We are here today to examine a truly 21st century issue – the energy and environmental impacts of cryptocurrencies.

In the last decade and a half, we have seen an explosion of blockchain technology and digital currencies, or cryptocurrencies. Concepts that once seemed futuristic have begun to enter the daily lives and digital wallets of everyday Americans. Bitcoin alone grew to a market cap of more than $900 billion last year.

Blockchain technology and cryptocurrency bring enormous promise. This hearing is not intended to stifle that promise nor discourage innovation, but instead to examine the potential environmental costs of the cryptomining industry and what can be done to address those impacts.

Right now, some blockchains are consuming enormous amounts of energy. One estimate found that the energy required to process transactions on the Bitcoin network could power a home for more than 70 days. Last year, there were hundreds of thousands of transactions on this network. Just imagine the climate implications. Another estimate found the 2021 carbon emissions from Bitcoin and Ethereum cryptomining to be 78.8 million tons of carbon—roughly equivalent to the tailpipe emissions from more than 15.5 million gasoline powered cars on the road every year.

As this Committee continues its work to combat the worsening climate crisis, it is critical that we examine these impacts. I look forward to hearing about the possibilities the cryptomining industry may bring in support of new renewable energy deployment, grid stabilization, and other innovations that may reduce energy consumption and have applications far beyond the cryptomining industry itself.

President Biden has set forth ambitious climate goals to reduce U.S. emissions by 50 percent from 2005 levels in 2030, create a 100 percent carbon pollution-free power sector by 2035, and achieve a net-zero economy by 2050. To achieve these important goals, we cannot bring retired fossil fuel plants back online or delay the retirement of some of our oldest and least efficient power plants in support of energy-intensive cryptomining activities—particularly in light of the cleaner blockchain technologies that already exist.

We need to be thinking about ways to encourage innovations that improve our energy grid, increase the mix of clean energy supporting it, and improve energy efficiency across industries.
This Committee and Congress have taken steps to further those goals already. The bipartisan infrastructure law and the Build Back Better Act collectively provide the funding and resources our country needs to upgrade our power infrastructure and make clean energy even more affordable and accessible. These investments in our future will reduce greenhouse gas pollution, build a clean power grid, create jobs in support of the clean energy transition, and provide cheaper energy.

It is also important to focus on how cryptomining can affect the affordability of electricity for American consumers. I was struck by the example of Plattsburgh, New York a few winters ago. Cryptomining companies flocked to the community because of the cheap electricity offered through a hydropower allotment. These same companies then caused the community to quickly use up that allotment during a particularly cold winter.

The city was forced to purchase expensive power on the spot market, and local residents found themselves with incredibly high monthly bills—some hundreds of dollars more than usual. While the industry has matured since, and there are now responsible actors in this space, we should be ready to collaborate and encourage innovation and investment in cleaner, renewable energy.

Developing more renewable energy, increasing energy efficiency, and managing demand on our energy grids are imperative to meeting our climate goals. I look forward to hearing from our witnesses today on how the cryptomining industry may assist in achieving those goals and whether it stands ready to do so.