

**White paper drafted under the  
European Markets in Crypto-  
Assets Regulation (EU) 2023/1114  
for FFG DGMQMFZD4**

# Preamble

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## **01. Date of notification**

2025-06-16

## **02. Statement in accordance with Article 6(3) of Regulation (EU) 2023/1114**

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 of the crypto-asset is solely responsible for the content of this crypto-asset white paper.

## **03. Compliance statement in accordance with Article 6(6) of Regulation (EU) 2023/1114**

This crypto-asset white paper complies with Title II of Regulation (EU) 2023/1114 of the European Parliament and of the Council 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. Statement in accordance with Article 6(5), points (a), (b), (c), of Regulation (EU) 2023/1114**

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

## **05. Statement in accordance with Article 6(5), point (d), of Regulation (EU) 2023/1114**

The token has no utility other than being holdable and transferable and can not be exchanged for any goods or services at the time of writing this white paper (2025-06-08).

## **06. Statement in accordance with Article 6(5), points (e) and (f), of Regulation (EU) 2023/1114**

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 or the deposit guarantee schemes under Directive 2014/49/EU of the European Parliament and of the Council.

### **Summary**

## **07. Warning in accordance with Article 6(7), second subparagraph, of Regulation (EU) 2023/1114**

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 or any other offer document pursuant to Union or national law.

## **08. Characteristics of the crypto-asset**

The crypto-asset name "Ethereum Classic" (ETC) refers to the native token of the Ethereum Classic distributed ledger (DL), which supports decentralized applications and smart contracts on its original, unaltered blockchain architecture.

The crypto-asset originated in 2016 following a contentious hard fork of the Ethereum blockchain after the DAO incident. Ethereum Classic represents the continuation of the original Ethereum protocol, maintained by a community committed to immutability and the principle that "code is law."

The crypto-asset is primarily used to pay for transaction fees and computational resources within the Ethereum Classic network. It may also function as a store of value and a medium of exchange in digital environments. Unlike Ethereum (ETH), Ethereum Classic remains secured by a Proof-of-Work (PoW) consensus mechanism.

The token has no inherent rights or utility beyond being holdable, transferable, or used to pay for network operations, and cannot be redeemed for any specific goods or services at the time of writing this white paper (2025-06-12). There is no central issuer; the network is maintained by a decentralized group of developers and supported by entities such as the Ethereum Classic Cooperative.

### **09. Information about the quality and quantity of goods or services to which the utility tokens give access and restrictions on the transferability**

Since holding the crypto-asset does not grant access to any goods or services, this is not applicable at the time of writing this white paper (2025-06-09).

### **10. Key information about the offer to the public or admission to trading**

Crypto Risk Metrics GmbH is seeking admission to trading on any Crypto Asset Service Provider platform in the European Union in accordance to Article 5 of REGULATION (EU) 2023/1114 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 May 2023 on markets in crypto-assets, and amending Regulations (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937. In accordance to Article 5(4), this crypto-asset white paper may be used by entities admitting the token to trading after Crypto Risk Metrics GmbH as the person responsible for drawing up such white paper has given its consent to its use in writing to the respective Crypto Asset Service Provider. If a CASP wishes to use this white paper, inquiries can be made under [info@crypto-risk-metrics.com](mailto:info@crypto-risk-metrics.com).

## **Part A – Information about the offeror or the person seeking admission to trading**

### **A.1 Name**

Crypto Risk Metrics GmbH

### **A.2 Legal form**

2HBR

### **A.3 Registered address**

DE, Lange Reihe 73, 20099 Hamburg, Germany

### **A.4 Head office**

Not applicable.

### **A.5 Registration date**

2018-12-03

### **A.6 Legal entity identifier**

39120077M9TG001FE242

### **A.7 Another identifier required pursuant to applicable national law**

Crypto Risk Metrics GmbH is registered with the commercial register in the the city of Hamburg, Germany, under number HRB 154488.

### **A.8 Contact telephone number**

+4915144974120

### **A.9 E-mail address**

info@crypto-risk-metrics.com

### **A.10 Response time (Days)**

030

**A.11 Parent company**

Not applicable.

**A.12 Members of the management body**

Name	Position	Address
Tim Zölitz	Chairman	Lange Reihe 73, 20099 Hamburg, Germany

**A.13 Business activity**

Crypto Risk Metrics GmbH is a technical service provider, who supports regulated entities in the fulfillment of their regulatory requirements. In this regard, Crypto Risk Metrics GmbH acts as a data-provider for ESG-data according to article 66 (5). Due to the regulations laid out in article 5 (4) of the REGULATION (EU) 2023/1114 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 May 2023 on markets in crypto-assets, and amending Regulations (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937, Crypto Risk Metrics GmbH aims at providing central services for crypto-asset white papers in order to minimize market confusion due to conflicting white papers for the same asset.

**A.14 Parent company business activity**

Not applicable.

**A.15 Newly established**

Crypto Risk Metrics GmbH has been established since 2018 and is therefore not newly established (i. e. older than three years).

**A.16 Financial condition for the past three years**

Crypto Risk Metrics GmbH's profit after tax for the last three financial years are as follows:

2024 (unaudited): negative 50.891,81 EUR

2023 (unaudited): negative 27.665,32 EUR

2022: 104.283,00 EUR.

As 2023 and 2024 were the years building Software for the MiCAR-Regulation which was not yet in place, revenue streams from these investments are expected to be generated in 2025.

#### **A.17 Financial condition since registration**

This point would only be applicable if the company were newly established and the financial conditions for the past three years had not been provided in the bulletpoint before.

## **Part B – Information about the issuer, if different from the offeror or person seeking admission to trading**

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

Yes

### **B.2 Name**

The crypto-asset Ethereum Classic was created in July 2016 as the result of a contentious split from the original Ethereum network. The separation followed the DAO incident, after which the Ethereum community opted to reverse the blockchain history through a hard fork. A group of developers and users rejected this rollback, choosing instead to maintain the original chain under the name Ethereum Classic.

The crypto-asset was created together with the continued operation of the original Ethereum distributed ledger. Since its inception, Ethereum Classic has been maintained by a decentralized network of independent participants, including miners, developers, and node operators. The project is not directed by a central legal entity, but receives support from community-driven organizations such as the Ethereum Classic Cooperative.

**B.3 Legal form**

The crypto-asset and its decentralized distributed ledger is not operated by a legal entity and thus do not have a legal form.

**B4. Registered address**

Due to the explanation given in field B.3 the crypto-asset does not have a registered address.

**B.5 Head office**

Due to the explanation given in field B.3 the crypto-asset does not have a head office.

**B.6 Registration date**

Due to the explanation given in field B.3 the crypto-asset does not have a registration date.

**B.7 Legal entity identifier**

Could not be found while drafting this white paper (2025-06-09).

**B.8 Another identifier required pursuant to applicable national law**

Not applicable

**B.9 Parent company**

The crypto-asset and its decentralized network are not operated by a legal entity and thus do not have a parent company.

**B.10 Members of the management body**

Due to the nature of the decentralized network, the crypto-asset does not have a management body as defined in Article 3(1), point (27), of Regulation (EU) 2023/1114.

**B.11 Business activity**

Due to the nature of the decentralized network, the crypto-asset does not have a management body as defined in Article 3(1), point (27), of Regulation (EU) 2023/1114.

**B.12 Parent company business activity**

Not applicable.

**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**

Not applicable

**C.2 Legal form**

Not applicable.

**C.3 Registered address**

Not applicable.

**C.4 Head office**

Not applicable.

**C.5 Registration date**

Not applicable.

**C.6 Legal entity identifier**

Not applicable.

**C.7 Another identifier required pursuant to applicable national law**

Not applicable.

**C.8 Parent company**

Not applicable.

**C.9 Reason for crypto-Asset white paper Preparation**

Not applicable.

**C.10 Members of the Management body**

Not applicable.

**C.11 Operator business activity**

Not applicable.

**C.12 Parent company business activity**

Not applicable.

**C.13 Other persons drawing up the crypto-asset white paper according to Article 6(1), second subparagraph, of Regulation (EU) 2023/1114**

Not applicable.

**C.14 Reason for drawing the white paper by persons referred to in Article 6(1), second subparagraph, of Regulation (EU) 2023/1114**

Not applicable.

**Part D – Information about the crypto-asset project****D.1 Crypto-asset project name**

Long Name: "Ethereum Classic Ether", Short Name: "ETC" according to the Digital Token Identifier Foundation ([www.dtif.org](http://www.dtif.org), DTI see F.13, FFG DTI see F.14 as of 2025-06-12).

**D.2 Crypto-assets name**

See F.13.

**D.3 Abbreviation**

See F.13.

#### D.4 Crypto-asset project description

As outlined in community documentation and public technical records (<https://ethereumclassic.org>, accessed 2025-06-12), the crypto-asset Ethereum Classic is intended to function as a decentralized, permissionless digital asset operating on a public, pseudonymous blockchain. The Ethereum Classic blockchain is structured as a linked chain of blocks, each containing transactions and smart contract instructions, with each block referencing the previous block's hash to maintain data integrity and consistency.

Since its creation through a network split in July 2016, Ethereum Classic has continued to operate using a Proof-of-Work (PoW) consensus mechanism. Transactions are validated by miners who compete to solve cryptographic puzzles using the Ethash algorithm, which is designed to promote network security and resist centralization.

#### D.5 Details of all natural or legal persons involved in the implementation of the crypto-asset project

Name	Role
Ethereum Classic Cooperative	Non-profit organization supporting development, infrastructure, and ecosystem growth of the Ethereum Classic network ( <a href="https://etccooperative.org">https://etccooperative.org</a> , accessed at 2025-06-12).
Others	More information was not available on the official project website <a href="https://ethereumclassic.org">https://ethereumclassic.org</a> (accessed at 2025-06-12). The network is maintained by independent developers and community participants without a central legal entity.

## **D.6 Utility Token Classification**

The token does not classify as a utility token.

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

Not applicable.

## **D.8 Plans for the token**

The crypto-asset is a decentralized blockchain platform designed to support smart contracts and decentralized applications (dApps) based on the original Ethereum protocol. Ethereum Classic emerged in July 2016 following a network split from Ethereum after the DAO incident. The project adheres to the principle of blockchain immutability and continues to use the Proof-of-Work (PoW) consensus mechanism. Unlike Ethereum, Ethereum Classic has not transitioned to Proof-of-Stake.

Past Milestones

Ethereum Launch (2015)

- The original Ethereum mainnet goes live on July 30, 2015, with ETC as part of its original history prior to the 2016 split.

The DAO Hack & Chain Split (2016)

- A major exploit in The DAO results in a hard fork. Ethereum Classic continues on the original chain, rejecting code-level rollback.

Agharta Upgrade (2020)

- These upgrade enhance compatibility with Ethereum's Istanbul and Constantinople features to maintain developer tooling support.

Magneto Upgrade (2021)

- Integrates Ethereum Berlin features, including gas optimizations and improved security for smart contracts.

## Future Milestones

All forward-looking developments remain subject to the decentralized governance model of the network. Timelines and outcomes are not guaranteed.

## SHA-3 Transition

- A upgrade would replace Ethash with the SHA-3 hashing algorithm.

## ECIP-1100 Series

- Community discussions continue around long-term governance structures, treasury models, and node incentivization.

## Interoperability Enhancements

- Proposals include improving compatibility with Ethereum-based tooling and cross-chain infrastructure.

## Development Ecosystem Support

- Focus on attracting developers through grants, EVM tooling compatibility, and simplified onboarding resources.

## **D.9 Resource allocation**

Could not be found while drafting this white paper (2025-06-09).

## **D.10 Planned use of Collected funds or crypto-Assets**

Not applicable, as this white paper was drawn up for the admission to trading and not for collecting funds for the crypto-asset-project.

## **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**

The white paper concerns the admission to trading on any Crypto Asset Service Providers platform that has obtained the written consent of Crypto Risk Metrics GmbH as the person drafting this white paper.

### **E.2 Reasons for public offer or admission to trading**

As already stated in A.13, Crypto Risk Metrics GmbH aims to provide central services to draw up crypto-asset white papers in accordance to COMMISSION IMPLEMENTING REGULATION (EU) 2024/2984. These services are offered in order to minimize market confusion due to conflicting white papers for the same asset drawn up from different Crypto Asset Service Providers. As of now, such a scenario seems highly likely as a Crypto Asset Service Provider who drew up a crypto-asset white paper and admitted the respective token in the Union has no incentive to give his written consent to another Crypto Asset Service Provider according to Article 5 (4 b) of the REGULATION (EU) 2023/1114 to use the white paper for his regulatory obligations, as this would 1. strengthen the market-positioning of the other Crypto Asset Service Provider (who is most likely a competitor) and 2. also entail liability risks.

### **E.3 Fundraising target**

Not applicable.

### **E.4 Minimum subscription goals**

Not applicable.

### **E.5 Maximum subscription goals**

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, as this white paper is written to support admission to trading and not for the initial offer to the public.

**E.10 Subscription fee**

Not applicable, as this white paper is written to support admission to trading and not for the initial offer to the public.

**E.11 Offer price determination method**

Once the token is admitted to trading its price will be determined by demand (buyers) and supply (sellers).

**E.12 Total number of offered/traded crypto-assets**

The "Gotham" upgrade was implemented on December 11, 2017, via Ethereum Classic Improvement Proposal ECIP-1017. It introduced a fixed monetary policy by setting a maximum supply cap of approximately 210.7 million ETC and defined a deflationary emission schedule.

As of June 2025, approximately 152.3 million ETC have been mined and are in circulation.

**E.13 Targeted holders**

ALL

**E.14 Holder restrictions**

The Holder restrictions are subject to the rules applicable to the Crypto Asset Service Provider as well as additional restrictions the Crypto Asset Service Providers might set in force.

**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**

The payment methods are subject to the respective capabilities of the Crypto Asset Service Provider listing the crypto-asset.

**E.25 Value transfer methods for reimbursement**

Not applicable.

**E.26 Right of withdrawal**

Not applicable, as this white paper is written to support admission to trading and not for the initial offer to the public.

**E.27 Transfer of purchased crypto-assets**

The transfer of purchased crypto-assets are subject to the respective capabilities of the Crypto Asset Service Provider listing the crypto-asset.

**E.28 Transfer time schedule**

Not applicable, as this white paper is written to support admission to trading and not for the initial offer to the public.

**E.29 Purchaser's technical requirements**

The technical requirements that the purchaser is required to fulfil to hold the crypto-assets of purchased crypto-assets are subject to the respective capabilities of the Crypto Asset Service Provider listing the crypto-asset.

**E.30 Crypto-asset service provider (CASP) name**

Not applicable.

**E.31 CASP identifier**

Not applicable.

**E.32 Placement form**

Not applicable.

**E.33 Trading platforms name**

The trading on all MiCAR-compliant trading platforms is sought.

**E.34 Trading platforms Market identifier code (MIC)**

Not applicable.

**E.35 Trading platforms access**

This depends on the trading platform listing the asset.

### **E.36 Involved costs**

This depends on the trading platform listing the asset. Furthermore, costs may occur for making transfers out of the platform (i. e. "gas costs" for blockchain network use that may exceed the value of the crypto-asset itself).

### **E.37 Offer expenses**

Not applicable, as this crypto-asset white paper concerns the admission to trading and not the offer of the token to the public.

### **E.38 Conflicts of interest**

MiCAR-compliant Crypto Asset Service Providers shall have strong measurements in place in order to manage conflicts of interests. Due to the broad audience this white-paper is addressing, potential investors should always check the conflicts of Interest policy of their respective counterparty.

### **E.39 Applicable law**

Not applicable, as it is referred to on "offer to the public" and in this white-paper, the admission to trading is sought.

### **E.40 Competent court**

Not applicable, as it is referred to on "offer to the public" and in this white-paper, the admission to trading is sought.

## **Part F – Information about the crypto-assets**

### **F.1 Crypto-asset type**

The crypto-asset described in the white paper is classified as a crypto-asset under the Markets in Crypto-Assets Regulation (MiCAR) but does not qualify as an electronic money token (EMT) or an asset-referenced token (ART). It is a digital representation of value that can be stored and transferred using distributed ledger technology (DLT) or similar technology, without embodying or conferring any rights to its holder.

The asset does not aim to maintain a stable value by referencing an official currency, a basket of assets, or any other underlying rights. Instead, its valuation is entirely market-driven, based on supply and demand dynamics, and not supported by a stabilization mechanism. It is neither pegged to any fiat currency nor backed by any external assets, distinguishing it clearly from EMTs and ARTs.

Furthermore, the crypto-asset is not categorized as a financial instrument, deposit, insurance product, pension product, or any other regulated financial product under EU law. It does not grant financial rights, voting rights, or any contractual claims to its holders, ensuring that it remains outside the scope of regulatory frameworks applicable to traditional financial instruments.

## **F.2 Crypto-asset functionality**

There is none, other than the ability to hold and transfer the crypto-asset.

## **F.3 Planned application of functionalities**

All functionalities referred to in F.2 have already been applied. There were no statements made to further functionalities for the token as of 2025-06-09.

**A description of the characteristics of the crypto asset, including the data necessary for classification of the crypto-asset white paper in the register referred to in Article 109 of Regulation (EU) 2023/1114, as specified in accordance with paragraph 8 of that Article**

## **F.4 Type of crypto-asset white paper**

The white paper type is "other crypto-assets" (i. e. "OTHR").

## **F.5 The type of submission**

The white paper submission type is "NEWT", which stands for new token.

## **F.6 Crypto-asset characteristics**

### 1. Decentralization

- No central authority controls the crypto-asset; it operates via a peer-to-peer network maintained by miners and nodes.

- Governance occurs through community consensus and open-source development processes.

## 2. Fixed Supply

- The total supply is capped at approximately 210.7 million ETC.
- New ETC is issued through block rewards.

## 3. Security & Immutability

- Transactions are recorded on a public blockchain secured by Proof of Work (PoW).
- Once confirmed, data on the chain cannot be altered or censored.

## 4. Pseudonymity

- Transactions are linked to token/wallet addresses, not personal identities.

## 5. Borderless & Permissionless

- Anyone with an internet connection can send and receive the crypto-asset without intermediaries.

## 6. Open Source & Programmable

- Ethereum Classic maintains full support for the Ethereum Virtual Machine (EVM).
- Developers can deploy and interact with programmable smart contracts using open-source tooling.

### **F.7 Commercial name or trading name**

See F.13.

### **F.8 Website of the issuer**

No single issuer can be identified. Information from supporting groups can be found here: <https://ethereumclassic.org/> or <https://etccooperative.org/>.

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

2025-07-14

**F.10 Publication date**

2025-06-16

**F.11 Any other services provided by the issuer**

It is not possible to exclude a possibility that the issuer of the token provides or will provide other services not covered by Regulation (EU) 2023/1114 (i.e. MiCAR).

**F.12 Language or languages of the crypto-asset white paper**

EN

**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**

GWQWXV7J

**F.14 Functionally fungible group digital token identifier, where available**

DGMQMFZD4

**F.15 Voluntary data flag**

Mandatory

**F.16 Personal data flag**

The white paper does contain personal data.

**F.17 LEI eligibility**

Unknow, as there is no central issuer.

**F.18 Home Member State**

Germany

**F.19 Host Member States**

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

## **Part G – Information on the rights and obligations attached to the crypto-assets**

### **G.1 Purchaser rights and obligations**

There are no rights or obligations attached for/of the purchaser.

### **G.2 Exercise of rights and obligations**

There are no rights or obligations attached for/of the purchaser.

### **G.3 Conditions for modifications of rights and obligations**

As the token grants neither rights nor obligations, there are no conditions under which the rights and obligations may be modified applicable.

### **G.4 Future public offers**

Information on the future offers to the public of crypto-assets were not available at the time of writing this white paper (2025-06-10).

### **G.5 Issuer retained crypto-assets**

Not applicable

### **G.6 Utility token classification**

No

### **G.7 Key features of goods/services of utility tokens**

As the crypto-asset grants no access to neither goods nor services this information is not applicable.

### **G.8 Utility tokens redemption**

Not applicable.

### **G.9 Non-trading request**

The admission to trading is sought.

**G.10 Crypto-assets purchase or sale modalities**

Not applicable, as the admission to trading of the tokens is sought.

**G.11 Crypto-assets transfer restrictions**

The crypto-assets as such do not have any transfer restrictions and are generally freely transferable. The Crypto Asset Service Providers can impose their own restrictions in agreements they enter with their clients. The Crypto Asset Service Providers may impose restrictions to buyers and sellers in accordance with applicable laws and internal policies and terms.

**G.12 Supply adjustment protocols**

The total supply of the crypto-asset is fixed at approximately 210.7 million ETC, as defined by the ECIP-1017 monetary policy implemented in the "Gotham" upgrade (2017). The issuance of new tokens follows a predefined deflationary schedule, with block rewards reduced by 20% every 5 million blocks.

**G.13 Supply adjustment mechanisms**

See G.12.

**G.14 Token value protection schemes**

No, the token does not have value protection schemes.

**G.15 Token value protection schemes description**

Not applicable.

**G.16 Compensation schemes**

No, the token does not have compensation schemes.

**G.17 Compensation schemes description**

Not applicable.

### **G.18 Applicable law**

Applicable law likely depends on the location of any particular transaction with the token.

### **G.19 Competent court**

Competent court likely depends on the location of any particular transaction with the token.

## **Part H – information on the underlying technology**

### **H.1 Distributed ledger technology (DTL)**

See F.13.

### **H.2 Protocols and technical standards**

The crypto-asset operates on a defined set of protocols and technical standards designed to ensure decentralization, security, and compatibility with Ethereum-based infrastructure.

#### 1. Network Protocols

- Ethereum Classic uses a peer-to-peer (P2P) protocol with nodes communicating over DevP2P.
- The network relies on Proof-of-Work (PoW) consensus using the Ethash algorithm.
- Smart contracts are executed via the Ethereum Virtual Machine (EVM).

#### 2. Transaction and Address Standards

- Address format: 20-byte Keccak-256 hashes of public keys.
- ETC supports legacy Ethereum transaction types (pre-EIP-1559); fee market changes like EIP-1559 are not implemented.

#### 3. Blockchain Data Structure & Block Standards

- Blocks include a header (parent hash, state root, timestamp, nonce) and a list of transactions.
- State is maintained using Merkle Patricia Trees.
- Block time: ~13–14 seconds; gas limit defines block capacity.

#### 4. Upgrade & Improvement Standards

- Network changes follow Ethereum Classic Improvement Proposals (ECIPs), adopted via informal community consensus.

### **H.3 Technology used**

Ethereum Classic operates as a decentralized ledger that records all token transactions on a public blockchain, with the intention of preserving an immutable and transparent record of transfers and ownership. To maintain control over their ETC holdings, users must securely manage their private keys and recovery phrases, as access to funds is solely dependent on cryptographic key ownership.

The crypto-asset employs elliptic curve cryptography using the secp256k1 curve for digital signatures and key generation, ensuring transaction authenticity and non-repudiation. Ethereum Classic uses the Keccak-256 hashing algorithm.

### **H.4 Consensus mechanism**

Ethereum Classic operates on a Proof of Work (PoW) consensus mechanism with the Etchash algorithm, which is a modified version of Ethash. This PoW model requires computational work from miners to validate transactions and secure the network. Core Components:

Miners use computational resources to perform the work necessary to add blocks to the blockchain, ensuring network security and resistance to tampering.

Code is Law Philosophy Immutable Ledger: Following the 2016 DAO hack, Ethereum Classic upheld the Code is Law principle by retaining the unaltered blockchain. This commitment to immutability sets Ethereum Classic apart, preserving its original ledger without reverting transactions.

## **H.5 Incentive mechanisms and applicable fees**

Ethereum Classic's incentive model combines block rewards and transaction fees, encouraging miner participation and network security.

Incentive Mechanisms:

### 1. Block Rewards:

- Deflationary Supply Model: Miners receive ETC through block rewards, which decrease over time, similar to Bitcoin's model. This deflationary design supports ETC's value retention and incentivizes continued mining efforts.

### 2. Transaction Fees:

- User-Paid Fees: Users pay fees in ETC for sending transactions, interacting with smart contracts, and utilizing dApps. These fees provide miners with additional income and help maintain network security.

Applicable Fees:

Ethereum Classic's fee structure involves user-paid transaction fees to support network operations and discourage spam transactions.

### 1. Transaction Fees:

- User-Paid Fees: Every transaction on Ethereum Classic incurs a fee in ETC, based on the computational effort required. These fees ensure that resources are efficiently used and contribute to miner revenue.

- Dynamic Demand-Based Fees: Fees vary according to transaction complexity and network demand, helping maintain transaction efficiency and preventing congestion.

### 2. Mining Rewards: Block Rewards Reduction:

Block rewards, which are scheduled to reduce over time, provide a primary income source for miners. This model aims to balance network security while managing ETC's supply.

## **H.6 Use of distributed ledger technology**

No, DLT not operated by the issuer or a third-party acting on the issuer's behalf.

## **H.7 DLT functionality description**

Not applicable.

## **H.8 Audit**

As we are understanding the question relating to "technology" to be interpreted in a broad sense, the answer answer to whether an audit of "the technology used" was conducted is "no, we can not guarantee, that all parts of the technology used have been audited". This is due to the fact this report focusses on risk, and we can not guarantee that each part of the technology used was audited.

## **H.9 Audit outcome**

Not applicable.

# **Part I – Information on risks**

## **I.1 Offer-related risks**

### 1. Regulatory and Compliance

This white paper has been prepared with utmost caution; however, uncertainties in the regulatory requirements and future changes in regulatory frameworks could potentially impact the token's legal status and its tradability. There is also a high probability that other laws will come into force, changing the rules for the trading of the token. Therefore, such developments shall be monitored and acted upon accordingly.

### 2. Operational and Technical

Blockchain Dependency: The token is entirely dependent on the blockchain the crypto-asset is issued upon (as of 2025-06-10). Any issues, such as downtime, congestion, or security vulnerabilities within the blockchain, could adversely affect the token's functionality.

Smart Contract Risks: Smart contracts governing the token may contain hidden vulnerabilities or bugs that could disrupt the token offering or distribution processes.

Connection Dependency: As the trading of the token also involves other trading venues, technical risks such as downtime of the connection or faulty code are also possible.

Human errors: Due to the irrevocability of blockchain-transactions, approving wrong transactions or using incorrect networks/addresses will most likely result in funds not being accessible anymore.

Custodial risk: When admitting the token to trading, the risk of losing clients assets due to hacks or other malicious acts is given. This is due to the fact the token is held in custodial wallets for the customers.

### 3. Market and Liquidity

Volatility: The token will most likely be subject to high volatility and market speculation. Price fluctuations could be significant, posing a risk of substantial losses to holders.

Liquidity Risk: Liquidity is contingent upon trading activity levels on decentralized exchanges (DEXs) and potentially on centralized exchanges (CEXs), should they be involved. Low trading volumes may restrict the buying and selling capabilities of the tokens.

### 4. Counterparty

As the admission to trading involves the connection to other trading venues, counterparty risks arise. These include, but are not limited to, the following risks:

General Trading Platform Risk: The risk of trading platforms not operating to the highest standards is given. Examples like FTX show that especially in nascent industries, compliance and oversight-frameworks might not be fully established and/or enforced.

Listing or Delisting Risks: The listing or delisting of the token is subject to the trading partners internal processes. Delisting of the token at the connected trading partners could harm or completely halt the ability to trade the token.

### 5. Liquidity

Liquidity of the token can vary, especially when trading activity is limited. This could result in high slippage when trading a token.

#### 6. Failure of one or more Counterparties

Another risk stems from the internal operational processes of the counterparties used. As there is no specific oversight other than the typical due diligence check, it cannot be guaranteed that all counterparties adhere to the best market standards.

Bankruptcy Risk: Counterparties could go bankrupt, possibly resulting in a total loss for the clients assets hold at that counterparty.

#### 7. Spillover effects

In general, when evaluating crypto assets, the total number of tokens issued across different networks must always be taken into account, as spillover effects can be adverse for investors.

### **I.2 Issuer-related risks**

#### 1. Insolvency

As with every other commercial endeavor, the risk of insolvency of the issuer is given. This could be caused by but is not limited to lack of interest from the public, lack of funding, incapacitation of key developers and project members, force majeure (including pandemics and wars) or lack of commercial success or prospects.

#### 2. Counterparty

In order to operate, the issuer has most likely engaged in different business relationships with one or more third parties on which it strongly depends on. Loss or changes in the leadership or key partners of the issuer and/or the respective counterparties can lead to disruptions, loss of trust, or project failure. This could result in a total loss of economic value for the crypto-asset holders.

#### 3. Legal and Regulatory Compliance

Cryptocurrencies and blockchain-based technologies are subject to evolving regulatory landscapes worldwide. Regulations vary across jurisdictions and may be subject to

significant changes. Non-compliance can result in investigations, enforcement actions, penalties, fines, sanctions, or the prohibition of the trading of the crypto-asset impacting its viability and market acceptance. This could also result in the issuer to be subject to private litigation. The beforementioned would most likely also lead to changes with respect to trading of the crypto-asset that may negatively impact the value, legality, or functionality of the crypto-asset.

#### 4. Operational

Failure to develop or maintain effective internal control, or any difficulties encountered in the implementation of such controls, or their improvement could harm the issuer's business, causing disruptions, financial losses, or reputational damage.

#### 5. Industry

The issuer is and will be subject to all of the risks and uncertainties associated with a memecoin-project, where the token issued has zero intrinsic value. History has shown that most of this projects resulted in financial losses for the investors and were only set-up to enrich a few insiders with the money from retail investors.

#### 6. Reputational

The issuer faces the risk of negative publicity, whether due to, without limitation, operational failures, security breaches, or association with illicit activities, which can damage the issuer reputation and, by extension, the value and acceptance of the crypto-asset.

#### 7. Competition

There are numerous other crypto-asset projects in the same realm, which could have an effect on the crypto-asset in question.

#### 8. Unanticipated Risk

In addition to the risks included in this section, there might be other risks that cannot be foreseen. Additional risks may also materialize as unanticipated variations or combinations of the risks discussed.

### **I.3 Crypto-assets-related risks**

#### 1. Valuation

As the crypto-asset does not have any intrinsic value, and grants neither rights nor obligations, the only mechanism to determine the price is supply and demand. Historically, most crypto-assets have dramatically lost value and were not a beneficial investment for the investors. Therefore, investing in these crypto-assets poses a high risk, and the loss of funds can occur.

#### 2. Market Volatility

Crypto-asset prices are highly susceptible to dramatic fluctuations influenced by various factors, including market sentiment, regulatory changes, technological advancements, and macroeconomic conditions. These fluctuations can result in significant financial losses within short periods, making the market highly unpredictable and challenging for investors. This is especially true for crypto-assets without any intrinsic value, and investors should be prepared to lose the complete amount of money invested in the respective crypto-assets.

#### 3. Liquidity Challenges

Some crypto-assets suffer from limited liquidity, which can present difficulties when executing large trades without significantly impacting market prices. This lack of liquidity can lead to substantial financial losses, particularly during periods of rapid market movements, when selling assets may become challenging or require accepting unfavorable prices.

#### 4. Asset Security

Crypto-assets face unique security threats, including the risk of theft from exchanges or digital wallets, loss of private keys, and potential failures of custodial services. Since crypto transactions are generally irreversible, a security breach or mismanagement can result in the permanent loss of assets, emphasizing the importance of strong security measures and practices.

#### 5. Scams

The irrevocability of transactions executed using blockchain infrastructure, as well as the pseudonymous nature of blockchain ecosystems, attracts scammers. Therefore, investors in crypto-assets must proceed with a high degree of caution when investing in if they invest in crypto-assets. Typical scams include – but are not limited to – the creation of fake crypto-assets with the same name, phishing on social networks or by email, fake giveaways/airdrops, identity theft, among others.

## 6. Blockchain Dependency

Any issues with the blockchain used, such as network downtime, congestion, or security vulnerabilities, could disrupt the transfer, trading, or functionality of the crypto-asset.

## 7. Privacy Concerns

All transactions on the blockchain are permanently recorded and publicly accessible, which can potentially expose user activities. Although addresses are pseudonymous, the transparent and immutable nature of blockchain allows for advanced forensic analysis and intelligence gathering. This level of transparency can make it possible to link blockchain addresses to real-world identities over time, compromising user privacy.

## 8. Regulatory Uncertainty

The regulatory environment surrounding crypto-assets is constantly evolving, which can directly impact their usage, valuation, and legal status. Changes in regulatory frameworks may introduce new requirements related to consumer protection, taxation, and anti-money laundering compliance, creating uncertainty and potential challenges for investors and businesses operating in the crypto space. Although the crypto-asset do not create or confer any contractual or other obligations on any party, certain regulators may nevertheless qualify the crypto-asset as a security or other financial instrument under their applicable law, which in turn would have drastic consequences for the crypto-asset, including the potential loss of the invested capital in the asset. Furthermore, this could lead to the sellers and its affiliates, directors, and officers being obliged to pay fines, including federal civil and criminal penalties, or make the crypto-asset illegal or impossible to use, buy, or sell in certain jurisdictions. On top of that, regulators could take action against the issuer as well as the trading platforms if the the

regulators view the token as an unregistered offering of securities or the operations otherwise as a violation of existing law. Any of these outcomes would negatively affect the value and/or functionality of the cryptot-asset and/or could cause a complete loss of funds of the invested money in the crypto-asset for the investor.

#### 9. Counterparty risk

Engaging in agreements or storing crypto-assets on exchanges introduces counterparty risks, including the failure of the other party to fulfill their obligations. Investors may face potential losses due to factors such as insolvency, regulatory non-compliance, or fraudulent activities by counterparties, highlighting the need for careful due diligence when engaging with third parties.

#### 10. Reputational concerns

Crypto-assets are often subject to reputational risks stemming from associations with illegal activities, high-profile security breaches, and technological failures. Such incidents can undermine trust in the broader ecosystem, negatively affecting investor confidence and market value, thereby hindering widespread adoption and acceptance.

#### 11. Technological Innovation

New technologies or platforms could render Ethereum Classics's design less competitive or even break fundamental parts (i.e., quantum computing might break cryptographic algorithms used to secure the network), impacting adoption and value. Participants should approach the crypto-asset with a clear understanding of its speculative and volatile nature and be prepared to accept these risks and bear potential losses, which could include the complete loss of the asset's value.

#### 12. Community and Narrative

As the crypto-asset has no intrinsic value, all trading activity is based on the intended market value is heavily dependent on its community and the popularity of the memecoin narrative. Declining interest or negative sentiment could significantly impact the token's value.

#### 13. Interest Rate Change

Historically, changes in interest, foreign exchange rates, and increases in volatility have increased credit and market risks and may also affect the value of the crypto-asset. Although historic data does not predict the future, potential investors should be aware that general movements in local and other factors may affect the market, and this could also affect market sentiment and, therefore most likely also the price of the crypto-asset.

#### 14. Taxation

The taxation regime that applies to the trading of the crypto-asset by individual holders or legal entities will depend on the holder's jurisdiction. It is the holder's sole responsibility to comply with all applicable tax laws, including, but not limited to, the reporting and payment of income tax, wealth tax, or similar taxes arising in connection with the appreciation and depreciation of the crypto-asset.

#### 15. Anti-Money Laundering/Counter-Terrorism Financing

It cannot be ruled out that crypto-asset wallet addresses interacting with the crypto-asset have been, or will be used for money laundering or terrorist financing purposes, or are identified with a person known to have committed such offenses.

#### 16. Market Abuse

It is noteworthy that crypto-assets are potentially prone to increased market abuse risks, as the underlying infrastructure could be used to exploit arbitrage opportunities through schemes such as front-running, spoofing, pump-and-dump, and fraud across different systems, platforms, or geographic locations. This is especially true for crypto-assets with a low market capitalization and few trading venues, and potential investors should be aware that this could lead to a total loss of the funds invested in the crypto-asset.

#### 17. Timeline and Milestones

Critical project milestones could be delayed by technical, operational, or market challenges.

#### **I.4 Project implementation-related risks**

As this white paper relates to the "Admission to trading" of the crypto-asset, the implementation risk is referring to the risks on the Crypto Asset Service Providers side. These can be, but are not limited to, typical project management risks, such as key-personal-risks, timeline-risks, and technical implementation-risks.

#### **I.5 Technology-related risks**

As this white paper relates to the "Admission to trading" of the crypto-asset, the technology-related risks mainly lie in the settling on the Ethereum Classic Network.

##### 1. Blockchain Dependency Risks

Ethereum Classic Network Downtime: Potential outages or congestion on the Ethereum Classic blockchain could interrupt on-chain token transfers, trading, and other functions.

##### 2. Wallet and Storage Risks

Private Key Management: Token holders must securely manage their private keys and recovery phrases to prevent permanent loss of access to their tokens, which includes Trading-Venues, who are a prominent target for dedicated hacks.

##### 3. Network Security Risks

Attack Risks: The Ethereum Classic Blockchain may face threats such as denial-of-service (DoS) attacks or exploits targeting its consensus mechanism, which could compromise network integrity.

4. Evolving Technology Risks: Technological Obsolescence: The fast pace of innovation in blockchain technology may make Ethereum Classic appear less competitive or become outdated, potentially impacting the usability or adoption of the token.

#### **I.6 Mitigation measures**

None

## **Part J – Information on the sustainability indicators in relation to adverse impact on the climate and other environment-related adverse impacts**

### **J.1 Adverse impacts on climate and other environment-related adverse impacts**

#### **S.1 Name**

Crypto Risk Metrics GmbH

#### **S.2 Relevant legal entity identifier**

39120077M9TG001FE242

#### **S.3 Name of the cryptoasset**

Ethereum Classic Ether

#### **S.4 Consensus Mechanism**

Ethereum Classic operates on a Proof of Work (PoW) consensus mechanism with the Etchash algorithm, which is a modified version of Ethash. This PoW model requires computational work from miners to validate transactions and secure the network. Core Components:

Miners use computational resources to perform the work necessary to add blocks to the blockchain, ensuring network security and resistance to tampering.

Code is Law Philosophy Immutable Ledger: Following the 2016 DAO hack, Ethereum Classic upheld the Code is Law principle by retaining the unaltered blockchain. This commitment to immutability sets Ethereum Classic apart, preserving its original ledger without reverting transactions.

#### **S.5 Incentive Mechanisms and Applicable Fees**

Ethereum Classic's incentive model combines block rewards and transaction fees, encouraging miner participation and network security.

Incentive Mechanisms:

1. Block Rewards:

- Deflationary Supply Model: Miners receive ETC through block rewards, which decrease over time, similar to Bitcoin's model. This deflationary design supports ETC's value retention and incentivizes continued mining efforts.

## 2. Transaction Fees:

- User-Paid Fees: Users pay fees in ETC for sending transactions, interacting with smart contracts, and utilizing dApps. These fees provide miners with additional income and help maintain network security.

### Applicable Fees:

Ethereum Classic's fee structure involves user-paid transaction fees to support network operations and discourage spam transactions.

## 1. Transaction Fees:

- User-Paid Fees: Every transaction on Ethereum Classic incurs a fee in ETC, based on the computational effort required. These fees ensure that resources are efficiently used and contribute to miner revenue.

- Dynamic Demand-Based Fees: Fees vary according to transaction complexity and network demand, helping maintain transaction efficiency and preventing congestion.

## 2. Mining Rewards: Block Rewards Reduction:

Block rewards, which are scheduled to reduce over time, provide a primary income source for miners. This model aims to balance network security while managing ETC's supply.

### **S.6 Beginning of the period to which the disclosure relates**

2024-06-12

### **S.7 End of the period to which the disclosure relates**

2025-06-12

### **S.8 Energy consumption**

898465632.17933 kWh/a

### **S.9 Energy consumption sources and methodologies**

For the calculation of energy consumptions, the so called "top-down" approach is being used, within which an economic calculation of the miners is assumed. Miners are persons or devices that actively participate in the proof-of-work consensus mechanism. The miners are considered to be the central factor for the energy consumption of the network. Hardware is pre-selected based on the consensus mechanism's hash algorithm: Etchash. A current profitability threshold is determined on the basis of the revenue and cost structure for mining operations. Only Hardware above the profitability threshold is considered for the network. The energy consumption of the network can be determined by taking into account the distribution for the hardware, the efficiency levels for operating the hardware and on-chain information regarding the miners' revenue opportunities. If significant use of merge mining is known, this is taken into account. When calculating the energy consumption, we used - if available - the Functionally Fungible Group Digital Token Identifier (FFG DTI) to determine all implementations of the asset of question in scope and we update the mappings regularly, based on data of the Digital Token Identifier Foundation. The information regarding the hardware used and the number of participants in the network is based on assumptions that are verified with best effort using empirical data. In general, participants are assumed to be largely economically rational. As a precautionary principle, we make assumptions on the conservative side when in doubt, i.e. making higher estimates for the adverse impacts.

### **S.10 Renewable energy consumption**

24.1347029759 %

### **S.11 Energy intensity**

0.05069 kWh

### **S.12 Scope 1 DLT GHG emissions – Controlled**

0.00000 tCO<sub>2</sub>e/a

### **S.13 Scope 2 DLT GHG emissions – Purchased**

370164.30170 tCO<sub>2</sub>e/a

### **S.14 GHG intensity**

0.02088 kgCO<sub>2</sub>e

### **S.15 Key energy sources and methodologies**

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 Our World in Data, see citation. The intensity is calculated as the marginal energy cost wrt. one more transaction.

Ember (2025); Energy Institute - Statistical Review of World Energy (2024) – with major processing by Our World in Data. “Share of electricity generated by renewables – Ember and Energy Institute” [dataset]. Ember, “Yearly Electricity Data Europe”; Ember, “Yearly Electricity Data”; Energy Institute, “Statistical Review of World Energy” [original data]. Retrieved from <https://ourworldindata.org/grapher/share-electricity-renewables>.

### **S.16 Key GHG sources and methodologies**

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 Our World in Data, see citation. The intensity is calculated as the marginal emission wrt. one more transaction.

Ember (2025); Energy Institute - Statistical Review of World Energy (2024) – with major processing by Our World in Data. “Carbon intensity of electricity generation – Ember and Energy Institute” [dataset]. Ember, “Yearly Electricity Data Europe”; Ember, “Yearly

Electricity Data"; Energy Institute, "Statistical Review of World Energy" [original data]. Retrieved from [https://ourworldindata.org/grapher/carbon-intensity electricity](https://ourworldindata.org/grapher/carbon-intensity-electricity) Licenced under CC BY 4.0

