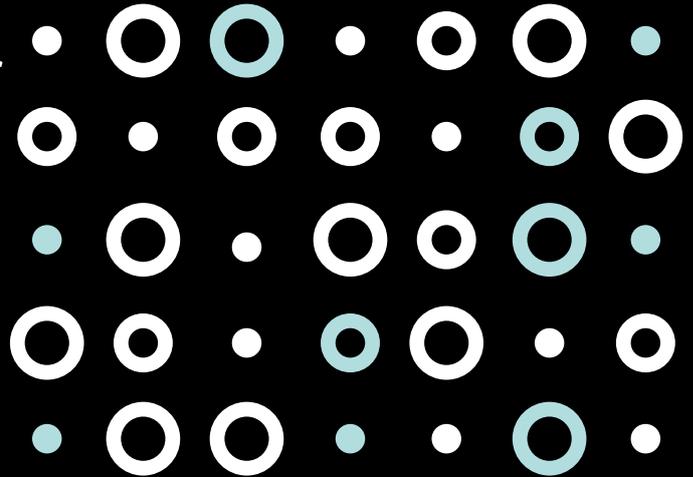


The Quest for a 'Greener' Bitcoin



As the crypto economy continues to grow in size, so does the infrastructure required to maintain this growth. Increasing amounts of institutional interest in this space means that the amount of electricity required in the production of crypto trading is also growing as trades increase both in number and size.

This is re-igniting (or at least adding some proverbial fire to) a discussion on the environmental impact of crypto trading. Guardian readers in the United Kingdom recently woke up to a rather alarming headline. “Another thing you may not know about Bitcoin: it’s killing the planet,” the opinion piece from Ethan Lou boomed. It was one of a series of headlines pointing to a until-then rather misunderstood problem in bitcoin land – that even though the currency was digital, it burned some very real energy.

This was an unexpected consequence of the way bitcoin is distributed. As proposed by the elusive Satoshi Nakamoto, the supply of bitcoin is fixed. After some was distributed among the founders, the remaining would then be given out randomly to the public after solving a complicated math equation. As the supply dwindled and demand rose, the equations got harder. In November of 2019 the equations were approximately 13 trillion times more difficult than they were when it launched a decade earlier.

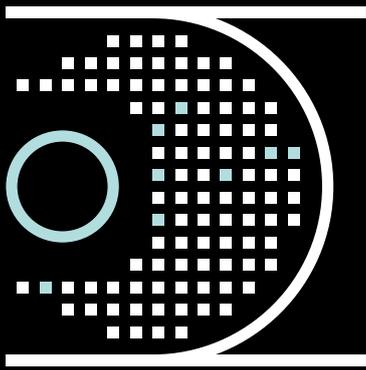
All of this computing power requires real-world energy which is only continuing to grow. Another alarming headline (that was later largely debunked)

suggested that crypto mining now uses more power than ‘traditional’ mining. There seems to be an awful lot of scary stories being thrown around that perhaps just aren’t that true. In a world where issues around climate change and corporate social responsibility are becoming ever more prominent, the digital asset industry needs to change and align with these environmental factors.

An often-overlooked fact about the carbon footprint of bitcoin or any other asset class is the fact that energy use doesn’t stop at the asset’s “creation.” The nature of bitcoin means that the underlying distributed ledger for any transaction needs to have an immutable record of the chain’s entire history. This list is only getting longer with additional time.

Cryptocurrency is also getting dragged into a wider arms race around speed and execution. Professional traders are increasingly looking to place orders worth the fiat equivalent of thousands or millions of dollars. This means the co-located facilities and upgraded execution services can cut out the time required to place and execute trades.

While it is unrealistic to expect crypto to be a carbon-neutral business, it is possible to abate the growing energy usage. There are two main approaches; ensure the energy has less of an impact or change the way bitcoin is allocated.



THE QUEST FOR CLEAN ENERGY TO MINE

Bitcoin has always been a global enterprise and so has mining. Interest first appeared in Middle Eastern and South American countries with subsidized energy. As the requirements ballooned, investors turned farther afield. Geothermal vents in Iceland, energy sources in distant Siberia and solar plants in the middle of the desert are all powering mining operations. With increasing investment in clean energy, it may be possible to tap into 'excess' energy in ways where the energy needed is relatively harmless.

A GREENER BITCOIN

Even though the allocation method dates to the near mythical-white paper that guided the founding of bitcoin, it (like everything else with the blockchain) can be revised. There has been increasing discussion about a fair way to distribute the remaining stocks of bitcoin and alt-coins through methods that do not have energy production built in.

One approach removes the requirement of consensus that every transaction must be checked across the whole blockchain each and every single time. The Byzantine Reliable Broadcast claims to achieve a safe cryptocurrency system with the same energy cost of sending an email. Founder Rachid Guerraoui said "We realize that players don't need to reach consensus; they just need to prevent malicious behavior when it manifests. We assume everyone is honest, and if players see someone trying to do something wrong, they ignore that player – and only that player."

Both approaches show merit. The most important imperative is that the industry – including the increasing number of global banks and institutional investors who are entering the space – do not accept the current situation as intractable. As a specialised provider of information-protecting ways to execute larger digital transactions, we are committed to being part of building a truly sustainable crypto-infrastructure.

Solutions exist and there are ways for the world to continue to take advantage of decentralized alternative currencies with a growing institutional interest, without paying a consummate environmental price.

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To arrange a demonstration, or for more information, contact a sales representative at sales@cyberian.digital



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