Published on *The National Law Review* https://natlawreview.com

ESG Issues and Opportunities Arise as Companies and Asset Managers Hone in on Blockchain-Based Technology Investments

Article By:

Jason H. Finger

Beyond the wider adoption of cryptocurrencies by consumers in recent years, companies and organizations have also shown increased interest in crypto-assets in the past year. A myriad of industries, from sports to fashion to art to videogames to music, are entering NFTs, which, depending on the marketplace, may be minted on a PoW or PoS blockchain. Financial institutions are exploring how to compete with decentralized finance products by offering services on blockchains to provide more security and less friction in an effort toward safer and faster transactions. Depending on how such platforms are structured, such services will also be on a PoW or PoS network. This increase in investments in blockchain-based products and services by numerous and varying shareholders has resulted in increased due diligence on how much investments are complying with ESG mandates. Corporate balance sheets are increasingly filled with cryptocurrencies, presumably as an inflation hedge or broad investment strategy, potentially impacting their ESG practices. At least one financial firm has announced that employers may soon have the option to offer workers the option to place a portion of 401(k) retirement savings in Bitcoin. Also, potential ESG issues can arise not only when investing in a cryptominer or in cryptocurrencies verified with a PoW consensus mechanism, but also with an investment in an exchange that transacts in certain energy-intensive cryptocurrencies.

Simply put, with the increased use of these types of emerging technologies, ESG concerns are likely to arise. It remains to be seen how such emerging technologies will balance innovation, while complying with ESG issues.

This is **Part II** of a two-part post on the issues raised by the Congressional hearing on the energy usage of blockchains. In this part we will raise some ESG considerations now affecting businesses as related to cryptocurrency investments and blockchain usage. In **Part I**, which was published in February 2022, we discussed how different blockchain consensus mechanisms impact energy usage and some potential solutions discussed at the hearing.

Focusing on the E in ESG, environmental risks arising from cryptocurrency exposure include, but are not limited to, greenhouse gas emissions from energy usage. Of course, not all crypto investing involves Bitcoin and can encompass less energy-intensive blockchains. Furthermore, some tokens and DeFi projects have attempted to strike a more eco-friendly pose by purchasing carbon offsets to help make their validator networks move toward a carbon neutral goal.

As heard at this Congressional hearing on the energy impacts of blockchains back in January, it was argued that cryptocurrencies, in certain instances, can spur clean energy investment in the U.S. For instance, solar and wind can be challenging sources of energy due to their inherent unpredictability –sometimes the sun shines and the wind blows with varying intensities, or not at all. So, depending on the weather, there can be too much energy or not enough. As previously discussed, in Part I, miners can use this excess curtailed energy that may otherwise go to waste if there is a lack of adequate battery storage, thereby providing much needed capital to green energy providers, essentially subsidizing clean energy capacity.

Stranded natural gas and other fossil fuels are also problematic because the stranded energy is flared, or burned and released into the atmosphere for disposal, contributing to air pollution and lost potential revenue. It has been reported that global flare gas recovery potential is eight times larger than the Bitcoin network's usage in 2021, according to a separate study by The University of Cambridge. ESG investment may incentivize nomadic Bitcoin miners to use stranded natural gas so the gas, and carbon, is not directly released into the atmosphere through combustion. ESG-minded investors could also invest, with an eye toward driving out "dirty" mining, by disincentivizing the rehabilitation of coal-powered plants. To be sure, investments in blockchain technologies do not necessarily mean that funds are flowing to energy-intensive PoW networks. To this end, some states like New York, are considering stimulating the push away from energy-intensive cryptomining. Recently, the New York legislature passed a bill (S6486D) that would, among other things, put in place a two-year moratorium on the approval of any new carbon-powered PoW mine and by preventing miners from renewing their permits if their facility uses carbon sourced energy and the mine seeks to increase its energy consumption (New York Gov. Kathy Hochul has not yet indicated whether she will sign the bill).

Much attention is paid to the "E" in ESG, but let's not forget the "S" and "G." Some fund managers argue cryptocurrency and mining are not ESG compliant [log-in required] due to their intensive energy consumption; on the other hand, others argue that the nascent technology will continue to decarbonize while providing social and governance benefits. Cryptocurrency is seen as a potential solution to banking the un- and underbanked because anyone can access cryptocurrencies with a phone or laptop and internet connection. Moreover, some cryptocurrencies offer lower transaction fees than traditional centralized coordinated transfers allowing systems to be stood up cheaply and quickly to provide greater financial inclusion. NFTs may prove to provide artists a means to control their works and provide additional revenue streams. ESG investors also have an opportunity to advocate for increased gender and racial inclusion with regard to the hiring and retention practices of cryptocurrency companies to fulfill their Governance mission.

Ultimately, there is room for growth on all ESG fronts in the cryptocurrency space, and it remains to be seen how ESG investing objectives will impact cryptomining and how future blockchain platforms will be less power intensive per transaction. As cryptocurrencies and blockchains continue to be a focus among institutional investors and government regulators, the development of new technologies is expected in parallel. ESG objectives can ideally make a positive impact and shape emerging, world-changing, technology and its related industry.

National Law Review, Volume XII, Number 167

asset-managers-hone-blockchain