ETC Group

Investors Guide to Crypto Staking



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Staking explained

Introduction

Investment strategies constantly evolve as investors seek avenues to maximize returns from their assets. Traditional finance has long relied on various instruments like bonds, stocks, and money market funds to generate income.

The amount of income depends on how risky or safe the instrument is perceived by the market. The emergence of crypto and digital assets has introduced novel approaches to leveraging digital assets for income generation, one of which is staking. This crypto staking guide delves into the fundamentals of crypto staking, exploring its principles, advantages for ETP investors, associated risks, and how ETC Group can offer support in navigating this terrain.

Staking can be seen as similar to equity dividends, however only those who vote and engage in the company's governance have the right to earn a share of the profits.

Unlike securities lending, staking doesn't involve counterparty risk, as the staked assets remain in the blockchain ecosystem, but it can tie up investor crypto for a short period when staking starts or stops (often referred to as bonding and unbonding period). Staking involves investors pledging their crypto assets as collateral to validate transactions on a blockchain network, thereby contributing to its security. In return, they receive additional tokens as rewards.

Given the unique driving factors, staking may offer a source of yield which is uncorrelated to traditional asset yields potentially enhancing overall income stability for investors.



Ethereum Yield vs Other Yields



Source: Glassnode, Bloomberg, ETC Group

ETC Group

What is Staking?

Proof of work and proof of stake are two different ways of achieving consensus on a blockchain network. Consensus means that all the nodes (computers) on the network agree on the validity and order of transactions. This is important to prevent fraud, such as double-spending or altering the history of transactions.

Proof of work is the original consensus mechanism used by Bitcoin and some other cryptocurrencies. It involves solving complex mathematical problems that require a lot of computing power and energy. The nodes that solve these problems are called miners, and they are rewarded with newly created coins and transaction fees.

Proof of stake is an alternative consensus mechanism, used by Ethereum and other blockchains, that aims to address some of the issues of proof of work. It does not require solving difficult puzzles, but rather selecting validators based on how many coins they stake (deposit) on the network.

Staking is a mechanism that allows investors to participate in the validation process of a blockchain network and earn a return on their staked assets. Blockchain technology enables peer-to-peer transactions without the need for a trusted intermediary such as a bank or a financial institution.

Peer-to-peer transactions require a consensus mechanism to ensure that the transactions are valid and consistent. For instance, if one party makes a payment to another, there needs to be a way to verify that the payer has sufficient funds in his or her account to make the payment.

In traditional finance, a bank often acts as the intermediary that verifies and settles the transactions.

A blockchain network has different consensus mechanisms to replace the role of the intermediary. Staking is a prominent consensus mechanism that supports the validation and confirmation of new transactions. To stake, investors allocate ("stake") their crypto assets to a blockchain network. These crypto assets are then used to validate network transactions.

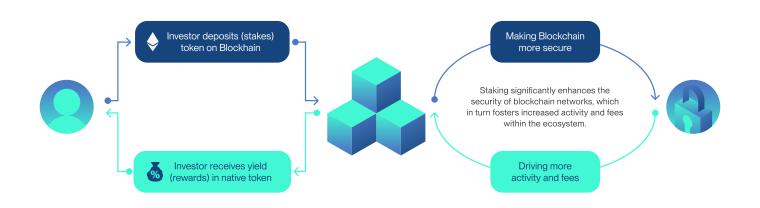
Staked assets represent the minimum holdings required by the network to enable the validation and confirmation of new transactions. These holdings are denominated in the native currency of the network.

As an incentive for allocating their assets, investors receive a return which is known as a staking reward (in addition to potential market returns). The amount of staking rewards varies for each network.

Networks that use staking to confirm transactions consume far less energy than alternative mechanisms and are therefore considered more environmentally friendly.



Benefits to the Blockchain Ecosystem



Staking with ETPs

When it comes to staking, investors have many options. Utilising an ETP wrapper stands out as one of the most efficient, secure, and reliable methods to earn staking rewards.

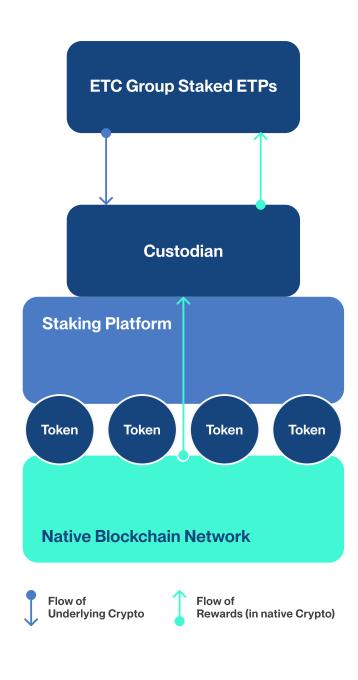
The Key benefits of staking using ETC Group ETPs:

- High operational efficiency
- Low cost
- Higher rewards potential vs other ETPs and staking options
- Rewards automatically compounded
- Liquidity, no lock up periods investors can sell at any time on exchange
- Transparent, benchmarked performance
- Secure, no lending

	Staking ETP	Liquid Staking Derivative	Institutional Staking Derivative	Solo Staking
Liquid	Yes	Yes	No	No
Trading on regulated exchange	Yes	No	No	No
Slashing risk	Low	Low	Low	High
Minimum investment	Low	Low	Very High	High (32 ETH)
Execution layer rewards potential	Higher	Higher	Lower	Lower
Staking fee	10%	10%—25%	Depends on AUM	0%
Benchmarked	Yes	No	No	No
Operational complexity to set up	Very Low	Low	High	Very High



How ETC Group Staking works



1

ETC Group securely "stakes" the underlying assets of specific ETPs on a robust platform managed by a professional, institutional-grade staking service provider, such as Blockdaemon. These assets remain segregated and held securely pledged within Ethereum's native protocol. Unlike securities lending there is no third-party counterparty risk, assets never leave the Ethereum network.

2

The staking provider stakes the assets on behalf of the ETP.

3

The staked assets are used to secure the network and generate returns.

4

Staking rewards are reinvested into the ETP, adding to the ETP's performance.

5

The staked assets can be withdrawn at any time, there is typically a waiting period before assets are returned. This period can range from 0 days to as long as 6 months depending on the protocol (though typically it is one month or less). To solve this problem, ETC Group has developed proprietary liquidity bridging processes to manage the liquidity needs of an ETP considering these lock-up periods. Meaning investors can not only trade un-impacted in the secondary market and redeem in the primary market on a normal T+1 to 2 settlement cycles, without facing any counterparty risk. The abovementioned liquidity bridging process is provided by conventional financial market players, not through so-called decentralized autonomous organization also known as staking platforms.



Investors advantages

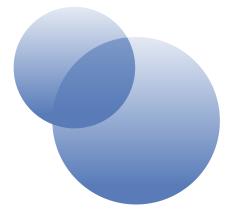
Staking ETPs by ETC Group make staking efficient and reliable for investors allowing for both caputuring the spot performance of the underlying asset as well as enhanced ETP performance thanks to staking. 90% of total staking rewards generated by the ETP are passed on to investors by being reinvested in the ETP.





Investors in ETC Group Staking ETPs enjoy daily liquidity on the stock exchange and are not limited by lock-up periods or other technical challenges of digital asset staking.

ETPs are an efficient way for investors to gain digital asset exposure while trading on traditional financial market infrastructure, with all the benefits of regulated products.





Risks associated with Staking

Unstaking and Utilization Rate Limitation

Most blockchain networks impose a waiting period before staked assets are eligible to be returned (unbonding period). The ETP wrapper enables investors to sell on exchange at any time without waiting for unbonding. Furthermore, in order to meet redemption requests in the primary market, ETC Group ETPs employ a proprietary liquidity bridging process where e. g. ETC Group borrows ETH to meet redemptions. This means redemption requests can be processed on a normal T+1 settlement basis without incurring any additional risks and maintaining a high staking utilization compared to other ETPs. This is a significant benefit to investors when compared to staking crypto directly and is a unique feature of ETC Group's staking ETPs.

Slashing Risk

An error in confirming a transaction or violating protocol rules can result in a penalty called "slashing," which means some of the staking rewards are lost.

Despite staking platforms' efforts to avoid errors and incurring slashing penalties, such issues can occur because of operational aspects of the staking process.

Staking ETPs by ETC Group reduce the risk of slashing by employing professional institutional staking platforms whose sole purpose is to stake assets and be able to cope with those operational challenges.

Staking Platform Risk

An investor can either stake assets on a blockchain network directly (which requires significant operational setup and oversight) or rely on a platform to provide this service.

Relying on a platform allows investors to benefit from the platform's expertise and can be an efficient way to access the benefits of staking.

ETC Group ETPs use established staking providers. ETC Group currently works with Blockdaemon which has third-party slashing insurance that covers 100% of any slashing penalties. Furthermore, Blockdaemon validators have never been slashed.



Staking vs Lending

What are the differences?

Staking and lending, while both yield-earning methods utilizing cryptocurrency, represent distinct approaches to generating income. Staking aligns with the native principles of crypto, whereas lending is a familiar concept in traditional finance.

Staking involves users committing cryptocurrency to a blockchain network to support transaction validation. Staking helps secure the network and, in turn, compensates those who stake with rewards.

On the other hand, lending is where users agree to loan their cryptocurrency in return for interest payments, which compensate lenders for giving up their assets for a period of time, as well as for the risk that they might not get them back.

ETC Group does not utilize lending in any of its ETP products.

Both concepts allow users to earn passive income, but the purpose, risks and rewards diverge significantly.

	Staking	Lending
Purpose	Help secure the network by validating the transactions	Provide liquidity to borrowers
Mechanics	Lock up or "stake" crypto assets on a Blockchain	Lend crypto assets to an nstitutional lending partner, can be on a collateralized or uncollateralized basis
Rewards	Staking rewards	Lending fee
Risks	Slashing Risk, Liquidity Risk (though daily liquidity is ensured through ETC Group products)	Counterparty Risk, Collateral Shortfall Risk



Frequently Asked Questions

Given the lock-up/unbonding periods often required for staking, do ETC Group ETPs that offer staking still provide daily liquidity on the stock exchange?

Yes, all ETC Group ETPs — including the staking products — can be bought or sold on exchange daily. This means investors can buy and sell on the stock exchange during conventional exchange trading hours. Additionally, to ensure ETC Group can meet daily redemption requests on the primary market, a liquidity bridging process is employed where ETC Group borrows crypto in the market to meet redemptions. This process does not expose holders of the ETP to any kind of counterparty risk.

How do investors in ETC Group's Staking ETPs receive staking rewards?

Staking rewards, net of fees, are added to the Crypto Entitlement (CE) of an ETP at the end of each trading day.

ETC Group's Crypto ETPs are 100% backed and assets are held in cold storage custody. Does this apply to Staking ETPs as well?

Yes. The staking provider ETC Group uses for its Staking ETPs has the ability to stake directly from the ETP's custody wallet. This means the crypto assets' private keys never leave custody during staking and remain in cold storage.

What is the typical return generated by staking rewards in ETC Group ETPs?

The level of staking rewards depends on the underlying cryptocurrency protocol. Generally, staking yield depends on the amount of staked assets on a blockchain network. The more staked, the lower the staking yield. But other factors also play a part, such as transaction volumes and overall demand for block space on the underlying blockchain network.

Do holders of Staking ETPs receive all staking rewards earned?

Yes. ETP holders receive all rewards less net of relevant service provider fees and staking fees charged by ETC Group. The fees vary depending on the product and are visible on the relevant product page on our website.

Can I stake crypto on my own?

Yes, investors certainly can (and do) directly stake their own crypto but it requires substantial time and complexity to setup and a relatively high level of expertise. In addition, significant daily oversight is required to manage slashing risk. This can also be quite expensive given the fees on community validators. By choosing ETC Group Staking ETPs, an investor can enjoy the benefits of staking through a professionally managed institutional staking platform, without the need for specialized expertise in staking (or crypto).



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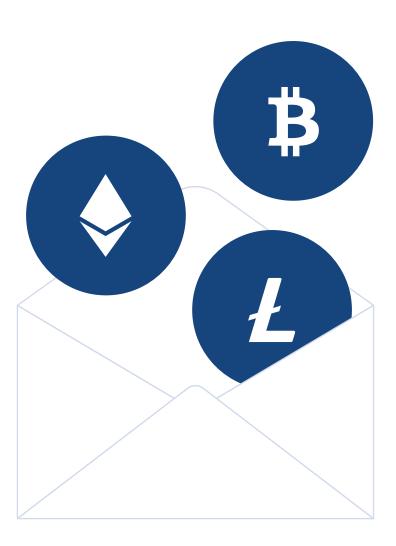
linkedin.com/company/ etcgroup-crypto

Product materials, analysis as well as due diligence collateral including SFDR information are available upon request.

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