

processes in the virtual world will require not real money, but digital. And, of course, when mentioning digital money, the blockchain and cryptocurrencies based on this technology come to mind first – it seems that they should have even more space in the metaverse than in reality. At the same time, experts believe that both existing currencies and new ones may be in demand there.

Therefore, for those who plan to become part of the metaverse at the first stages of its existence, it is worth plunging into the world of cryptocurrencies right now – otherwise there is a chance of not keeping up with the departing train. In this article, the concept of the metaverse and its role in the economy of the future were considered.

REFERENCES:

1. What You Need To Know About How the Metaverse Will Affect Business [Electronic resource]. – Mode of access: <https://www.entrepreneur.com/article/415480>. – Date of access: 05.03.2022.
2. The Metaverse [Electronic resource]. – Mode of access: <https://grayscale.com/learn/the-metaverse/>. – Date of access: 05.03.2022.
3. Demystifying the metaverse [Electronic resource]. – Mode of access: <https://www.pwc.com/us/en/tech-effect/emerging-tech/demystifying-the-metaverse.html>. – Date of access: 05.03.2022.
4. 5 Things To Know About Balenciaga’s Virtual Reality AW21 Show [Electronic resource]. – Mode of access: <https://www.vogue.co.uk/news/gallery/balenciaga-autumn-winter-2020>. – Date of access: 05.03.2022.
5. The metaverse: An innovation worth leadership attention [Electronic resource]. – Mode of access: <https://www.fastcompany.com/90705119/the-metaverse-an-innovation-worth-leadership-attention>. – Date of access: 05.03.2022.
6. How Will The Metaverse Impact Businesses In The Consumer Goods Sector? [Electronic resource]. – Mode of access: <https://www.forbes.com/sites/forbestechcouncil/2022/01/19/how-will-the-metaverse-impact-businesses-in-the-consumer-goods-sector/?sh=1525fc63f2ae>. – Date of access: 05.03.2022.

Kristina Grin

Science tutor *E. Lukyanova*
BSEU (Minsk)

ARE ENVIRONMENTALLY FRIENDLY NFTS POSSIBLE?

The purpose of the work is to identify ways of greening the NFT market. The relevance of the work lies in the simultaneous digitalization of the economy and the growth of environmental problems.

An NFT (non-fungible token) is a record on a cryptocurrency’s blockchain (an immutable ledger that can record more than just virtual coins) that represents pieces of digital media

[1]. The essence of this technology consists in registering the ownership of a specific virtual object in the blockchain.

Any field of activity that is somehow connected with cryptocurrency is extremely energy-intensive, since powerful mining equipment is needed. Since today most of the world's power plants are thermal, carbon dioxide is released into the atmosphere, which creates a greenhouse effect, and also negatively affects the thermal balance of the Earth. The latter provokes global warming and large-scale climate change. In addition, there is a need to increase the volume of extracted raw materials, which leads to a faster depletion of natural resources.

Nevertheless, as the entire global economy, the digital NFT market is interested in finding new, more environmentally friendly ways of working. One of them is the creation of carbon neutral platforms. The Ethereum blockchain, which is used to mint NFTs, uses a mechanism called Proof-of-Work to verify the legality of transactions and data storage. This mechanism leads to incredibly high energy consumption. However, it is possible to use alternative mechanisms, such as PoS (Proof-of-Stake), which are far less energy intensive. In fact, several blockchains that also support NFTs (e.g. Polygon and Tezos) have already used the PoS mechanism and had vastly lower power consumption compared to Ethereum. For comparison, the annual energy consumption of the Tezos network is estimated to be at 0.001 TWh, which is minimal when compared to Ethereum at 26 TWh [2].

An important direction in the greening of the economy is the use of alternative energy sources. A Cambridge University study in 2020 found that 39% of the energy used by Proof-of-Work blockchains has already been renewable energy. The researchers also concluded that this number may increase in the future [3].

Another way to minimize the harmful impact of the digital NFT market on the outside world is to invest the received funds in environmental projects. Carbon offsets are payments made to finance a project that reduces carbon emissions or removes carbon dioxide from the atmosphere. The cryptocurrency area is highly profitable, so it could be an excellent source of funding for such events. But still, this project remains quite controversial, as companies have an incentive to compensate rather than to reduce emissions, which generates even more environmental pollution.

Despite the need for a large amount of computer equipment for mining, working with NFTs does not require an enterprise, office equipment, large water and electricity supply systems in the office, etc.

After all, the energy consumed for NFT accounts for an insignificant fraction of all global emissions. This is even a small part of the total energy used only in blockchains. Many of the potential solutions to the carbon emissions problems observed with NFTs have already been working, in many cases they just need wider adoption. And although the solution has not been found yet, a lot of artists and even environmentalists are pretty optimistic about NFTs. They believe that in a couple of years, the emissions will cease to be a problem for the NFT space.

Ultimately, it was the artists themselves who most actively sought change. They have the power, and if the NFT markets fail to meet their demands, the artists can easily stop mining NFTs or move to an alternative market.

Some artists are offering rewards to those who are able to find new ways to improve sustainability and reduce the carbon footprint of NFTs. This is a great example of how a community solves a problem on its own terms, rather than disregarding it and hoping that someone else will solve it.

REFERENCES:

1. The Economist [Electronic resource]. – Mode of access: <https://www.economist.com/the-economist-explains/2021/10/12/what-is-an-nft>. – Date of access: 09.03.2022.
2. BitPinas [Electronic resource] : PwC Report. – Mode of access: <https://www.jbs.cam.ac.uk/faculty-research/centres/alternative-finance/publications/3rd-global-cryptoasset-benchmarking-study/>. – Date of access: 16.03.2022.
3. University of Cambridge [Electronic resource] : 3rd Global Cryptoasset Benchmarking Study. – Mode of access: <https://www.jbs.cam.ac.uk/faculty-research/centres/alternative-finance/publications/3rd-global-cryptoasset-benchmarking-study/>. – Date of access: 10.03.2022.

Yana Demchuk, Anastasia Korzan
BSTU (Brest)

INVESTMENT TOOLS IN THE DIGITAL ECONOMY

In the current era, the progressive development of world technologies plays the most important role in determining the component of the future of the whole society for a unit. Day after day, inventors and specialists from various fields create and subsequently introduce the latest solutions to mutually dependent spheres of human activity, modernizing and optimizing them. These findings are firmly embedded in the daily life of mankind, thus forming their significance and necessity due to their new capabilities in more simplified use and instant availability, unconditional minimization of actions and time. One of the leading positions in such a rapidly growing progress is digitalization, namely, in it, economic activity based on digital technologies and associated with e-business and e-commerce.

The digital revolution in the global economy is characterized by a constant increase in the flow of information, ideas and innovation. Purely diverse Internet platforms are growing daily: media platforms, social networks, online stores, instant messengers. Online games and online advertising are gaining more and more coverage among users to generate direct income, and electronic transfers and Internet banking have become available to any client of commercial banks, where the use of modern methods to improve the quality of service and meet the minimum needs for convenience is actively practiced. In addition, a kind of high-speed electronic information systems with a large capacity provide a person with the opportunity, with a few light strokes on the keyboard, to transfer copies of works in digital code to millions of other people practically anywhere in the