



## TELEPORTATION AND GREEN ECONOMY: FANTASY OR REAL OPPORTUNITY?

***Baxromova Indira Azizjon qizi***

*Alfraganus University, Faculty of Economics*

*1st-year student, Economics major*

[\*baxromovaindira@gmail.com\*](mailto:baxromovaindira@gmail.com)

***G'ulomova Gulasal Azizjonovna***

*Alfraganus University, Faculty of Economics*

*1st-year student, Economics major*

***Axmedov O'tkirjon Aloviddin o'g'li***

*Alfraganus University, Faculty of Economics*

*Lecturer, Department of Economics*

***ABSTRACT:*** *This article examines the concept of teleportation, its scientific foundations, and its potential impact on the green economy, employment, and global ecology, drawing from both scientific research and science fiction ideas. The article highlights both the positive and negative aspects of teleportation and provides scenario-based predictions about the possible impact of this technology on humanity's future.*

***Keywords:*** *teleportation, green economy, future technologies, science fiction, ecology, employment, technological revolution*

### INTRODUCTION

#### **The historical development of the idea of teleportation**

The concept of teleportation can be traced back to ancient mythology and religious texts. In Indian epics such as the Mahabharata, heroes are described as instantly moving across vast distances. In Sufi tales from the East, there are also ideas about the body or soul transcending time and space. In the 19th and 20th centuries, science fiction writers such as H. G. Wells, Isaac Asimov, and Ursula Le Guin described teleportation in literary works, giving the concept a scientific tone.



From the mid-20th century, teleportation began to be studied in connection with quantum mechanics, information theory, and physics experiments.

Teleportation is the idea of instantly transferring matter (a person, object, or information) from one place to another. First introduced in science fiction and movies (for example, Star Trek), it is now a subject of serious scientific discussion. In the 21st century, especially with the development of quantum physics, scientific research has begun to turn teleportation into a more realistic concept.

However, teleportation could have not only technical but also economic, ecological, and social impacts. In the context of global warming, pollution, traffic congestion, and harmful emissions from transport, teleportation is seen as a potential solution for the green economy. At the same time, this technology may negatively affect jobs, raise safety concerns, and pose ethical dilemmas.

### **LITERATURE REVIEW**

There are already scientific experiments related to teleportation. In 2020, American scientists successfully transmitted the quantum state of a photon over a distance of 44 km. Although this was not complete teleportation, it confirmed the principle known as quantum teleportation.

Famous futurists such as Ray Kurzweil and Michio Kaku believe that teleportation could become a reality by the year 2100. They have speculated about the role this technology may play in the progress of humanity. In particular, Michio Kaku in his book *Physics of the Impossible* states that teleportation is “not impossible, only uncertain for now.”

### **SCIENTIFIC FOUNDATIONS AND TECHNOLOGICAL ADVANCES**

Teleportation in the sense of moving entire physical objects has not yet been achieved. However, significant progress has been made in the field of quantum teleportation. This process is based on the phenomenon known as quantum entanglement, in which two or more particles are so interconnected that a change in one instantly affects the other.



In 2020, American scientists successfully transmitted the quantum state of a photon over 44 km.

In 2022, Chinese scientists managed to transmit a quantum signal over 1,200 km.

The European Union's "Quantum Flagship" program is funding large-scale research into quantum internet and long-distance teleportation.

## **TELEPORTATION AND THE GREEN ECONOMY**

Teleportation could significantly reduce carbon dioxide (CO<sub>2</sub>) emissions from transportation. Currently, transport accounts for about 24% of global CO<sub>2</sub> emissions, contributing substantially to climate change. With teleportation, billions of dollars currently spent on roads and bridges could be saved, cities would have cleaner air, and opportunities for ecological tourism would expand. Moreover, by reducing energy consumption, teleportation could also positively influence the global energy market.

## **SOCIAL AND ETHICAL ISSUES**

If teleportation becomes widespread, millions of workers in the transport sector may lose their jobs. This would require a transition to new sectors that demand advanced skills, such as information technology and scientific research.

The risk of technological inequality is also present — developed countries may adopt teleportation faster and gain economic dominance over less developed nations.

From a security perspective, teleportation could bypass border and customs controls, increasing risks of crime and terrorism. There is also the possibility of uncontrolled transmission of viruses and bacteria.

One of the most complex ethical questions is whether a teleported individual remains the same person or becomes a perfect copy — a debate that opens profound legal and philosophical dilemmas.

## **DISCUSSION: BETWEEN FICTION AND REALITY**

Teleportation is not yet a real technology. However, every great innovation began in human imagination. The internet, airplanes, and mobile communication





were once science fiction. In the future, the creation of teleportation could lead to the greatest logistics revolution in human history.



## **FUTURE SCENARIOS**

The impact of teleportation can be described through three main scenarios:

Optimistic scenario: environmental problems are solved, economic efficiency improves, and new highly skilled jobs are created.

Pessimistic scenario: technology is only available to developed nations, increasing global inequality and security crises.

Mixed scenario: initial problems emerge but are later balanced through global cooperation and international legal frameworks.

## **CONCLUSION AND RECOMMENDATIONS**

Teleportation can be regarded as a promising technology that may reduce environmental issues, eliminate wasteful transportation, and contribute to the development of the green economy. However, it could also create serious challenges in employment, security, and ethics. Therefore, before introducing teleportation, strategies addressing global safety, social equality, and ecological balance must be developed.

### **Recommendations:**



Fund research on teleportation through cooperation between science and government.

Develop scenarios for implementing this technology in the context of the green economy.

Establish social equality and security measures at the global level.

## REFERENCES

1. Kaku, M. (2014). The Future of the Mind: The Scientific Quest to Understand, Enhance, and Empower the Mind. Anchor Books.
2. Bell, J. S. (2004). Speakable and Unspeakable in Quantum Mechanics: Collected Papers on Quantum Philosophy. Cambridge University Press.
3. OECD. (2020). Green Growth and Sustainable Development: Innovative Approaches to Green Jobs. OECD Publishing.
4. Kurzweil, R. (2019). The Singularity is Near: When Humans Transcend Biology. Moscow: Alpina Publisher.
5. Qodirov, S. (2021). "Relevant Directions of Green Economy Development in Uzbekistan." Journal of Economics and Innovative Technologies, 5(3), 45–51.