

**TSX****ETHR**

Evolve Ether ETF

OVERVIEW

Ethereum is a decentralized, open-source blockchain platform that enables the creation and execution of smart contracts and decentralized applications (DApps). Proposed in late 2013 by programmer Vitalik Buterin, Ethereum was designed to expand upon Bitcoin's capabilities by introducing a more versatile scripting language, allowing developers to build and deploy a wide range of applications beyond simple transactions. The platform's native cryptocurrency, Ether (ETH), serves as both a digital currency and a means to power operations on the Ethereum network.

HISTORY & DEVELOPMENT



Vitalik Buterin first described Ethereum in a white paper in November 2013, envisioning a platform that could facilitate decentralized applications through a general-purpose scripting language. Development was crowdfunded in 2014, and the network officially launched on July 30, 2015, with its "Frontier" release. Since then, Ethereum has undergone several significant upgrades, including the "Homestead"

(March 2016), "Metropolis" (split into "Byzantium" in October 2017 and "Constantinople" in February 2019), and the "Serenity" upgrade, which transitioned the network from a Proof-of-Work (PoW) to a Proof-of-Stake (PoS) consensus mechanism in an event known as "The Merge" on September 15, 2022.

INVESTMENT CASE



Ethereum is often viewed as a foundational layer for the decentralized internet, sometimes referred to as "Web3." Investors are attracted to ETH due to its utility in powering a vast array of DApps, its role in decentralized finance (DeFi), and its involvement in the burgeoning non-fungible token (NFT) market. The transition to PoS has also addressed environmental concerns associated with PoW, potentially making ETH more appealing to environmentally conscious investors. However, challenges such as network congestion, high transaction fees, and competition from other smart contract platforms pose risks.

USES



Ethereum's versatility allows for numerous applications:

- **Smart Contracts:** Self-executing contracts with terms directly written into code, enabling trustless agreements without intermediaries.
- **Decentralized Finance (DeFi):** Platforms that offer financial services like lending, borrowing, and trading without centralized intermediaries.
- **Non-Fungible Tokens (NFTs):** Unique digital assets representing ownership of specific items or content, such as art, collectibles, and virtual real estate.
- **Decentralized Autonomous Organizations (DAOs):** Organizations governed by smart contracts and community voting, operating without centralized leadership.
- **Gaming:** Blockchain-based games that allow for true ownership of in-game assets and interoperability between games.

These applications highlight Ethereum's role as a programmable blockchain, enabling developers to create a wide range of decentralized services.

SUPPLY & SUPPLY ISSUANCE



Unlike Bitcoin's fixed supply of 21 million coins, Ethereum does not have a capped total supply. Initially, 72 million ETH were pre-mined for the 2014 crowd sale. New ETH was then issued through mining rewards under the PoW system. With the transition to PoS, new issuance is determined by the amount of ETH staked and the prevailing interest rates set by the protocol. Additionally, the "London" upgrade in August 2021 introduced EIP-1559, which implemented a mechanism to burn a portion of transaction fees, potentially reducing ETH's net issuance and introducing deflationary pressure under certain conditions.

TECHNICAL FEATURES



Ethereum's architecture includes several key components:

- **Ethereum Virtual Machine (EVM):** A Turing-complete virtual machine that executes smart contracts, ensuring that code runs consistently across the network.
- **Consensus Mechanism:** Originally utilizing PoW, Ethereum transitioned to PoS with "The Merge." In PoS, validators are selected to propose and validate blocks based on the amount of ETH they have staked, enhancing energy efficiency and security.
- **Gas System:** Transactions and smart contract executions require "gas," a unit that measures computational effort. Users pay for gas in ETH, and the gas system helps prevent spam and allocate network resources efficiently.
- **Sharding (Upcoming):** A planned scalability solution that involves splitting the blockchain into smaller, more manageable pieces called "shards," allowing for parallel processing and increased transaction throughput.

These features contribute to Ethereum's flexibility and scalability as a platform for decentralized applications.

GOVERNANCE & DECENTRALIZATION



Ethereum operates as a decentralized platform without a central governing authority. Decisions

regarding protocol upgrades and changes are made through a combination of off-chain discussions and on-chain voting mechanisms. The Ethereum Foundation, a non-profit organization, plays a significant role in supporting development and fostering the ecosystem, but it does not have unilateral control over the network. The open-source nature of Ethereum allows for a diverse community of developers, miners, validators, and users to participate in its governance.

SECURITY & RISKS



While Ethereum's smart contract functionality offers significant advantages, it also introduces potential security risks:

- **Smart Contract Vulnerabilities:** Bugs or flaws in smart contract code can be exploited, leading to significant financial losses, as seen in the 2016 DAO hack.
- **Scalability Challenges:** High demand can lead to network congestion and increased transaction fees, potentially limiting usability.
- **Regulatory Uncertainty:** As with other cryptocurrencies, Ethereum faces evolving regulatory landscapes that could impact its development and adoption.

DISCLAIMER

The contents of this piece are not to be used or construed as investment advice or as an endorsement or recommendation of any entity or security discussed. This should not be construed to be legal or tax advice. Please consult your own legal and tax advisor.

Commissions, management fees and expenses all may be associated with exchange traded funds (ETFs). Please read the prospectus before investing. ETFs are not guaranteed, their values change frequently and past performance may not be repeated.

Certain statements in this document are forward-looking. Forward-looking statements ("FLS") are statements that are predictive in nature, depend upon or refer to future events or conditions, or that include words such as "may," "will," "should," "could," "expect," "anticipate," "intend," "plan," "believe," or "estimate," or other similar expressions. Statements that look forward in time or include anything other than historical information are subject to risks and uncertainties, and actual results, actions or events could differ materially from those set forth in the FLS. FLS are not guarantees of future performance and are by their nature based on numerous assumptions. Although the FLS contained herein are based upon what Evolve Funds Group Inc. and the portfolio manager believe to be reasonable assumptions, neither Evolve Funds Group Inc. nor the portfolio manager can assure that actual results will be consistent with these FLS. The reader is cautioned to consider the FLS carefully and not to place undue reliance on FLS. Unless required by applicable law, it is not undertaken, and specifically disclaimed that there is any intention or obligation to update or revise FLS, whether as a result of new information, future events or otherwise.

Evolve ETFs

Scotia Plaza, 40 King Street West, Suite 3404, Toronto ON M5H3Y2
416.214.4884 | 1.844.370.4884 | www.evolveetfs.com

