



Feel the Burn — Why Ethereum Is the Cryptoasset of the Summer

BITWISE RESEARCH



Matt Hougan
Chief Investment Officer
matt@bitwiseinvestments.com
@Matt_Hougan



David Lawant
Director of Research
david@bitwiseinvestments.com
@dlawant



Juan Leon
Crypto Analyst – Equities
@singularity7x



Ryan Rasmussen
Crypto Analyst – DeFi
@RasterlyRock

[CLICK HERE TO VIEW MORE RESEARCH](#)

IN THIS ISSUE, WE DISCUSS:

- >> A technological upgrade to the Ethereum blockchain — currently scheduled for August 4 — will fundamentally transform Ethereum, both as an investment and a technology.
- >> Following the upgrade, called EIP-1599, anyone wanting to use the Ethereum blockchain will have to “burn” a small amount of ETH to do so.
- >> This will transform ETH into a true consumable commodity: The more demand to use the Ethereum blockchain, the more ETH will be consumed. It will also make Ethereum significantly more user-friendly as a technology.
- >> This is one of the biggest stories in crypto this year and, we believe, underappreciated by the media (which has barely covered it).

.....

Cryptoassets like bitcoin and ethereum have two parts: the underlying technology (i.e., the blockchain) and the asset (i.e., the cryptocurrency).

Bitcoin, for instance, is an asset (BTC) that is recorded and transferred over the Bitcoin blockchain (the technology). Similarly, ether is an asset (ETH) that is recorded and transferred over the Ethereum blockchain (the technology).

It’s easy in crypto to get hung up on the asset: *Is bitcoin trading up or down today?* But every so often, an event occurs that reminds us that the underlying technology matters a great deal.

We’re about to have one of those events in the Ethereum network. It’s called Ethereum Improvement Proposal 1599, or EIP-1599 for short, and it’s scheduled for August 4.

It’s one of the biggest stories in crypto this year.

WHAT IS EIP-1599?

Just like Apple might release an upgrade to its iOS software, EIP-1599 is a software upgrade that Ethereum developers release to the Ethereum blockchain.

EIP-1599 introduces two major changes to Ethereum that will improve the user experience and make ETH more attractive as an investment:



Currently, with Ethereum, there is no way to know beforehand exactly what fee you need to pay to ensure your transaction is approved. ... EIP-1599 solves this.

1. CLEAR PRICING

The first change has to do with how users interact with Ethereum.

Blockchains like Ethereum settle transactions in batches or “blocks”; that’s literally where the word blockchain comes from. Each block can only contain a certain number of transactions, and if a block is full, you have to wait for the next one.

The miners that process transactions decide which transactions to put into each block based on the fee users offer to pay. Users who want their transaction to be processed in the next block will pay a higher fee than those who are willing to wait for future, cheaper (and less congested) blocks.

Currently, with Ethereum, there is no way to know beforehand exactly what fee you need to pay to ensure your transaction is approved. There are guides, but basically you have to guess. This creates two issues: First, it introduces a major uncertainty around whether you’ll get your transaction processed in a timely fashion; and second, people overpay because they don’t know the clearing price (they bid too much to make sure they are over the bar).

EIP-1599 solves this. Through a few clever technical steps — including doubling the amount of space available in each block — EIP-1599 creates a publicly broadcasted fee that users can rely on in nearly all circumstances. Users no longer have to guess what fee to pay for their transaction or overpay for the privilege of using the network. That’s a big deal.

2. MORE ATTRACTIVE AS AN INVESTMENT

The bigger change from EIP-1599, however, lies in how it transforms Ethereum as an investment.

As mentioned, when someone wants to make a transaction on a blockchain, they typically pay a fee to have that transaction processed. In most blockchains, that fee is paid in the native cryptocurrency: i.e., you pay a small amount of ETH to transact on the Ethereum blockchain.

Currently, these fees are paid to the miner who processes the transaction. Miners typically sell the cryptoasset they receive to pay for the costs of running and maintaining their mining equipment.

EIP-1599 will change that for Ethereum the network and ether the asset.



Continued on next page.



The upgrade ... will reduce the amount of ETH that exists, and transform ether the asset into a consumable commodity like gas or oil.

After the upgrade, the core fee that users pay to transact on Ethereum will be “burned” or removed from circulation forever. This will reduce the amount of ETH that exists, and transform ether the asset into a consumable commodity like gas or oil.

As an added benefit, this change will also make it significantly easier for investors to understand the value of holding ETH. After EIP-1599, as the use of Ethereum increases, the amount of ETH being consumed by the machine rises, just like running your car longer uses more gas. And if you’re holding ETH, it’s like you’ve got a piece of the gas supply. That intuitive analogy could help bring a new wave of institutional investors into the market.

WHY DOES THIS MATTER AND HOW BIG IS THE IMPACT?

Both halves of this upgrade are important, and a long time coming. EIP-1599 was first proposed in 2019, and it took multiple years of testing, research and deliberation to gain consensus in the community (particularly among the miners) that it was the right thing to do. Still, it will be worth the wait.



The improvement to the user experience is important because it will help Ethereum compete with the rising number of so-called “Ethereum killers.”

The improvement to the user experience is important because it will help Ethereum compete with the rising number of so-called “Ethereum killers” — blockchains like Cardano and Solano that have seen increased popularity in part due to their ability to offer cheaper and more predictable transaction fees.

The fee “burn” component of EIP-1559 is an even bigger deal: When ETH is burned, it’s pulled out of circulation forever, effectively increasing the value of all other ETH that still exists.

Ethereum users paid \$4.16 billion in transaction fees for the year ending June 2021, according to Coin Metrics. All of those fees were paid in ETH to miners, who likely sold that ETH to cover energy and hardware costs. After EIP-1599, instead of that constant supply of ETH being sold on the open market, core transaction fee payments will be burned forever, which will reduce ether’s inflation rate.



Estimates say that EIP-1599 will reduce ETH’s overall inflation rate from roughly 4% a year to 3% a year. That may not sound like much, but a material reduction in new supply is always a big deal in crypto (and with most forms of sound money, historically).

Estimates say that EIP-1599 will reduce ETH’s overall inflation rate from roughly 4% a year to 3% a year. That may not sound like much, but a material reduction in new supply is always a big deal in crypto (and with most forms of sound money, historically). For context, that’s about half as big a reduction proportionately as we see in bitcoin “halving” events, which are often credited with launching year-plus-long bull markets in the bitcoin space. It’s also substantially lower than the inflation we’re seeing in U.S. CPI data recently.

As for the miners themselves, they will continue to be paid, although they may see a reduction in their income. In addition to the core transaction fees paid by users, miners are issued newly minted ETH every time they settle a block of transactions, and this will continue after EIP-1599. Also, ETH super-users may pay miners extra fees above and beyond the core transaction fee to prioritize the ranking of specific transactions inside a block. For these and other reasons — including the possibility that rising ETH prices could offset the reduction in income — most miners have decided that they stand the most to gain by supporting this upgrade.



Continued on next page.



ETH 2.0 ... should dramatically increase the throughput of the Ethereum blockchain, cut its carbon footprint by more than 90%, and reduce the new issuance of ETH each year by 50% or more.

WHAT COMES NEXT?

The amazing thing about EIP-1599 is that it is not the only upgrade scheduled for the Ethereum blockchain in the near future. Some time in 2022, Ethereum is scheduled to make the transition to what’s being called ETH 2.0.

ETH 2.0 isn’t a single upgrade, but rather a series of technological improvements that include transitioning the blockchain from a “proof-of-work” consensus mechanism to a “proof-of-stake” consensus mechanism. We’ll cover the details in a future issue of “Notes from the CIO,” but this and related changes, if successful, should dramatically increase the throughput of the Ethereum blockchain, cut its carbon footprint by more than 90%, and reduce the new issuance of ETH each year by an additional 50% or more (above and beyond the impact of EIP-1599).

Taken together, EIP-1599 & ETH 2.0 are a potent one-two punch, representing dramatic improvements to Ethereum both as a technology and an investment.

As with any technological upgrade, there are risks. The upgrades could be delayed, or the promised improvements may not appear. But if they fulfill expectations, it will be a major moment that will shape Ethereum’s trajectory significantly in the coming months, quarters and years.



ABOUT BITWISE:

Bitwise Asset Management is the world’s largest crypto index fund manager, with over \$1.2B AUM as of March 31, 2021. Founded in 2017, the firm is known for managing the world’s largest crypto index fund, the first “DeFi” crypto index fund, and pioneering products spanning Bitcoin, Ethereum, crypto-focused equities, and other exposures. Bitwise focuses on serving investment professionals, financial advisors, institutional investors, and high net worth individuals, providing partnership, education and research. The team at Bitwise combines expertise in technology with decades of experience in traditional asset management and indexing, coming from firms including BlackRock, Blackstone, Facebook, and Google, as well as the U.S. Attorney’s office. Bitwise is backed by leading institutional investors and asset management executives and has been profiled in Institutional Investor, CNBC, Barron’s, Bloomberg and The Wall Street Journal. For more about Bitwise, visit www.bitwiseinvestments.com.

ABOUT MATT HOUGAN:

Matt Hougan is one of the world’s leading experts on crypto, ETFs and financial technology. He is the Chief Investment Officer for Bitwise Asset Management, the world’s largest provider of cryptocurrency index funds. He was previously CEO of ETF.com and Inside ETFs, where he helped build the world’s first ETF data and analytics system, the leading ETF media site, and the world’s largest ETF conference. Matt is co-author of two publications for the CFA Institute Research Foundation: “A Comprehensive Guide to Exchange-Traded Funds” and “Cryptoassets: The Guide to Bitcoin, Blockchain and Cryptocurrencies for Professional Investors.” He is a crypto columnist for Forbes, a three-time member of the Barron’s ETF Roundtable, a member of ETFdb’s ETF Hall of Fame, and the eighth person to receive a Lifetime Achievement Award from ETF.com for contributions to the ETF industry.

