

MiCA White Paper

Ethereum (ETH)

Version 1.1
April 2025

White Paper in accordance with Markets in Crypto Assets Regulation (MiCAR)
for the European Union (EU) & European Economic Area (EEA).

Purpose: seeking admission to trading in EU/EEA.

Prepared and Filed by LCX.com

NOTE: THIS CRYPTO-ASSET WHITE PAPER HAS NOT BEEN APPROVED BY ANY COMPETENT AUTHORITY IN ANY MEMBER STATE OF THE EUROPEAN UNION. THE PERSON SEEKING ADMISSION TO TRADING IS SOLELY RESPONSIBLE FOR THE CONTENT OF THIS CRYPTO-ASSET WHITE PAPER ACCORDING TO THE EUROPEAN UNION'S MARKETS IN CRYPTO-ASSET REGULATION (MiCA).

LCX is **voluntarily filing a MiCA-compliant whitepaper for Ethereum (ETH)** as ETH is classified as "Other Crypto-Assets" under the Markets in Crypto-Assets Regulation (MiCA). Unlike Asset-Referenced Tokens (ARTs), Electronic Money Tokens (EMTs), or Utility Tokens, Ethereum does not legally require a MiCA whitepaper. However, MiCA allows service providers to publish a whitepaper voluntarily to enhance transparency, regulatory clarity, and investor confidence. As one of the most widely adopted blockchain networks, Ethereum plays a critical role in the Web3 ecosystem, powering smart contracts, decentralized applications (dApps), and financial innovation. This whitepaper aims to provide a comprehensive regulatory disclosure, ensuring market participants have clear insights into Ethereum's functionality, risks, and role within the MiCA framework.

This document provides essential information about **Ethereum's** characteristics, risks, and the framework under which LCX facilitates ETH-related services in compliance with MiCA's standards.

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01 DATE OF NOTIFICATION

2025-03-13

COMPLIANCE STATEMENTS

02 This crypto-asset white paper has not been approved by any competent authority in any Member State of the European Union. The offeror of the crypto-asset is solely responsible for the content of this crypto-asset white paper.

Where relevant in accordance with Article 6(3), second subparagraph of Regulation (EU) 2023/1114, reference shall be made to 'person seeking admission to trading' or to 'operator of the trading platform' instead of 'offeror'.

03 This crypto-asset white paper complies with Title II of Regulation (EU) 2023/1114 and, to the best of the knowledge of the management body, the information presented in the crypto-asset white paper is fair, clear and not misleading and the crypto-asset white paper makes no omission likely to affect its import.

04 The crypto-asset referred to in this white paper may lose its value in part or in full, may not always be transferable and may not be liquid.

05 false

06 The crypto-asset referred to in this white paper is not covered by the investor compensation schemes under Directive 97/9/EC of the European Parliament and of the Council. The crypto-asset referred to in this white paper is not covered by the deposit guarantee schemes under Directive 2014/49/EU of the European Parliament and of the Council.

SUMMARY

07 Warning

This summary should be read as an introduction to the crypto-asset white paper. The prospective holder should base any decision to purchase this crypto-asset on the content of the crypto-asset white paper as a whole and not on the summary alone. The offer to the public of this crypto-asset does not constitute an offer or solicitation to purchase financial instruments and any such offer or solicitation can be made only by means of a prospectus or other offer documents pursuant to the applicable national law.

This crypto-asset white paper does not constitute a prospectus as referred to in Regulation (EU) 2017/1129 of the European Parliament and of the Council (36) or any other offer document pursuant to Union or national law.

08 Characteristics of the crypto-asset

Ethereum (ETH) is a decentralized digital asset, that operates on a blockchain network designed for smart contracts and decentralized applications (DApps). It enables secure, transparent, and immutable transactions through cryptographic verification, using a proof-of-stake (PoS) consensus mechanism. ETH holders can stake their tokens to support network security and earn rewards but do not receive ownership rights, governance participation, dividends, or claims against any entity. Once confirmed, ETH transactions are irreversible.

The conditions under which rights and obligations may be modified are determined through a decentralized governance process. Changes to the Ethereum protocol require community consensus and are typically proposed through Ethereum Improvement Proposals (EIPs). While such updates may impact transaction fees, scalability, or staking rewards, they do not alter the fundamental ownership rights of ETH holders.

Since Ethereum is neither an Asset-Referenced Token (ART), an Electronic Money Token (EMT), nor a Utility Token under MiCA, it falls into the category of "Other Crypto-Assets." As a decentralized asset with no identifiable issuer, Ethereum is not subject to MiCA's issuance and authorization requirements. However, service providers facilitating ETH-related activities, such as exchanges and custodians, must comply with MiCA's operational and consumer protection rules.

09 Not applicable

10 Key information about the offer to the public or admission to trading

Ethereum (ETH) is a decentralized, open-market digital asset, and as such, there is no centralized entity conducting an offer to the public. LCX does not issue or control the supply of Ethereum but facilitates its trading and custody in compliance with MiCA regulations. This whitepaper is a voluntary disclosure to enhance transparency regarding Ethereum's listing and trading on LCX's platform.

Since Ethereum is already widely circulated and traded globally, this document does not represent a new issuance, public offering, or token sale but instead provides essential information about its admission to trading on the LCX platform.

<i>Total offer amount</i>	Not applicable
<i>Total number of tokens to be offered to the public</i>	Not applicable
<i>Subscription period</i>	Not applicable

<i>Minimum and maximum subscription amount</i>	Not applicable
<i>Issue price</i>	Not applicable
<i>Subscription fees (if any)</i>	Not applicable
<i>Target holders of tokens</i>	Not applicable
<i>Description of offer phases</i>	Not applicable
<i>CASP responsible for placing the token (if any)</i>	Not applicable
<i>Form of placement</i>	Not applicable
<i>Admission to trading</i>	LCX AG, Herrengasse 6, 9490 Vaduz, Liechtenstein

A. PART A - INFORMATION ABOUT THE OFFEROR OR THE PERSON SEEKING ADMISSION TO TRADING

A.1 Name

LCX

A.2 Legal Form

AG

A.3 Registered Address

Herrengasse 6, 9490 Vaduz, Liechtenstein

A.4 Head Office

Herrengasse 6, 9490 Vaduz, Liechtenstein

A.5 Registration Date

24.04.2018

A.6 Legal Entity Identifier

529900SN07Z6RTX8R418

A.7 Another Identifier Required Pursuant to Applicable National Law

FL-0002.580.678-2

A.8 Contact Telephone Number

+423 235 40 15

A.9 E-mail Address

legal@lcx.com

A.10 Response Time (Days)

020

A.11 Parent Company

Not applicable

A.12 Members of the Management Body

Full Name	Business Address	Function
Monty C. M. Metzger	Herrengasse 6, 9490 Vaduz, Liechtenstein	President of the Board
Katarina Metzger	Herrengasse 6, 9490 Vaduz, Liechtenstein	Board Member
Anurag Verma	Herrengasse 6, 9490 Vaduz, Liechtenstein	Director of Technology

A.13 Business Activity

LCX provides various crypto-asset services under Liechtenstein's Token and Trusted Technology Service Provider Act ("Token- und Vertrauenswürdige Technologie-Dienstleister-Gesetz" in short "TVTG") also known as the Blockchain Act. These include custody and administration of crypto-assets, offering secure storage for clients' assets and private keys. LCX operates a trading platform, facilitating the matching of buy and sell orders for crypto-assets. It enables both crypto-to-fiat and crypto-to-crypto exchanges, ensuring compliance with AML and KYC regulations. LCX also supports token placements, marketing crypto-assets on behalf of offerors.

Under MiCA, LCX is classified as a Crypto-Asset Service Provider (CASP). LCX AG has applied for MiCA licensing on February 1, 2025, the first day of MiCA's implementation in Liechtenstein.

Under the TVTG framework, LCX provides:

- TT Depository – Custody and safekeeping of crypto-assets.
- TT Trading Platform Operator – Operation of a regulated crypto-asset exchange.
- TT Exchange Service Provider – Crypto-to-fiat and crypto-to-crypto exchange.
- Token Issuer – Marketing and distribution of tokens.
- TT Transfer Service Provider – Crypto-asset transfers between ledger addresses.
- Token Generator & Tokenization Service Provider – Creation and issuance of tokens.
- Physical Validator – Enforcement of token-based rights on TT systems.
- TT Verification & Identity Service Provider – Legal capacity verification and identity registration.
- TT Price Service Provider – Providing aggregated crypto-asset price information.

A.14 Parent Company Business Activity

Not applicable

A.15 Newly Established

false

A.16 Financial Condition for the past three Years

LCX AG has a strong capital base, with CHF 1 million (approx. 1,126,000 USD) in share capital (Stammkapital) and a solid equity position (Eigenkapital) in 2023. The company has experienced fluctuations in financial performance over the past three years, reflecting the dynamic nature of the crypto market. While LCX AG recorded a loss in 2022, primarily due to a market downturn and a security breach, it successfully covered the impact through reserves. The company has remained financially stable, achieving revenues and profits in 2021, 2023 and 2024 while maintaining break-even operations.

In 2023 and 2024, LCX AG strengthened its operational efficiency, expanded its business activities, and upheld a stable financial position. Looking ahead to 2025, the company anticipates positive financial development, supported by market uptrends, an inflow of customer funds, and strong business performance. Increased adoption of digital assets and service expansion are expected to drive higher revenues and profitability, further reinforcing LCX AG's financial position.

A.17 Financial Condition Since Registration

LCX AG has been financially stable since its registration, supported by CHF 1 million in share capital (Stammkapital) and continuous business growth. Since its inception, the company has expanded its operations, secured multiple regulatory registrations, and established itself as a key player in the crypto and blockchain industry.

While market conditions have fluctuated, LCX AG has maintained strong revenues and break-even operations. The company has consistently reinvested in its platform, technology, and regulatory compliance, ensuring long-term sustainability. The LCX Token has been a fundamental part of the ecosystem, with a market capitalization of approximately \$200 million USD and an all-time high exceeding \$500 million USD in 2022. Looking ahead, LCX AG anticipates continued financial growth, driven by market uptrends, increased adoption of digital assets, and expanding business activities.

B. PART B - INFORMATION ABOUT THE ISSUER, IF DIFFERENT FROM THE OFFEROR OR PERSON SEEKING ADMISSION TO TRADING¹

B.1 Issuer different from offeror or person seeking admission to trading

True

B.2 Name

Ethereum Foundation

The Ethereum Foundation is not the issuer of ETH but is listed here as a key contributor to Ethereum's development. Ethereum is a decentralized protocol with no central issuer as defined under MiCAR Article 3(1)(5).

B.3 Legal Form

Non-profit foundation (Stiftung)

B.4 Registered Address

Zeughausgasse 7a, 6300 Zug, Switzerland

B.5 Head Office

Zeughausgasse 7a, 6300 Zug, Switzerland

B.6 Registration Date

July 6, 2014

B.7 Legal Entity Identifier

Not applicable

B.8 Another Identifier Required Pursuant to Applicable National Law

Not applicable

B.9 Parent Company

Not applicable

B.10 Members of the Management Body

- Vitalik Buterin – President of the Board
- Ming Chan – Executive Director
- Lars Klawitter – Board Member
- Vadim Levitin – Board Member
- Wayne Hennessy-Barrett – Board Member

B.11 Business Activity

The Ethereum Foundation is dedicated to supporting the Ethereum ecosystem through research, development, and education. Its activities include:

- Funding core protocol development and community projects.
- Organizing events like Devcon to foster collaboration.
- Providing educational resources to promote Ethereum adoption.

B.12 Parent Company Business Activity

Not applicable

¹ [19-04-2025] All information available in the public domain regarding the issuer has been added in Part- B

C. PART C - INFORMATION ABOUT THE OPERATOR OF THE TRADING PLATFORM IN CASES WHERE IT DRAWS UP THE CRYPTO-ASSET WHITE PAPER AND INFORMATION ABOUT OTHER PERSONS DRAWING THE CRYPTO-ASSET WHITE PAPER PURSUANT TO ARTICLE 6(1), SECOND SUBPARAGRAPH, OF REGULATION (EU) 2023/1114

C.1 Name

LCX AG

C.2 Legal Form

AG

C.3 Registered Address

Herrengasse 6, 9490 Vaduz, Liechtenstein

C.4 Head Office

Herrengasse 6, 9490 Vaduz, Liechtenstein

C.5 Registration Date

24.04.2018

C.6 Legal Entity Identifier

529900SN07Z6RTX8R418

C.7 Another Identifier Required Pursuant to Applicable National Law

FL-0002.580.678-2

C.8 Parent Company

Not Applicable

C.9 Reason for Crypto-Asset White Paper Preparation

LCX is voluntarily preparing this MiCA-aligned whitepaper for Ethereum (ETH) to enhance transparency, regulatory clarity, and investor confidence. As Ethereum is classified as an “Other Crypto-Asset” under MiCA Article 4(2), a white paper is not required for its offering or trading. However, LCX is providing this document as part of its commitment to regulatory best practices and transparency.

LCX has applied for authorization as a Crypto-Asset Service Provider (CASP) and is aligning its operations with MiCA requirements while facilitating ETH trading on its platform. This white paper serves to provide clear, standardized information about ETH for users and investors, even though it is not a MiCA requirement.

C.10 Members of the Management Body

Full Name	Business Address	Function
Monty C. M. Metzger	Herrengasse 6, 9490 Vaduz, Liechtenstein	President of the Board
Katarina Metzger	Herrengasse 6, 9490 Vaduz, Liechtenstein	Board Member
Anurag Verma	Herrengasse 6, 9490 Vaduz, Liechtenstein	Director of Technology

C.11 Operator Business Activity

LCX provides various crypto-asset services under Liechtenstein’s Token and Trusted Technology Service Provider Act (“Token- und Vertrauenswürdige Technologie-Dienstleister-Gesetz” in short

“TVTG”) also known as the Blockchain Act. These include custody and administration of crypto-assets, offering secure storage for clients' assets and private keys. LCX operates a trading platform, facilitating the matching of buy and sell orders for crypto-assets. It enables both crypto-to-fiat and crypto-to-crypto exchanges, ensuring compliance with AML and KYC regulations. LCX also supports token placements, marketing crypto-assets on behalf of offerors.

Under MiCA, LCX is classified as a Crypto-Asset Service Provider (CASP). LCX AG has applied for MiCA licensing on February 1, 2025, the first day of MiCA's implementation in Liechtenstein.

Under the TVTG framework, LCX provides:

- TT Depository – Custody and safekeeping of crypto-assets.
- TT Trading Platform Operator – Operation of a regulated crypto-asset exchange.
- TT Exchange Service Provider – Crypto-to-fiat and crypto-to-crypto exchange.
- Token Issuer – Marketing and distribution of tokens.
- TT Transfer Service Provider – Crypto-asset transfers between ledger addresses.
- Token Generator & Tokenization Service Provider – Creation and issuance of tokens.
- Physical Validator – Enforcement of token-based rights on TT systems.
- TT Verification & Identity Service Provider – Legal capacity verification and identity registration.
- TT Price Service Provider – Providing aggregated crypto-asset price information.

C.12 Parent Company Business Activity

Not Applicable

C.13 Other persons drawing up the white paper under Article 6 (1) second subparagraph MiCA

Not Applicable

C.14 Reason for drawing up the white paper under Article 6 (1) second subparagraph MiCA

Not Applicable

D. PART D - INFORMATION ABOUT THE CRYPTO-ASSET PROJECT

D.1 Crypto-Asset Project Name

Ethereum

D.2 Crypto-Assets Name

Ethereum

D.3 Abbreviation

ETH

D.4 Crypto-Asset Project Description

Ethereum (\$ETH) is a decentralized, open-source blockchain enabling smart contracts and decentralized applications (dApps). It operates on a Proof-of-Stake (PoS) consensus mechanism, making it more energy-efficient than Proof-of-Work (PoW). Ether (ETH) is used for transaction fees (gas), staking, and governance. Ethereum powers decentralized finance (DeFi), NFTs, and Web3 applications, with continuous upgrades via Ethereum Improvement Proposals (EIPs) to enhance scalability, security, and sustainability.

D.5 Details of all persons involved in the implementation of the crypto-asset project

Ethereum is an open-source blockchain with no central issuer. It is maintained by a decentralized network of developers, validators, node operators, and users worldwide. The Ethereum Foundation and other independent contributors drive its development.

Full Name	Business Address	Function
<i>Vitalik Buterin</i>	<i>Not applicable</i>	<i>Co-founder & Early Developer</i>
<i>Ethereum Foundation</i>	<i>Zeughausgasse 7a, 6300 Zug, Switzerland</i>	<i>Development & Ecosystem Support</i>
<i>Ethereum Core Developers</i>	<i>Global</i>	<i>Software Development & Maintenance</i>
<i>Ethereum Validators</i>	<i>Global</i>	<i>Transaction Validation & Security (PoS)</i>
<i>Ethereum Node Operators</i>	<i>Global</i>	<i>Network Verification & Governance</i>

D.6 Utility Token Classification

false

D.7 Key Features of Goods/Services for Utility Token Projects

Not applicable

D.8 Plans for the Token

Not applicable

D.9 Resource Allocation

Not applicable

D.10 Planned Use of Collected Funds or Crypto-Assets

Not applicable

E. PART E - INFORMATION ABOUT THE OFFER TO THE PUBLIC OF CRYPTO-ASSETS OR THEIR ADMISSION TO TRADING

E.1 Public Offering or Admission to Trading

ATTR

E.2 Reasons for Public Offer or Admission to Trading

LCX is voluntarily filing a MiCA-compliant whitepaper for Ethereum (ETH) to enhance transparency, regulatory clarity, and investor confidence. While ETH is classified as “Other Crypto-Assets” under MiCA and does not require a whitepaper, this initiative supports compliance readiness and aligns with MiCA’s high disclosure standards. By doing so, LCX strengthens its position as a regulated exchange, ensuring a trustworthy and transparent trading environment for Ethereum within the EU’s evolving regulatory framework. Additionally, this filing facilitates market access and institutional adoption by removing uncertainty for institutional investors and regulated entities seeking to engage with Ethereum in a compliant manner. It further supports the broader market adoption and integration of Ethereum into the regulated financial ecosystem, reinforcing LCX’s role in shaping compliant and transparent crypto markets.

E.3 Fundraising Target

Not applicable

E.4 Minimum Subscription Goals

Not applicable

E.5 Maximum Subscription Goal

Not applicable

E.6 Oversubscription Acceptance

Not applicable

E.7 Oversubscription Allocation

Not applicable

E.8 Issue Price

Not applicable

E.9 Official Currency or Any Other Crypto-Assets Determining the Issue Price

Not applicable

E.10 Subscription Fee

Not applicable

E.11 Offer Price Determination Method

Not applicable

E.12 Total Number of Offered/Traded Crypto-Assets

Approximately 120.59 million ETH (as of March 2025), with a dynamic supply due to EIP-1559 and staking rewards.

E.13 Targeted Holders

ALL

E.14 Holder Restrictions

Not applicable

- E.15 Reimbursement Notice**
Not applicable
- E.16 Refund Mechanism**
Not applicable
- E.17 Refund Timeline**
Not applicable
- E.18 Offer Phases**
Not applicable
- E.19 Early Purchase Discount**
Not applicable
- E.20 Time-Limited Offer**
Not applicable
- E.21 Subscription Period Beginning**
Not applicable
- E.22 Subscription Period End**
Not applicable
- E.23 Safeguarding Arrangements for Offered Funds/Crypto-Assets**
Not applicable
- E.24 Payment Methods for Crypto-Asset Purchase**
Not applicable
- E.25 Value Transfer Methods for Reimbursement**
Not applicable
- E.26 Right of Withdrawal**
Not applicable
- E.27 Transfer of Purchased Crypto-Assets**
Not applicable
- E.28 Transfer Time Schedule**
Not applicable
- E.29 Purchaser's Technical Requirements**
Not applicable
- E.30 Crypto-asset service provider (CASP) name**
Not applicable
- E.31 CASP identifier**
Not applicable
- E.32 Placement Form**
NTAV
- E.33 Trading Platforms name**
LCX AG

E.34 Trading Platforms Market Identifier Code (MIC)

LCXE

E.35 Trading Platforms Access

Ethereum (ETH) is widely traded on multiple regulated and unregulated trading platforms globally. As a decentralized crypto-asset with no central issuer, ETH is not restricted to a single exchange and can be accessed by retail and institutional investors worldwide.

LCX Exchange also provides access to Ethereum trading with several pairs. Investors can access Ethereum (\$ETH) through [LCX.com](https://www.lcx.com), the official LCX exchange, as well as other supported cryptocurrency trading platforms. To trade \$ETH, users must register, complete KYC (Know Your Customer) verification, and comply with platform-specific requirements.

E.36 Involved Costs

Not applicable

E.37 Offer Expenses

Not applicable

E.38 Conflicts of Interest

Not applicable

E.39 Applicable Law

Not applicable - As Ethereum (ETH) is a decentralized, open-source crypto-asset with no central issuer or governing entity, it does not fall under the jurisdiction of any specific legal framework.

E.40 Competent Court

In case of disputes related to services provided by LCX, the competent court is: The Courts of Liechtenstein, with jurisdiction in accordance with Liechtenstein law and applicable EU regulations.

F. PART F - INFORMATION ABOUT THE CRYPTO-ASSETS

F.1 Crypto-Asset Type

Other Crypto-Asset

F.2 Crypto-Asset Functionality

Ethereum (ETH) is a decentralized digital asset that powers the Ethereum blockchain. It serves as both a medium of exchange and a utility token, enabling transactions, smart contract execution, and participation in decentralized applications (dApps). ETH is also used for staking in Ethereum's Proof-of-Stake (PoS) consensus mechanism.

Ethereum (ETH) is not issued with the intention to provide access to any good or service by an identifiable issuer or offeror. Its usage within the Ethereum network for transaction fees and staking does not constitute a utility function under Article 3(1)(11) of Regulation (EU) 2023/1114.

F.3 Planned Application of Functionalities

Ethereum (ETH) is a fully operational crypto-asset with established functionality. It is used for network fees (gas), smart contract execution, decentralized finance (DeFi), non-fungible tokens (NFTs), and staking in Ethereum's PoS protocol. Its functionality remains active and evolves through network upgrades.

F.4 Type of white paper

OTHR

F.5 The type of submission

NEWT

F.6 Crypto-Asset Characteristics

Ethereum (ETH) is a decentralized blockchain-based platform that enables smart contracts and decentralized applications (dApps). It operates on a peer-to-peer network, allowing users to execute programmable transactions without intermediaries. ETH serves as both a utility token for network fees (gas) and a store of value. With no fixed supply, Ethereum continuously evolves through upgrades like Ethereum 2.0, which introduced proof-of-stake (PoS) consensus. Under the Markets in Crypto-Assets Regulation (MiCA), Ethereum is classified as an "Other Crypto-Asset" (OTHR).

ISO 24165 DTI Code: X9J9K872S

F.7 Commercial name or trading name

Ethereum

F.8 Website of the issuer

Not applicable

F.9 Starting date of offer to the public or admission to trading

2025-01-01

F.10 Publication date

2025-04-02

F.11 Any other services provided by the issuer

Not applicable

F.12 Language or languages of the white paper

English

F.13 Digital Token Identifier Code used to uniquely identify the crypto-asset or each of the several crypto assets to which the white paper relates, where available

X9J9K872S

F.14 Functionally Fungible Group Digital Token Identifier, where available

Not applicable

F.15 Voluntary data flag

true

F.16 Personal data flag

false

F.17 LEI eligibility

false

F.18 Home Member State

Liechtenstein

F.19 Host Member States

Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden.

G. PART G - INFORMATION ON THE RIGHTS AND OBLIGATIONS ATTACHED TO THE CRYPTO-ASSETS

G.1 Purchaser Rights and Obligations

Purchasers of Ethereum do not acquire contractual rights or obligations from an issuer, as Ethereum is a decentralized, open-source protocol without a central governing entity. Ownership of ETH grants the right to store, transfer, and use it within the network, subject to its consensus rules and cryptographic security mechanisms. Users are solely responsible for managing their private keys and complying with applicable laws and regulations.

G.2 Exercise of Rights and Obligation

Since Ethereum is a decentralized, permissionless network with no central issuer, there are no contractual rights or obligations to exercise. The use and transfer of ETH are governed by Ethereum's consensus rules and executed via smart contracts and network transactions. Users control their ETH holdings by managing their private keys and can transact freely within the network, subject to gas fees and block confirmation times. Compliance with applicable laws and regulations remains the responsibility of the user.

G.3 Conditions for Modifications of Rights and Obligations

Ethereum's protocol and functionalities are determined by network consensus and cannot be unilaterally modified by any single entity. Changes to the network require broad agreement among stakeholders, including developers, miners/validators, and node operators, typically implemented through Ethereum Improvement Proposals (EIPs). However, legal and regulatory obligations may change based on jurisdiction, and users must ensure compliance with relevant laws.

G.4 Future Public Offers

Not applicable

G.5 Issuer Retained Crypto-Assets

Not applicable

G.6 Utility Token Classification

No

G.7 Key Features of Goods/Services of Utility Tokens

Not applicable

G.8 Utility Tokens Redemption

Not applicable

G.9 Non-Trading Request

True

G.10 Crypto-Assets Purchase or Sale Modalities

Not applicable

G.11 Crypto-Assets Transfer Restrictions

Not applicable

G.12 Supply Adjustment Protocols

Ethereum does not have a fixed supply cap like Bitcoin. Instead, its issuance model is dynamic, influenced by network upgrades and governance decisions. The transition from Proof-of-Work (PoW) to Proof-of-Stake (PoS) through Ethereum 2.0 (the Merge) significantly reduced new ETH issuance. Additionally, Ethereum Improvement Proposal (EIP) 1559 introduced a base fee-burning mechanism that reduces the circulating supply over time by burning a portion of transaction fees.

G.13 Supply Adjustment Mechanisms

Ethereum's supply is adjusted dynamically through protocol mechanisms such as staking rewards and fee burns. EIP-1559 ensures that a portion of transaction fees is permanently removed from circulation, impacting supply and potential deflationary effects. Changes to supply mechanisms require community consensus and are implemented through Ethereum Improvement Proposals (EIPs).

G.14 Token Value Protection Schemes

False

G.15 Token Value Protection Schemes Description

Not Applicable

G.16 Compensation Schemes

False

G.17 Compensation Schemes Description

Not Applicable

G.18 Applicable Law

Not applicable - As Ethereum (ETH) is a decentralized, open-source crypto-asset with no central issuer or governing entity, it does not fall under the jurisdiction of any specific legal framework.

G.19 Competent Court

Not applicable - As Ethereum (ETH) is a decentralized, open-source crypto-asset with no central issuer or governing entity, it does not fall under the jurisdiction of any specific legal framework.

In case of disputes related to services provided by LCX, the competent court is: The Courts of Liechtenstein, with jurisdiction in accordance with Liechtenstein law and applicable EU regulations.

H. PART H – INFORMATION ON THE UNDERLYING TECHNOLOGY

H.1 Distributed ledger technology

Ethereum operates on a public, decentralized blockchain, which is a type of Distributed Ledger Technology (DLT). It enables the execution of smart contracts and decentralized applications (dApps) in a trustless environment without intermediaries. The Ethereum blockchain is maintained by a global network of validators who secure the network through the Proof-of-Stake (PoS) consensus mechanism.

Ethereum Blockchain Characteristics

Decentralization: Ethereum is a permissionless blockchain with no central authority. Anyone can run a node, participate in validation, or develop smart contracts and dApps.

Security: Transactions and smart contracts are secured through cryptographic techniques, and blocks are linked in an immutable ledger. The transition from Proof-of-Work (PoW) to Proof-of-Stake (PoS) via “The Merge” has significantly enhanced energy efficiency and network security.

Smart Contract Functionality: Ethereum enables self-executing contracts, allowing developers to build applications such as DeFi protocols, NFTs, and DAOs. The Ethereum Virtual Machine (EVM) executes smart contracts across the network.

Scalability & Layer 2 Solutions: Ethereum supports scaling solutions such as rollups (Optimistic and ZK-Rollups) and sidechains, improving transaction throughput and reducing costs.

EIP-1559 and Fee Burn Mechanism: Ethereum introduced a transaction fee-burning mechanism via EIP-1559, reducing ETH supply over time and potentially making it deflationary depending on network usage.

Proof-of-Stake (PoS) Consensus Mechanism

Ethereum transitioned from Proof-of-Work (PoW) to Proof-of-Stake (PoS) with “The Merge” in September 2022, eliminating mining and replacing it with staking.

- A) Validators propose and finalize blocks by staking ETH as collateral.
- B) The Beacon Chain coordinates validators and ensures security through a randomized selection process.
- C) Staking rewards incentivize honest participation, while penalties (slashing) deter malicious behavior.
- D) This PoS mechanism significantly reduces Ethereum’s energy consumption compared to PoW.

Ethereum’s Monetary Policy and Supply Model

Ethereum does not have a fixed supply cap like Bitcoin. Instead, its issuance model is dynamic, with ETH supply influenced by:

- A) **Staking Rewards:** Newly issued ETH compensates validators for securing the network.
- B) **EIP-1559 Fee Burning:** A portion of every transaction fee is burned, reducing total ETH supply.
- C) **Network Activity:** The balance between issuance and burning determines Ethereum’s inflation or deflation over time.

Governance and Development

Ethereum upgrades and protocol changes follow the Ethereum Improvement Proposal (EIP) process, where developers and the community propose, review, and implement updates. Decisions are coordinated through decentralized governance, including client teams, researchers, validators, and ecosystem participants.

Key upgrades include:

- A) **EIP-1559:** Introduced fee burning mechanism.
- B) **The Merge:** Shifted Ethereum from PoW to PoS.
- C) **Shanghai Upgrade:** Enabled ETH staking withdrawals.

- D) Future Upgrades: Proto-Danksharding (EIP-4844) and full Danksharding to improve scalability.

Further Information Sources and Links:

- A) Ethereum Whitepaper: <https://ethereum.org/en/whitepaper/>
- B) Ethereum Main Repository: <https://github.com/ethereum>
- C) Ethereum Blockchain Explorer: <https://etherscan.io>
- D) Ethereum Wiki: <https://eth.wiki>

H.2 Protocols and Technical Standards

Ethereum Protocol and Network Architecture

Ethereum operates on a decentralized, peer-to-peer (P2P) network, enabling smart contracts and decentralized applications (dApps). Transactions and blocks are propagated across the network using the Ethereum Wire Protocol, ensuring consensus and security. Nodes follow the Ethereum protocol specifications, implemented in clients such as Geth (Go Ethereum), Nethermind, Besu, and Erigon.

Consensus Mechanism – Proof-of-Stake (PoS)

Ethereum transitioned from Proof-of-Work (PoW) to Proof-of-Stake (PoS) with The Merge in 2022. Validators replace miners by staking ETH to propose and attest to new blocks. The Beacon Chain coordinates validators, with a randomized selection process ensuring fairness. Slashing penalties deter malicious behavior, while the Epoch Finality System secures the blockchain.

Ethereum Improvement Proposals (EIPs) & Protocol Upgrades

Ethereum's evolution follows an open development process through Ethereum Improvement Proposals (EIPs). Key EIPs include:

- A) EIP-1559: Introduced a transaction fee-burning mechanism to optimize gas pricing.
- B) EIP-3675: Transitioned Ethereum from PoW to PoS.
- C) EIP-4844 (Proto-Danksharding): Introduces "Blob Transactions" for scalability.
- D) EIP-721 & EIP-1155: Defined NFT standards for unique and multi-token assets.

Transaction and Address Standards

Ethereum supports multiple address types and transaction models:

- A) Externally Owned Accounts (EOAs): Standard Ethereum wallets controlled by private keys.
- B) Smart Contract Accounts: Deployed contracts with programmable execution logic.
- C) Ethereum Name Service (ENS): Converts human-readable names into Ethereum addresses.
- D) EIP-2718 & EIP-2930: Enabled transaction types such as access lists and optional gas optimizations.

Layer 2 Scaling – Rollups and Sidechains

Ethereum scales through Layer 2 solutions that enhance transaction efficiency:

- A) Optimistic Rollups (e.g., Arbitrum, Optimism): Aggregate transactions and use fraud proofs.
- B) Zero-Knowledge Rollups (ZK-Rollups) (e.g., zkSync, StarkNet): Compress data using cryptographic proofs.
- C) State Channels & Plasma: Enable off-chain transactions while ensuring on-chain finality.

Security & Cryptography Standards

Ethereum uses the Keccak-256 hashing algorithm for block validation and Elliptic Curve Digital Signature Algorithm (ECDSA) for securing private keys. Zero-Knowledge Proofs (ZKPs) and BLS Signatures improve transaction privacy and consensus efficiency.

Interoperability & Data Standards

Ethereum employs ERC token standards to ensure compatibility across dApps and exchanges:

- A) ERC-20: Standard for fungible tokens.
- B) ERC-721 & ERC-1155: Standards for NFTs and multi-token assets.
- C) ERC-4337: Enables account abstraction for smart contract wallets.
- D) Ethereum Virtual Machine (EVM): Ensures execution consistency across all Ethereum-compatible chains.

Ethereum's modular upgrades and rollup-centric roadmap aim to optimize scalability, security, and usability while maintaining decentralization.

H.3 Technology Used

Ethereum operates on a decentralized blockchain network utilizing the Proof-of-Stake (PoS) consensus mechanism via Ethereum's Beacon Chain and validators to secure the network and validate transactions. The Ethereum Virtual Machine (EVM) executes smart contracts, enabling decentralized applications (dApps) and tokenized assets.

Wallets and key management infrastructure play a critical role in Ethereum's ecosystem. Users can store ETH and interact with smart contracts using custodial or non-custodial wallets. Non-custodial wallets, such as MetaMask, Ledger, and Trezor, provide users with full control over their private keys. Multi-signature (multi-sig) wallets enhance security by requiring multiple approvals for transactions.

Ethereum transactions use an account-based model, and addresses follow the Ethereum standard (0x-prefixed addresses). Gas fees are paid in ETH, with Ethereum's EIP-1559 upgrade introducing a base fee mechanism to improve fee predictability.

For scalability and efficiency, Ethereum supports Layer 2 solutions, such as Optimistic Rollups and zk-Rollups, which enable faster and cheaper transactions. Smart contract standards, including ERC-20 (fungible tokens), ERC-721 (NFTs), and ERC-1155 (multi-token standard), facilitate diverse blockchain applications and interoperability.

H.4 Consensus Mechanism

Ethereum operates using the Proof-of-Stake (PoS) consensus mechanism, which enhances security, scalability, and energy efficiency compared to Proof-of-Work. Validators replace miners, staking ETH as collateral to propose and validate blocks. Honest participation is incentivized with staking rewards, while malicious behavior can result in slashing (loss of staked ETH).

Ethereum's consensus is maintained by the Beacon Chain, which coordinates validators and ensures block finality. Blocks are proposed and confirmed in slots (~12 seconds each), grouped into epochs (~32 slots per epoch). The Casper FFG and LMD-GHOST algorithms govern finality and fork choice rules, ensuring a secure, decentralized ledger.

Ethereum's PoS mechanism significantly reduces energy consumption and enhances network decentralization, as participation does not require costly mining equipment. The transition from PoW to PoS was completed through The Merge (September 2022), solidifying Ethereum's long-term sustainability.

H.5 Incentive Mechanisms and Applicable Fees

Ethereum's incentive mechanism is based on the Proof-of-Stake (PoS) model, where validators secure the network by staking ETH and proposing or attesting to blocks. Validators earn staking rewards in the form of newly issued ETH and priority transaction fees. To discourage dishonest behavior, malicious validators risk having their staked ETH slashed (partially or fully forfeited).

Ethereum's fee model follows the EIP-1559 upgrade, introducing a base fee that is burned, reducing ETH supply, and a priority fee (tip) that incentivizes validators to prioritize transactions. The base fee adjusts dynamically based on network congestion, optimizing gas costs.

Gas fees are measured in gwei (fractions of ETH) and depend on transaction complexity. High-demand periods result in increased fees, while Layer 2 scaling solutions like Optimistic and ZK-Rollups offer lower-cost alternatives for users. This model enhances security, ensures long-term sustainability, and gradually reduces ETH inflation through the burning mechanism.

H.6 Use of Distributed Ledger Technology

True

H.7 DLT Functionality Description²

Ethereum is a decentralized, open-source blockchain platform that supports smart contract functionality. In September 2022, Ethereum transitioned from a Proof-of-Work (PoW) consensus mechanism to a Proof-of-Stake (PoS) model through an upgrade known as "The Merge." This shift significantly reduced the network's energy consumption by approximately 99.95% . Under PoS, validators are selected to propose and attest to new blocks based on the amount of ETH they stake, enhancing the network's security and scalability. This consensus mechanism allows Ethereum to process transactions efficiently while maintaining decentralization and resistance to censorship .

H.8 Audit

True

H.9 Audit Outcome³

The Ethereum Foundation has undertaken multiple security audits to ensure the robustness and reliability of its protocol. Notably, in February 2025, an external security review was conducted on the Pectra System Contracts, encompassing Ethereum Improvement Proposals (EIPs) such as EIP-2935, EIP-7002, and EIP-7251. The audit identified several issues, all of which were addressed by the Ethereum Foundation, reinforcing the protocol's security posture . Additionally, the Foundation maintains a public repository of past audit results and continues to engage in ongoing security assessments to uphold the integrity of the Ethereum network.

Link to Audit Reports: <https://blog.ethereum.org/2025/02/28/pectra-audit-results?>

² [19/4/2025] Updated DLT Functionality Description in Sub-Part H.7

³ [19/4/2025] Updated Audit Outcome information in Sub-Part H.9

I. PART I – INFORMATION ON RISKS

I.1 Offer-Related Risks

The admission to trading of Ethereum (\$ETH) carries risks related to market volatility, regulatory uncertainties, and trading conditions. While Ethereum is the second-largest cryptocurrency by market capitalization and has deep liquidity with active global secondary markets, price fluctuations can still be significant due to factors such as network upgrades, market sentiment, macroeconomic trends, institutional adoption, and speculative activity.

Ethereum's liquidity is generally high, but market conditions may vary, and external events such as regulatory changes, exchange delistings, or systemic financial shocks could impact trading. Regulatory shifts may impose new compliance requirements or restrictions on ETH trading and DeFi applications built on Ethereum, affecting market accessibility in certain jurisdictions.

I.2 Issuer-Related Risks

Ethereum (\$ETH) does not have a central issuer, as it operates on a decentralized, permissionless blockchain maintained by independent validators, developers, and node operators. As a result, many issuer-specific risks, such as financial stability, operational risks, or conflicts of interest, do not apply. However, the Ethereum ecosystem is subject to certain risks, including:

Regulatory and Legal Uncertainty: While Ethereum itself is decentralized, regulatory frameworks in different jurisdictions may impact exchanges, custodians, DeFi applications, and other service providers offering access to Ethereum.

Network Governance and Protocol Risks: Ethereum's development follows an open, decentralized governance process through Ethereum Improvement Proposals (EIPs). While this fosters innovation, protocol changes require broad community consensus, which can lead to disagreements, forks, or delays in network upgrades.

Validator and Staking Centralization Risks: With Ethereum's transition to Proof-of-Stake (PoS), validators play a key role in network security. If staking power becomes too concentrated among a few entities, it may pose risks to decentralization and governance.

Security and Technological Risks: Ethereum's smart contract functionality introduces additional security risks, as vulnerabilities in smart contract code can lead to exploits, financial losses, or unintended protocol behavior. Future advancements in cryptographic technologies, such as quantum computing, may also impact Ethereum's security model.

I.3 Crypto-Assets-Related Risks

Ethereum (\$ETH) is a decentralized digital asset with no central issuer, reducing risks associated with centrally controlled crypto-assets. However, Ethereum carries specific risks, including:

Market Risk: Ethereum's price is highly volatile, influenced by macroeconomic factors, regulatory developments, and technological advancements. Price fluctuations can result in significant gains or losses.

Liquidity Risk: Ethereum has deep liquidity across multiple exchanges and DeFi platforms, but extreme market conditions or regulatory actions could impact market accessibility and trading volumes.

Custodial and Self-Custody Risk: ETH ownership requires secure private key management. Loss of private keys results in permanent loss of assets. Users storing ETH on centralized platforms face counterparty risks, including exchange insolvency, hacks, or regulatory intervention.

Regulatory and Taxation Risks: Ethereum operates in multiple regulatory jurisdictions, each with different rules regarding taxation, securities classification, and compliance requirements. Future regulatory changes could impact Ethereum's use in DeFi, staking, or smart contract applications.

Smart Contract and Protocol Risks: As Ethereum supports decentralized applications (dApps) and smart contracts, vulnerabilities in code can lead to exploits, financial losses, or protocol failures.

Network Security and Governance Risks: Ethereum's Proof-of-Stake (PoS) consensus mechanism relies on validators securing the network. Risks include potential validator centralization, governance disputes over protocol upgrades, or unforeseen security vulnerabilities in smart contract execution.

Quantum Computing Threats: Advances in quantum computing may pose long-term risks to cryptographic security, potentially impacting Ethereum's key management and transaction signing mechanisms.

Despite these risks, Ethereum remains the leading smart contract platform, with broad adoption across DeFi, NFTs, and enterprise blockchain applications, supported by an active developer community and ongoing protocol improvements.

I.4 Project Implementation-Related Risks

Ethereum, as a decentralized and open-source blockchain, has no central issuer, but certain risks affect its development and adoption. Protocol Upgrades & Governance rely on community consensus, and disagreements may lead to forks or delays. Scalability Challenges persist despite upgrades, with network congestion causing high gas fees. Regulatory Uncertainty varies across jurisdictions, potentially impacting staking, DeFi, and smart contracts. Validator Centralization Risks arise if staking power is concentrated among a few entities. Security Threats include smart contract exploits, potential bugs, and evolving attack vectors. Quantum Computing Risks may pose future challenges to cryptographic security. Market Volatility remains high, affecting liquidity and investor confidence. Despite these risks, Ethereum continues to innovate and expand its ecosystem.

I.5 Technology-Related Risks

Ethereum (\$ETH) operates on a decentralized Proof-of-Stake (PoS) blockchain, enhancing energy efficiency and security. However, several technology-related risks remain. Private Key Management is crucial, as loss or theft results in permanent loss of funds. Smart Contract Vulnerabilities pose significant risks, as flawed or exploited code can lead to hacks and irreversible financial losses. Network congestion can cause high gas fees and slow transaction processing, impacting usability during peak demand.

Ethereum's PoS consensus model mitigates 51% attacks but introduces validator centralization risks, as staking is dominated by large entities. Protocol Upgrades & Governance depend on community consensus, which can lead to delays or contentious forks. Security Risks include potential bugs in protocol updates, reliance on Layer 2 solutions, and the long-term challenge of quantum computing threats to cryptographic security.

Additionally, Ethereum's pseudonymous transactions can be analyzed, reducing privacy. Dependence on third-party services, such as centralized exchanges and custodians, introduces counterparty risks, including hacks, insolvency, and regulatory restrictions. Despite these risks, Ethereum remains a leading blockchain for smart contracts, DeFi, and NFTs, continuously evolving to improve security and scalability.

I.6 Mitigation Measures

Ethereum minimizes environmental impact through its Proof-of-Stake (PoS) consensus, reducing energy consumption by over 99% compared to Proof-of-Work. Layer 2 solutions like rollups improve scalability and lower fees by processing transactions off-chain. Regular protocol upgrades via Ethereum Improvement Proposals (EIPs) enhance security, efficiency, and decentralization. Smart contract risks are mitigated through formal verification, bug bounties, and multi-client diversity. Future upgrades, including sharding, aim to further scale the network while maintaining security and decentralization.

J. PART J – INFORMATION ON THE SUSTAINABILITY INDICATORS IN RELATION TO ADVERSE IMPACT ON THE CLIMATE AND OTHER ENVIRONMENT-RELATED ADVERSE IMPACTS

Adverse impacts on climate and other environment-related adverse impacts.

J.1 Mandatory information on principal adverse impacts on the climate and other environment-related adverse impacts of the consensus mechanism

Ethereum’s Proof-of-Stake (PoS) consensus drastically reduces energy consumption by eliminating mining, making it far more energy-efficient than Proof-of-Work (PoW) systems. Validators secure the network by staking ETH, requiring minimal computational power.

The network’s annual energy consumption is 2,390,166 kWh, with 17.41% sourced from renewable energy. Scope 2 emissions total 795.48 tCO₂e per year, while energy intensity per transaction is 0.00010 kWh, and GHG intensity per transaction is 0.00003 kgCO₂e.

Ethereum’s environmental impact continues to improve through staking decentralization, Layer 2 scaling solutions, and increased adoption of renewable energy for validator operations.

General information	
S.1 Name <i>Name reported in field A.1</i>	LCX
S.2 Relevant legal entity identifier Identifier referred to in field A.2	529900SN07Z6RTX8R418
S.3 Name of the crypto-asset Name of the crypto-asset, as reported in field D.2	Ethereum
S.4 Consensus Mechanism The consensus mechanism, as reported in field H.4	<p>Ethereum operates using the Proof-of-Stake (PoS) consensus mechanism, which enhances security, scalability, and energy efficiency compared to Proof-of-Work. Validators replace miners, staking ETH as collateral to propose and validate blocks. Honest participation is incentivized with staking rewards, while malicious behavior can result in slashing (loss of staked ETH).</p> <p>Ethereum’s consensus is maintained by the Beacon Chain, which coordinates validators and ensures block finality. Blocks are proposed and confirmed in slots (~12 seconds each), grouped into epochs (~32 slots per epoch). The Casper FFG and LMD-GHOST algorithms govern finality and fork choice rules, ensuring a secure, decentralized ledger.</p> <p>Ethereum’s PoS mechanism significantly reduces energy consumption and enhances network decentralization, as participation does not require costly mining equipment. The transition from PoW to PoS was completed through The Merge (September 2022), solidifying Ethereum’s long-term sustainability.</p>

<p>S.5 Incentive Mechanisms and Applicable Fees</p> <p>Incentive mechanisms to secure transactions and any fees applicable, as reported in field H.5</p>	<p>Ethereum’s incentive mechanism is based on the Proof-of-Stake (PoS) model, where validators secure the network by staking ETH and proposing or attesting to blocks. Validators earn staking rewards in the form of newly issued ETH and priority transaction fees. To discourage dishonest behavior, malicious validators risk having their staked ETH slashed (partially or fully forfeited).</p> <p>Ethereum’s fee model follows the EIP-1559 upgrade, introducing a base fee that is burned, reducing ETH supply, and a priority fee (tip) that incentivizes validators to prioritize transactions. The base fee adjusts dynamically based on network congestion, optimizing gas costs. Gas fees are measured in gwei (fractions of ETH) and depend on transaction complexity. High-demand periods result in increased fees, while Layer 2 scaling solutions like Optimistic and ZK-Rollups offer lower-cost alternatives for users. This model enhances security, ensures long-term sustainability, and gradually reduces ETH inflation through the burning mechanism.</p>
<p>S.6 Beginning of the period to which the disclosure relates</p>	<p>2024-03-04</p>
<p>S.7 End of the period to which the disclosure relates</p>	<p>2025-03-04</p>
<p>Mandatory key indicator on energy consumption</p>	
<p>S.8 Energy consumption</p> <p>Total amount of energy used for the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions, expressed per calendar year</p>	<p>2390166.00000 kWh per year</p>
<p>Sources and methodologies</p>	
<p>S.9 Energy consumption sources and Methodologies</p> <p>Sources and methodologies used in relation to the information reported in field S.8</p>	<p>Ethereum’s energy consumption is minimal following its transition to Proof-of-Stake (PoS), which eliminates mining. Estimates are based on validator node operations, hardware efficiency, and electricity usage. Unlike Proof-of-Work (PoW), PoS drastically reduces energy demand, making Ethereum significantly more sustainable.</p>

J.2 Supplementary information on principal adverse impacts on the climate and other environment-related adverse impacts of the consensus mechanism

<p>Supplementary key indicators on energy and GHG emissions</p>
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<p>S.10 Renewable energy consumption</p> <p>Share of energy used generated from renewable sources, expressed as a percentage of the total amount of energy used per calendar year, for the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions.</p>	<p>17.41% of the network's energy use comes from renewable sources.</p>
<p>S.11 Energy intensity</p> <p>Average amount of energy used per validated transaction</p>	<p>0.00010 kWh per transaction</p>
<p>S.12 Scope 1 DLT GHG emissions – Controlled</p> <p>Scope 1 GHG emissions per calendar year for the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions</p>	<p>0.00 tCO₂e per year</p>
<p>S.13 Scope 2 DLT GHG emissions – Purchased</p> <p>Scope 2 GHG emissions, expressed in tCO₂e per calendar year for the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions</p>	<p>795.47849 tCO₂e per year</p>
<p>S.14 GHG intensity</p> <p>Average GHG emissions (scope 1 and scope 2) per validated transaction</p>	<p>0.00003 kgCO₂e per transaction</p>
<p>Sources and methodologies</p>	
<p>S.15 Key energy sources and methodologies</p> <p>Sources and methodologies used in relation to the information reported in fields S.10 and S.11</p>	<p>To determine the proportion of renewable energy usage, the locations of the nodes are to be determined using public information sites, open-source crawlers and crawlers developed in-house. If no information is available on the geographic distribution of the nodes, reference networks are used which are comparable in terms of their incentivization structure and consensus mechanism. This geo-information is merged with public information from the European Environment Agency (EEA) and thus determined.</p>
<p>S.16 Key GHG sources and methodologies</p> <p>Sources and methodologies used in relation to the information reported in fields S.12, S.13 and S.14</p>	<p>To determine the GHG Emissions, the locations of the nodes are to be determined using public information sites, open-source crawlers and crawlers developed in-house. If no information is available on the geographic distribution of the nodes, reference networks are used which are comparable in terms of their incentivization structure and consensus mechanism. This geo-information is merged with public information from the European Environment Agency (EEA) and thus determined.</p>