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Committee on Agriculture
Subcommittee on Commodity Markets, Digital Assets, and Rural Development
Hearing on American Innovation and the Future of Digital Assets: On-Chain Tools for an
Off-Chain World
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Chairman Johnson, Ranking Member Davis, and distinguished members of the Subcommittee, I thank you for the invitation to testify about how blockchain is a special technology that allows us to innovate in all aspects of the American economy, including the agriculture sector. Regulation of the blockchain space is an important debate for our elected representatives to have, especially this year as industry-defining legislation is brought to the fore. Permissionless blockchain networks are new technologies that have real value and present exciting new opportunities that will impact our real-world lives.

I work as a senior legal counsel at Consensys Software Inc., a software developer that is headquartered in Fort Worth, Texas and employs over 300 persons across the U.S. and another 300 around the world. Our business is helping to build the next version of the internet, often called Web3, using the Ethereum blockchain. Ethereum is the first and most established programmable blockchain. Just like Bitcoin, it allows you to safeguard your own assets without a bank or other custodian and to send funds without a payment intermediary. But unlike Bitcoin, it additionally supports software programs that greatly expand what the network can do. Anyone in the world with the requisite computer skills can publish a software program on Ethereum for anyone else in the world to access. Anyone can also participate in maintaining the network itself and processing new transactions.

New computer networks like Ethereum have enticed meaningful computer engineering talent to migrate to the blockchain space to build the apps that will impact our future. What we see with Ethereum is the building of a new world computer for which anyone can build software programs that replace service providers, and everyday people can enjoy better access to important services. And this world computer has special characteristics: a Big Tech company cannot pick winners and losers; there are no software black boxes; and the data is resilient and incorruptible. It gives us the chance to move past this era of tech oligopoly where we can trust systems again.

Consensys has been closely tied to Ethereum since 2016. Both those who build on blockchain and those who use blockchain day to day are the main audience for our flagship offering, the

MetaMask wallet, which you can find in every app store. It is the most popular self-custody wallet software in digital assets with over 100 million users. MetaMask is a browser interface that allows you to read the blockchain and to execute transactions on your own behalf. Wallets ensure Web3 user security because they are the technology safeguarding a user's digital assets.¹ Those digital assets can represent almost any kind of asset: digital dollars, native digital assets like Bitcoin or Ether, or NFTs that represent art or ownership of real-world assets.

A wallet like MetaMask is the link that brings digital assets to today's internet, so it is a critical piece of tooling. And as wallet technology matures, it will make Web3 accessible, intuitive, and useful for everyone, giving rise to a swath of new applications that can be brought to market directly and that users can connect with directly, cutting out Big Tech gatekeepers.

When you use a wallet to access onchain software, programs which are frequently referred to as "smart contracts", you unlock a software application frontier that can meaningfully impact the real world in ways that the current internet with today's apps simply cannot. Much attention is paid to the financial applications in decentralized finance ("DeFi") or to payment stablecoins. And rightly so - they are indeed powerful new innovations that will mature as more economic and investment activity move online.²

But blockchain applications are much more diverse than finance. Developers are creating apps with commercial and social applications.³ Other applications focus on building out physical networks by incentivizing people to build and maintain network infrastructure. Yet others are delving into the world of artificial intelligence, both by changing how AI models work and by improving how we use them. Some projects aim at solving tricky problems while preserving privacy, including how we can fight deep fakes so we can begin to trust information we get over the internet.

The foundation for these apps and the blockchains upon which we build them are basic economic incentives. Open computer networks allow anyone to join and anyone participate in them, but they do not work without incentives that drive participants to play by the system's rules. Starting with Bitcoin, blockchains are built so that people are heavily incentivized to play by the rules. Regulation should embrace that. Maintaining the conditions for those incentives to work their economic magic should be the goal of any regulation of the space.

¹ To learn more about self-custody digital wallets, please visit MetaMask Learn found at <https://learn.metamask.io/> (last visited April 7, 2025).

² Indeed, Ethereum has more DeFi activity and stablecoin volume than any other chain.

³ Consensys highlighted some of these app developers in our "Web3 Builders" series, which may be found at <https://consensys.io/blog/builder-stories-back-represent-web3-innovation-matters-most> (last accessed April 7, 2025) and <https://consensys.io/blog/the-essence-of-web3-is-its-people-meet-the-builder-stories> (last accessed April 7, 2025).

On most blockchains, including the Bitcoin blockchain, Ethereum, and many others, there is a native digital asset which is the foundation of that incentive structure. For example, on the Ethereum network, Ether is the native digital asset, and it is how Ethereum users pay for moving value or accessing software applications on the network. Ether is paid to the people who maintain the infrastructure of the network and confirm the transactions. Ether has value because it is the only way to access the Ethereum network and the applications that people have built on it.

In this way, Ether is akin to gasoline, while the blockchain itself is akin to an engine. Without Ether, blockchain transactions would not process, and without the blockchain, there would be no need for Ether. Together, they allow millions of Americans and other people around the world to coordinate productively to operate the first truly global computer platform.

We should embrace the fact that blockchains like Ethereum incentivize participants to play by the rules by offering a financial reward in the form of a token. Those tokens exist only on the blockchain ledger, and serve an important function without which the blockchain would not work.

There are thousands of developers using these blockchain-based tools to build services to solve real-world problems. A network like Ethereum is the foundation of their applications. Two such projects are here to testify about their own work. But, they are just two examples in an almost limitless universe. Just like we could not imagine the services that people would develop in the early days of the internet, we can only speculate today about what people will develop in the future with blockchains and digital assets, if provided the freedom to do so.

We are at a watershed moment today with the opportunity to move on from the past several years of outdated thinking. While the rest of the world has updated policies to embrace innovation, the U.S. has lagged behind, threatening its leadership role on this issue.

But it is a new day, and America is back open for blockchain businesses of all stripes. Those in this space are heartened by bipartisan interest in the technology and the growing familiarity among the ranks of Congress. Durable clarity on the law is what we need today to ensure we can capture the opportunities presented by blockchain technology. What we can build is limited only by our imagination and the law. I am pleased to be with you today to explore these topics, and we at Consensus applaud this Committee for taking an important leadership role on these issues.