

ONE HUNDRED SEVENTEENTH CONGRESS
Congress of the United States
House of Representatives
COMMITTEE ON ENERGY AND COMMERCE
2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-6115

Majority (202) 225-2927
Minority (202) 225-3641

February 16, 2022

Mr. Gregory Zerzan
Shareholder
Jordan Ramis P.C.
6907 Andover Drive
Alexandria, VA 22307

Dear Mr. Zerzan:

Thank you for appearing before the Subcommittee on Oversight and Investigations on Thursday, January 20, 2022, at the hearing entitled “Cleaning Up Cryptocurrency: The Energy Impacts of Blockchains.” I appreciate the time and effort you gave as a witness before the Committee on Energy and Commerce.

Pursuant to Rule 3 of the Committee on Energy and Commerce, members are permitted to submit additional questions to the witnesses for their responses, which will be included in the hearing record. Attached are questions directed to you from certain members of the Committee. In preparing your answers to these questions, please address your response to the member who has submitted the questions in the space provided.

To facilitate the printing of the hearing record, please submit your responses to these questions no later than the close of business on Wednesday, March 2, 2022. As previously noted, this transmittal letter and your responses, as well as the responses from the other witnesses appearing at the hearing, will all be included in the hearing record. Your written responses should be transmitted by e-mail in the Word document provided to Austin Flack, Junior Professional Staff, at austin.flack@mail.house.gov. To help in maintaining the proper format for hearing records, please use the document provided to complete your responses.

Mr. Gregory Zerzan
Page 2

Thank you for your prompt attention to this request. If you need additional information or have other questions, please contact Austin Flack with the Committee staff at (202) 225-2927.

Sincerely,

A handwritten signature in blue ink that reads "Frank Pallone, Jr." in a cursive style.

Frank Pallone, Jr.
Chairman

Attachment

Mr. Gregory Zerzan

Page 3

cc: The Honorable Cathy McMorris Rodgers
Ranking Member
Committee on Energy and Commerce

The Honorable Diana DeGette
Chair
Subcommittee on Oversight and Investigations

The Honorable H. Morgan Griffith
Ranking Member
Subcommittee on Oversight and Investigations

Attachment—Additional Questions for the Record

**Subcommittee on Oversight and Investigations
Hearing on
“Cleaning Up Cryptocurrency: The Energy Impacts of Blockchains”
January 20, 2022**

Mr. Gregory Zerzan, Shareholder, Jordan Ramis P.C.

The Honorable H. Morgan Griffith (R-VA)

1. During the Subcommittee’s hearing I asked you about decentralized finance and so-called central bank cryptocurrencies. For example, the new digital renminbi that China has begun issuing. Are these central bank issued cryptocurrencies an unlimited amount of online tokens or does the central bank have to use computing power to calculate randomly generated puzzles?

Answer: From reports it appears that the digital renminbi issued by the Central Bank of China is not a decentralized application where transactions are conducted on a blockchain. Instead, it appears that the “digital yuan” is simply an electronic ledger maintained by the People’s Bank of China (PBOC), and each user of the digital yuan is in effect given a bank account at the PBOC. In this way the digital yuan is very different from cryptocurrencies such as Bitcoin, which do operate on a blockchain that is not controlled by any one, centralized authority. In addition, unlike Bitcoin, there does not appear to be any limit to the amount of digital yuan that the PBOC can issue. Therefore the digital yuan appears to operate as a form of “electronic cash” that is different from how most currency transactions occur today in the United States and other countries only in that, instead of relying on private-sector financial institution intermediaries (e.g. banks), the PBOC has eliminated the intermediaries. Critics of this approach have noted that it gives a government institution greater ability to observe its citizens’ transactions and freeze or confiscate their individual accounts, should it choose to do so.

The Honorable Michael C. Burgess (R-TX)

1. During my time as the Chairman of the Commerce, Manufacturing, and Trade Subcommittee in the 114th Congress, now the Consumer Protection and Commerce Subcommittee, I held an educational hearing about digital currency and blockchain technology.
 - a. How far has cryptocurrency and blockchain technology come since this hearing in 2016?

Answer: The Blockchain Whitepaper published in the name of Satoshi Nakamoto in 2008 and the Ethereum White Paper written by Vitalik Buterin in 2013 remain foundational documents in establishing the basis for much of the cryptocurrency and blockchain technology in use today. As measured by the value of the cryptocurrency market in the aggregate, growth since 2016 has as times been exponential (although subject to significant volatility).

- b. What do you see as the role of the Federal government in these technologies?

Answer: The United States can foster growth of blockchain technology by eliminating legal and regulatory uncertainty that currently exists regarding transactions in cryptocurrency. Blockchains generally run on cryptocurrency, which provides an internal accounting mechanism for the use of the service and the attendant costs in computing power. There is nothing about the technology behind blockchain that is inherently “financial,” but most discussion of regulatory policy in the United States appears to be occurring among financial regulators. In my view it would be better for Congress to enact a legal presumption that a digital coin or token is not a financial product unless it is primarily designed to serve as a financial product and is sold or marketed as a financial product. This would create a clear legal distinction between cryptocurrencies that are intended to be financial products (e.g. tokenized securities), and those that are intended to facilitate the operation of decentralized applications (dapps) without regard to whether a secondary market has developed for the cryptocurrency used in such dapp.

- c. How can the United States assist Bitcoin mining domestically in being cleaner and more productive?

Answer: There is currently a large and apparently growing market in the United States for energy sources that are less carbon-intensive. Bitcoin mining in the U.S. appears to be likewise subject to market pressure to lessen its carbon footprint. By fostering free markets the United States can encourage not only more clean and productive Bitcoin mining, but greater technological innovation leading to cleaner energy production generally.

2. Mr. Zerzan, A bitcoin mining company that is expanding into Texas asserts that these companies can help stabilize an electric grid by rapidly curtailing and even completely shutting down their 24/7 energy consumption during periods of surging demand in order to ensure consumers receive needed energy.

- a. How can mining cryptocurrency strengthen the reliability and stability of our power grids?

Answer: As my fellow witness John Belizaire, Founder and Chief Executive Officer of Soluna Computing, Inc., noted in his testimony: “Curtailed energy, it turns out, is a nearly universal problem in clean energy development. Up to

30% of clean power generated on solar and wind farms can be curtailed - or wasted - which decreases the profitability of these power plants.” As Mr. Belizaire noted, the computing power required for blockchain transactions can utilize this energy on a flexible basis, providing a market for what would otherwise be wasted energy production. In addition, companies engaged in cryptocurrency mining have explored creating their own generating facilities, allowing them to potentially sell power to the grid during times of high demand. These actions- providing a source of demand for otherwise wasted energy, the ability to pause computing operations if local conditions require it, and the ability to generate and sell power- help increase the reliability and stability of the grid.

3. Mr. Zerzan, there is a lot of consternation surrounding bitcoin, from the financial services sector to the energy sector. But cryptocurrencies and the blockchain have also shown to be effective tools in validating transactions, maintaining records, and allowing the traditionally unbanked to access financial markets.
 - a. Can you explain how cryptocurrency mining can be a tool for good, particularly for underserved communities?

Answer: Cryptocurrency holds the potential to allow products and services to exist on decentralized networks, potentially lowering costs and increasing access. Cryptocurrency mining helps ensure these networks operate effectively. Consumers generally benefit from “frictionless” markets where costs imposed by intermediaries are reduced or eliminated, provided operational efficiencies are not degraded in the process. Blockchain holds the potential for facilitating the creation of efficient, frictionless markets, which can benefit all users including those in underserved communities.