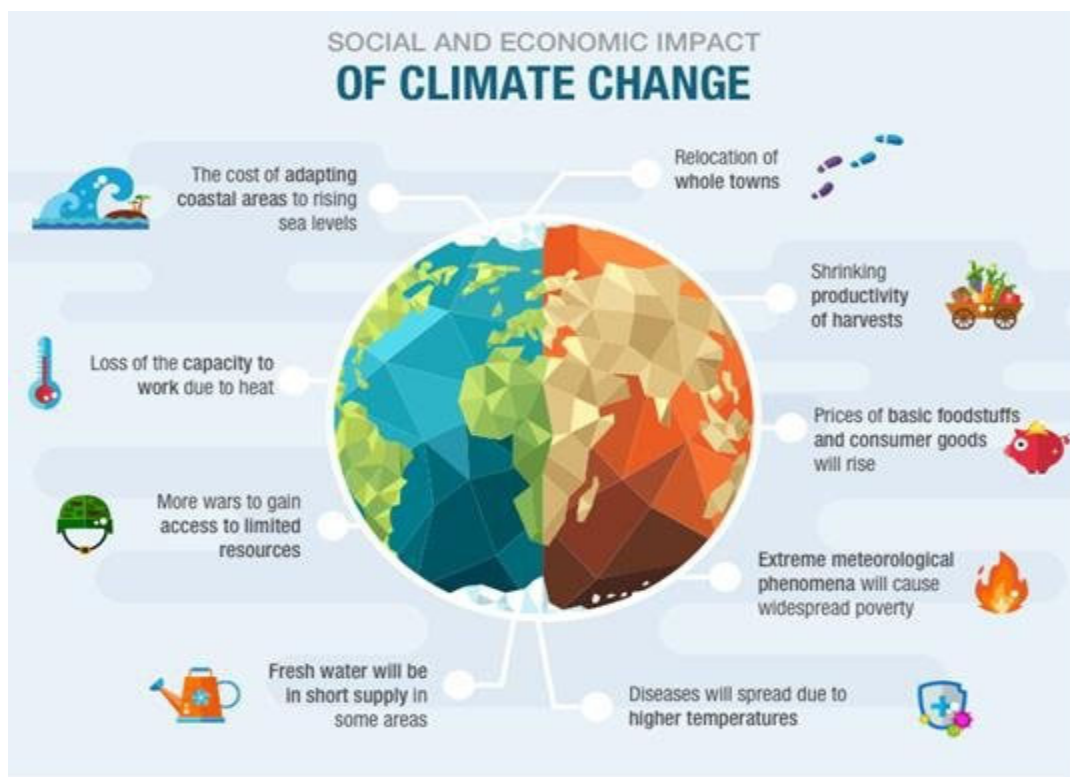
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*“Man's attitude toward nature is today critically important simply because we have now acquired a fateful power to alter and destroy nature. But man is a part of nature, and his war against nature is inevitably a war against himself. [We are] challenged as mankind has never been challenged before to prove our maturity and our mastery, not of nature, but of ourselves.” – Rachel Carson, 1962 (Silent Spring)*

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## KEY FACTS - Ourworldindata

1. If you imagine Earth's 4.5 billion years of history squeezed into a calendar year, modern human life has existed for 37 minutes, and we have used up a third of Earth's natural resources in the last 0.2 seconds.
2. The human impact on Earth is so massive that it has resulted in the formal denomination of a new geological Epoch: **The Anthropocene Epoch**.
3. The human population makes up only a fraction of the life on Earth, about one percent of one percent (0.01%) of the Earth's biomass.
4. We consume natural resources and dump waste at a rate exceeding the Earth's capacity by 75%.
5. If the current deforestation rate continues, the world's rainforests will be gone in 100 years.
6. We have produced enough plastic in the last 70 years to coat the Earth entirely in plastic.
7. The global food chain requires 1000 tons of grass to feed one human being for one year.
8. Over 36 billion metric tonnes of CO<sub>2</sub> will be emitted into the atmosphere in 2023, causing millions of pounds of ice to melt and sea levels to rise.
9. Over \$6 trillion in synthetic chemicals were produced in 2023, increasing pollution.
10. More interesting facts from ourworldindata can be found here: <https://ourworldindata.org/>





*If you are interested in learning more or have thoughts about how we could be doing better, please get in touch with me.*

*All responses will be kept confidential.*

## Contact

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## FINAL THOUGHTS

In conclusion, sustainable development is a global imperative, demanding innovative and comprehensive solutions. Our exploration of various strategies, from renewable energy adoption to conservation measures and inclusive economic policies, underscores the multifaceted nature of this challenge. As our world grapples with environmental threats, social inequities, and economic disparities, the importance of holistic, long-term solutions cannot be overstated. Collaboration among governments, industries, communities, and individuals is paramount to achieving a harmonious balance between ecological preservation, economic growth, and social well-being. The urgency to address sustainable development issues is apparent, and the path forward requires unwavering commitment and transformative action. The future of our planet and the generations to come hinges on the choices we make today.

