

STATEMENT OF

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before the

COMMITTEE ON FINANCIAL SERVICES

UNITED STATES HOUSE OF REPRESENTATIVES

December 8, 2021

Chairwoman Waters, Ranking Member McHenry, and members of the committee, thank you for inviting me here today to discuss digital assets and the future of finance. This topic is an important one for anyone who cares about American competitiveness in the financial services sector, a financial ecosystem that empowers users over bank CEOs and other powerful central decisionmakers, and the next iteration of the Internet in which individuals are able not only to read information and write content but also own a piece of the underlying network protocols themselves.

I am CEO of Bitfury Group, a company that provides a suite of infrastructure products and services that support various aspects of the cryptocurrency ecosystem – an ecosystem many of us refer to as “Web 3” since cryptoassets generally represent either the rewards paid to participants for maintaining a particular decentralized network or an app that operates on such a network. Since 2011, Bitfury has designed and produced eight successive generations of ASIC chips and related equipment for conducting transaction validation activity on the Bitcoin blockchain – a process known informally as bitcoin mining. Along the way, Bitfury developed a series of adjacent businesses to make cryptoassets safe, sustainable, and useful. Our various businesses include LiquidStack, one of the world’s largest immersion cooling companies focusing on

reducing the energy used by bitcoin mining and other high performance data centers by as much as 90 percent; Crystal, a blockchain analytics company that provides transaction monitoring and related compliance tools to more than 150 law enforcement agencies, crypto exchanges, and financial services companies in Europe, Asia, and North America; Axelera, a producer of cutting-edge artificial intelligence ASIC chips; and others.

I believe the committee's topic requires an understanding of three important threshold issues.

First, a national policy agenda that takes crypto compliance seriously should assess whether it makes more sense to continue to keep crypto activities largely out of the regulated financial system, or to bring them inside the system precisely so they can be supervised and operated with appropriate levels of risk management. For example, is it consistent to take the position that only banks should be allowed to issue stablecoins, but then fail to grant bank charters to the largest issuers of stablecoins? That would, after all, bring stablecoin activity within the ambit of national bank supervision. Or does it make sense to bring enforcement actions challenging certain cryptoassets as unregistered securities, but then fail to allow those assets to be registered and trade on a national securities exchange or alternative trading system that is supervised by FINRA and the SEC?

Second, Americans deserve to know what our national policy is for a decentralized Web 3 powered by cryptoassets. Treating “crypto” as a single unitary activity whose main feature is a need for financial regulation would be like treating the original Internet in the 1990s as primarily a tax policy issue. We did not do that then. What we had in the 1990s with respect to Web 1 that we lack today with respect to crypto is a comprehensive national policy predicated first on the notion of do no harm to the emerging Internet. Today, instead of focusing only on micro questions such as whether a particular token is a security or whether a particular exchange-traded fund may be offered, it would be worthwhile for the elected branches of government to grapple with the bigger questions: Do we believe a user-controlled decentralized Internet is better than an Internet largely controlled by five big companies? Do we believe that the financial services sector is any less subject to network effects than information and commerce were in earlier iterations of the Internet? Do we trust big banks more, or open-source software more, as a tool for maintaining ledgers of account and allocating credit and capital? Can we recognize the difference between crypto projects failing for lack of demand just as many publicly traded companies do, and individual crypto projects being scams unworthy of being presented to the fair but sometimes harsh judgment of markets?

Third, crypto policy should take into account not only any new risks introduced into the system, but also the risks in the present system that are being

solved by decentralization. Having issued almost \$1 billion in civil money penalties against banks and bank executives during my tenure leading the Office of the Comptroller of the Currency, it is clear to me that the present financial system has plenty of examples of risks and costs and various forms of unsafe and unsound conduct. Shouldn't we take seriously the possibility that algorithms and open-source software that take a measure of human error, greed, negligence, fraud, and bias out of the system might make the system better on net even if there are some new risks that need to be examined and understood?

Apart from those three overarching considerations, I would like to make two points specific to my current perspective on the cryptoeconomy.

One relates to the effect of U.S. crypto regulation on American competitiveness in both the technology and capital markets sectors. There are a number of examples of U.S. regulatory decisions that have driven legitimate activity offshore, in ways that harm U.S. investors, innovators, and workers. Can anyone explain, for example, why Fidelity Investments, one of America's best-known investment advisors, had to go to Canada to offer a bitcoin ETF? Or why physically settled crypto ETFs are safe and legal in Germany, Brazil, and Singapore, but not in the United States? Can anyone explain why crypto exchanges, stablecoin issuers and others can receive e-money licenses to access the payments system in the United Kingdom, but in the United States that privilege is

reserved exclusively for chartered banks, with the result that the GDP cost of the payments system in the U.S. is roughly four times the cost in the U.K.? For that matter, why is there no clear path for crypto-focused insured depositories chartered in the State of Wyoming to access Federal Reserve payment services like all other insured depositories? There is a reason why crypto talent is no longer concentrated in Silicon Valley, the birthplace of the original commercial Internet. Sure, some talent has merely moved from Silicon Valley to Miami – but a surprising number of talented founders have left for Portugal, Dubai, Abu Dhabi, Singapore, and other jurisdictions that are not at all unregulated but that have a more positive posture toward innovation and growth.

My other specific point relates to the debate over the environmental sustainability of “proof of work” assets – bitcoin and other assets that rely on compute power to solve complex math puzzles to validate transactions on their networks. On one level the headline allegations about bitcoin mining – that somehow bitcoin mining consumes more electricity than, say, the entire nation of Argentina – are just wrong. The best data shows that bitcoin’s total global energy usage of about 188 terawatts is somewhat less than the total annual energy usage of Christmas lights (around 201 terawatts). It is statistically trivial compared to the energy usage of countries like South Korea (3,336 terawatts), Brazil (3,342

terawatts), or Germany (3,364 terawatts), let alone the United States (24,386 terawatts).

But what is truly striking is how small Bitcoin's energy usage is compared to the total energy *wasted* each year in the United States alone – 188 terawatts for Bitcoin versus 6,800 terawatts lost or wasted in the U.S. And that is the compelling pro-Bitcoin case: that Bitcoin has the potential to capture some of that lost energy production (much of which is from renewable energy that cannot be stored due to battery technology limitations), create financial value, and in the process take an unprofitable and government subsidized solar and wind power industry and make it more profitable – thus inducing the development of more of it. This is in fact what the industry is doing, with the result that the sustainable power mix of bitcoin mining – 57.7 percent – is also twice as good as the sustainable power mix of the U.S. energy mix as a whole (31.4 percent). Bitcoin's ability to use excess energy capacity, create market incentives for more sustainable energy development, and create more than \$1 trillion of financial value in the process is surely a relevant consideration as the committee considers what a comprehensive national policy toward cryptoassets should look like.

Thank you for the opportunity to speak with you today and I look forward to the committee members' questions.

