



THE IMPACT OF TECHNOLOGY ON ENVIRONMENT

Hemant kumar
Shayam Lal College
University of Delhi

Introduction

The environment and technology are essential to one another's existence. Technology is influenced by the environment. Tech has an impact on people. The issue is how the environment and technology are currently affecting one another and how they will do so in the future. However, it is predicted that the use of artificial intelligence (AI) might reduce world GHG emissions by 4% by 2030. The environment and technology are inextricably linked. Both have an impact on one another and need to be maintained for the other to succeed. People must be able to use technology effectively if they want to develop and be successful. If technology is to prosper, it must develop in ways that are advantageous to society as a whole. A technological society needs to cohabit with the environment in order to remain viable.

The environment and technology work well together. Together, they enable technology to advance. Without the earth, humans cannot survive. It offers shelter, food, and air. These are all delivered through various environmental quality measures.

EARTH ROOT • VOLUME 27 • AUGUST 2023

How Technology Can Harm the Environment

Several technologies can harm the environment:
Consuming resources: Technology is produced using priceless non-renewable resources like gold, while others like coal are burnt to produce electricity for its functioning. Technology manufacturing procedures can also contaminate water, further diminishing this priceless resource.

Pollution - The creation and usage of technology can result in air, water, heat, and noise pollution. Large amounts of waste are produced during manufacturing, and worn electronics are discarded.

Ecology disruption - Clearing land where animals once lived to create factories can significantly alter the natural cycles of the ecosystem.

Health dangers - The use of hazardous materials in the manufacture of technology can result in significant health risks, including the possibility of cancer. Additionally, an excessive reliance on technology might result in a number of health problems.

The modern world is plagued by numerous environmental issues. The impoverished in developing nations, those who reside in rural areas, and those who have limited access to clean water and electricity suffer many of these issues.

It is true that technology has, in some instances, made certain issues easier to deal with. The employment of technology, however, is not restricted to enhanced forestry techniques, clean energy, and water purification. In terms of technology and the environment, integrating technology into society has further advantages.

The increased usage of clean energy, water conservation, and technological adoption are praised by environmentalists. They contend that technological solutions to the environmental issues that society is currently facing can and should be developed.

While technology might not be able to fix every environmental issue, it might potentially help by developing solutions to problems including air pollution, water pollution, and pesticide use.

As was already mentioned, technology has had an impact on the environment since the beginning of time. The effects of technology on the environment can be traced back to the Stone Age. Additionally, technology has continued to have new effects on the environment.

New environmental concerns have been brought about by technological advancements in fields like telecommunications. A telephone network is made up of a significant amount of electricity that was produced over a very long time.

To assess the effect of technological advancement on the environment, it is crucial that the important questions are raised and sufficient study is conducted

Technology Has Become an Integral Part of Our Daily Lives

Every aspect of our everyday lives now involves technology, from the devices we use to the systems that keep the globe running. Without a doubt, it has greatly improved communication, efficiency, and convenience. But even as we reap the rewards of technology, it is crucial to understand how it affects the environment and work toward a sustainable equilibrium.

The way we manage and monitor the environment has been completely transformed by technology. We are now better able to comprehend and address environmental issues including deforestation, wildlife protection, and climate modeling. This is made possible by remote sensing, data analytics, and artificial intelligence (AI).

Scientists, decision-makers, and conservationists can now make more informed judgments and take proactive steps to protect our planet thanks to this data-driven approach.

The move to a more sustainable and circular economy has also been aided by technology. The rise of ride-sharing, home-sharing, and other collaborative consumption patterns is a result of the sharing economy idea, which is supported by technological platforms and reduces the demand for new goods and waste.

So, how can we strike a balance between technology and the environment?

Encourage Eco-Design Principles: Encouraging eco-design principles in the production of electronic equipment, such as energy efficiency, robustness, repairability, and recyclability, can lessen their environmental impact and support a circular economy.

Practice Responsible Consumption: We may reduce e-waste and its harmful effects by being aware of our consumption patterns and prolonging the life of our devices through repairs, upgrades, and proper disposal.

Support and Adopt Renewable Energy technology: By embracing renewable energy technology, we can lessen our reliance on fossil fuels and cut back on greenhouse gas emissions.

Digital Activities & The Carbon Footprint

Digital technologies use energy at a pace of 9% yearly and produce 4% of greenhouse gas emissions (GHG). Every year, 1.6 billion tons of GHG emissions are produced by the internet alone. In addition, it is anticipated that by 2025, the communications sector would use 20% of all the electricity consumed globally.

The Coming Catastrophe: Toxic Techno trash

Prepare yourself for techno trash's nightmare! Electronic waste has given birth to a ruthless beast that is tearing through our world at an unheard-of rate.

Thrown out with the ordinary garbage, it eventually ends up in the dreaded landfill, where its hazardous heavy metals and non-biodegradable elements are waiting to start harm.

The Backbone Of A Net-Zero Emissions Future

The importance of transitioning to a net-zero economy on a global scale, with a strong focus on reducing greenhouse gas emissions, cannot be overstated.

Digital technologies will be at the vanguard of this transformation since they are essential to achieving net-zero emissions. Digital technologies support decarbonization initiatives by having the ability to handle data effectively, identify problems rapidly, and virtually test remedies.

Energy-intensive systems stand to benefit from the adoption of digital and Web3 technologies, such as cloud and edge computing, artificial intelligence (AI) and machine learning (ML), internet of things (IoT) sensors, and blockchain technology, as they offer opportunities for improved efficiency and sustainability.

Conclusion

Thus, technology and the environment are closely related to one another. Technology can enhance environmental and sustainability solutions, but it also has downsides that need to be addressed.

