

MiCA White Paper

PEPE (PEPE)

Version 1.0
July 2025

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

Purpose: seeking admission to trading in 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 ECONOMIC AREA. THE PERSON SEEKING ADMISSION TO TRADING IS SOLELY RESPONSIBLE FOR THE CONTENT OF THIS CRYPTO-ASSET WHITE PAPER ACCORDING TO THE EUROPEAN ECONOMIC AREA'S MARKETS IN CRYPTO-ASSET REGULATION (MICA).

LCX is voluntarily filing a MiCA-compliant whitepaper for PEPE as PEPE is classified as “**Other Crypto-Assets**” (**OTHR**) under MiCA. Unlike Asset-Referenced Tokens (ARTs), Electronic Money Tokens (EMTs), or Utility Tokens, PEPE does not legally require a MiCA whitepaper. However, MiCA permits service providers to publish a whitepaper voluntarily to enhance transparency, regulatory clarity, and investor confidence. As a purely community-driven *memecoin*, PEPE has no inherent utility or entitlement features – its value is driven by internet meme culture and speculative market demand. This whitepaper provides a comprehensive regulatory disclosure, ensuring market participants have clear insights into PEPE’s characteristics, technology, risks, and the framework under which LCX facilitates PEPE-related services in compliance with MiCA standards.

This document provides essential information about **PEPE**’s characteristics, risks, and the framework under which LCX facilitates PEPE-related services in compliance.

This white paper has been prepared in accordance with the requirements set forth in Commission Implementing Regulation (EU) 2024/2984, ensuring that all relevant reporting formats, content specifications, and machine-readable structures outlined in Annex I of this regulation have been fully mapped and implemented, particularly reflected through the Recitals, to enable proper notification under the Markets in Crypto-Assets Regulation (MiCAR).

Copyright:

This White Paper is under **copyright** of LCX AG Liechtenstein and may not be used, copied, or published by any third party without explicit written permission from LCX AG.

00 TABLE OF CONTENT

COMPLIANCE STATEMENTS	6
SUMMARY	7
A. PART A - INFORMATION ABOUT THE OFFEROR OR THE PERSON SEEKING ADMISSION TO TRADING	9
A.1 Name	9
A.2 Legal Form	9
A.3 Registered Address	9
A.4 Head Office	9
A.5 Registration Date	9
A.6 Legal Entity Identifier	9
A.7 Another Identifier Required Pursuant to Applicable National Law	9
A.8 Contact Telephone Number	9
A.9 E-mail Address	9
A.10 Response Time (Days)	9
A.11 Parent Company	9
A.12 Members of the Management Body	9
A.13 Business Activity	9
A.14 Parent Company Business Activity	10
A.15 Newly Established	10
A.16 Financial Condition for the past three Years	10
A.17 Financial Condition Since Registration	10
B. PART B - INFORMATION ABOUT THE ISSUER, IF DIFFERENT FROM THE OFFEROR OR PERSON SEEKING ADMISSION TO TRADING	11
B.1 Issuer different from offeror or person seeking admission to trading	11
B.2 Name	11
B.3 Legal Form	11
B.4 Registered Address	11
B.5 Head Office	11
B.6 Registration Date	11
B.7 Legal Entity Identifier	11
B.8 Another Identifier Required Pursuant to Applicable National Law	11
B.9 Parent Company	11
B.10 Members of the Management Body	11
B.11 Business Activity	11
B.12 Parent Company Business Activity	11
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	12
C.1 Name	12
C.2 Legal Form	12
C.3 Registered Address	12
C.4 Head Office	12
C.5 Registration Date	12

C.6 Legal Entity Identifier	12
C.7 Another Identifier Required Pursuant to Applicable National Law	12
C.8 Parent Company	12
C.9 Reason for Crypto-Asset White Paper Preparation	12
C.10 Members of the Management Body	12
C.11 Operator Business Activity	12
C.12 Parent Company Business Activity	13
C.13 Other persons drawing up the white paper under Article 6 (1) second subparagraph MiCA	13
C.14 Reason for drawing up the white paper under Article 6 (1) second subparagraph MiCA	13
D. PART D - INFORMATION ABOUT THE CRYPTO-ASSET PROJECT	14
D.1 Crypto-Asset Project Name	14
D.2 Crypto-Assets Name	14
D.3 Abbreviation	14
D.4 Crypto-Asset Project Description	14
D.5 Details of all persons involved in the implementation of the crypto-asset project	14
D.6 Utility Token Classification	15
D.7 Key Features of Goods/Services for Utility Token Projects	15
D.8 Plans for the Token	15
D.9 Resource Allocation	15
D.10 Planned Use of Collected Funds or Crypto-Assets	15
E. PART E - INFORMATION ABOUT THE OFFER TO THE PUBLIC OF CRYPTO-ASSETS OR THEIR ADMISSION TO TRADING	16
E.1 Public Offering or Admission to Trading	16
E.2 Reasons for Public Offer or Admission to Trading	16
E.3 Fundraising Target	16
E.4 Minimum Subscription Goals	16
E.5 Maximum Subscription Goal	16
E.6 Oversubscription Acceptance	16
E.7 Oversubscription Allocation	16
E.8 Issue Price	16
E.9 Official Currency or Any Other Crypto-Assets Determining the Issue Price	16
E.10 Subscription Fee	16
E.11 Offer Price Determination Method	16
E.12 Total Number of Offered/Traded Crypto-Asset	16
E.13 Targeted Holders	17
E.14 Holder Restrictions	17
E.15 Reimbursement Notice	17
E.16 Refund Mechanism	17
E.17 Refund Timeline	17
E.18 Offer Phases	17
E.19 Early Purchase Discount	17
E.20 Time-Limited Offer	17
E.21 Subscription Period Beginning	17
E.22 Subscription Period End	17
E.23 Safeguarding Arrangements for Offered Funds/Crypto-Assets	17
E.24 Payment Methods for Crypto-Asset Purchase	17
E.25 Value Transfer Methods for Reimbursement	17

E.26 Right of Withdrawal	17
E.27 Transfer of Purchased Crypto-Assets	17
E.28 Transfer Time Schedule	17
E.29 Purchaser's Technical Requirements	18
E.30 Crypto-asset service provider (CASP) name	18
E.31 CASP identifier	18
E.32 Placement Form	18
E.33 Trading Platforms name	18
E.34 Trading Platforms Market Identifier Code (MIC)	18
E.35 Trading Platforms Access	18
E.36 Involved Costs	18
E.37 Offer Expenses	18
E.38 Conflicts of Interest	18
E.39 Applicable Law	18
E.40 Competent Court	18
F. PART F - INFORMATION ABOUT THE CRYPTO-ASSETS	19
F.1 Crypto-Asset Type	19
F.2 Crypto-Asset Functionality	19
F.3 Planned Application of Functionalities	19
F.4 Type of white paper	19
F.5 The type of submission	19
F.6 Crypto-Asset Characteristics	19
F.7 Commercial name or trading name	20
F.8 Website of the issuer	20
F.9 Starting date of offer to the public or admission to trading	20
F.10 Publication date	20
F.11 Any other services provided by the issuer	20
F.12 Language or languages of the white paper	20
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	20
F.14 Functionally Fungible Group Digital Token Identifier, where available	20
F.15 Voluntary data flag	20
F.16 Personal data flag	20
F.17 LEI eligibility	20
F.18 Home Member State	20
F.19 Host Member States	20
G. PART G - INFORMATION ON THE RIGHTS AND OBLIGATIONS ATTACHED TO THE CRYPTO-ASSETS	21
G.1 Purchaser Rights and Obligations	21
G.2 Exercise of Rights and Obligation	21
G.3 Conditions for Modifications of Rights and Obligations	21
G.4 Future Public Offers	21
G.5 Issuer Retained Crypto-Assets	21
G.6 Utility Token Classification	21
G.7 Key Features of Goods/Services of Utility Tokens	21
G.8 Utility Tokens Redemption	21
G.9 Non-Trading Request	21

G.10 Crypto-Assets Purchase or Sale Modalities	21
G.11 Crypto-Assets Transfer Restrictions	21
G.12 Supply Adjustment Protocols	21
G.13 Supply Adjustment Mechanisms	22
G.14 Token Value Protection Schemes	22
G.15 Token Value Protection Schemes Description	22
G.16 Compensation Schemes	22
G.17 Compensation Schemes Description	22
G.18 Applicable Law	22
G.19 Competent Court	22
H. PART H – INFORMATION ON THE UNDERLYING TECHNOLOGY	22
H.1 Distributed ledger technology	22
H.2 Protocols and Technical Standards	23
H.3 Technology Used	24
H.4 Consensus Mechanism	26
H.5 Incentive Mechanisms and Applicable Fees	27
H.6 Use of Distributed Ledger Technology	27
H.7 DLT Functionality Description	27
H.8 Audit	28
H.9 Audit Outcome	28
I. PART I – INFORMATION ON RISKS	29
I.1 Offer-Related Risks	29
I.2 Issuer-Related Risks	29
I.3 Crypto-Assets-Related Risks	29
I.4 Project Implementation-Related Risks	30
I.5 Technology-Related Risks	31
I.6 Mitigation Measures	32
J. PART J - INFORMATION ON THE SUSTAINABILITY INDICATORS IN RELATION TO ADVERSE IMPACT ON THE CLIMATE AND OTHER ENVIRONMENT-RELATED ADVERSE IMPACTS	33
J.1 Mandatory information on principal adverse impacts on the climate and other environment-related adverse impacts of the consensus mechanism	33
J.2 Supplementary information on principal adverse impacts on the climate and other environment-related adverse impacts of the consensus mechanism	36

01 DATE OF NOTIFICATION

2025-09-01

COMPLIANCE STATEMENTS

- 02 This crypto-asset white paper has not been approved by any competent authority in any Member State of the European Economic Area. 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 Not applicable
- 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

PEPE is a crypto-asset issued on the Ethereum blockchain, functioning as a meme-based token within the decentralized finance (DeFi) ecosystem. As an ERC-20 token, PEPE is primarily used for peer-to-peer transfers, trading on decentralized and centralized exchanges, and participation in community-driven initiatives or integrations. It does not inherently provide access to any underlying protocol service, nor is it required to utilize any specific decentralized application (dApp).

Holders of PEPE do not gain any ownership rights, claims to profits, dividends, or decision-making authority in any legal entity. The token carries no inherent staking rights, governance functions, or entitlements to yields or returns. It derives value solely from market perception, community engagement, and its role in speculative trading environments.

While PEPE may be used in limited community-led or promotional contexts, it does not qualify as a “Utility Token” as defined under MiCAR. It is not issued by a service provider for the exclusive purpose of accessing a digital product or service, nor does it serve as a medium to consume a service within a defined infrastructure. Therefore, PEPE is more appropriately classified as an “Other crypto-asset” under MiCAR, reflecting its general-purpose, non-utility nature within the crypto market.

09 Not applicable

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

PEPE is a decentralized meme-based crypto-asset deployed on the Ethereum blockchain, with no central issuer conducting a public offering. The token was launched in 2023 as a community-driven project and has since become widely traded and held globally. This white paper is provided voluntarily in alignment with the Markets in Crypto-Assets Regulation (MiCA) to promote transparency regarding PEPE’s admission to trading on regulated platforms.

There is no ongoing or planned issuance, public sale, or capital raise associated with PEPE in connection with this document. The token is already in free circulation, and this disclosure serves exclusively to support its compliant listing and trading under the MiCA framework.

LCX AG, as a Crypto-Asset Service Provider, facilitates the listing and trading of PEPE on its platform in a compliant manner. LCX’s regulated exchange will support PEPE trading (e.g., PEPE/EUR pair), providing a secure and transparent marketplace. Users must have an LCX account and complete KYC/AML verification to trade PEPE on LCX, in line with regulatory requirements.

<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 is not yet formally supervised under MiCA until the license is granted by the competent authority. 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 Depositary – 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

There is no formal legal issuer entity for PEPE. The token was originally created by anonymous blockchain developers. For the purposes of disclosure, the “PEPE project” can be associated with its community and the pseudonymous developers who deployed the token smart contract (collectively referred to as the “PEPE creators”).

B.3 Legal Form

Not applicable. PEPE was not issued by a registered legal entity such as a corporation or foundation.

B.4 Registered Address

Not applicable

B.5 Head Office

Not applicable

B.6 Registration Date

Not applicable

B.7 Legal Entity Identifier

Not applicable. (No LEI – the issuer is not a legal entity.)

B.8 Another Identifier Required Pursuant to Applicable National Law

Not applicable. (No LEI – the issuer is not a legal entity.)

B.9 Parent Company

Not applicable

B.10 Members of the Management Body

Not applicable. There is no formal management body. The PEPE project does not have officers or directors. It is driven by community volunteers and holders.

B.11 Business Activity

Not applicable

B.12 Parent Company Business Activity

Not applicable

¹

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-compliant white paper for PEPE (PEPE) to enhance transparency, regulatory clarity, and investor confidence in the trading of PEPE. While PEPE qualifies as “Other Crypto-Assets” under MiCA and thus does not strictly require a white paper, LCX is providing this document to support its role as a regulated Crypto-Asset Service Provider and to ensure full compliance with MiCA when facilitating PEPE trading on its platform. By publishing a MiCA white paper for PEPE, LCX aims to set a high disclosure standard and help market participants make informed decisions about the asset within the EU’s regulatory framework.

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 is not yet formally supervised under MiCA until the license is granted by the competent authority. 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 Depositary – 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

PEPE

D.2 Crypto-Assets Name

PEPE

D.3 Abbreviation

PEPE

D.4 Crypto-Asset Project Description

Pepe (PEPE) is a meme-based crypto-asset created as an homage to the “Pepe the Frog” internet meme. Launched on April 14, 2023, on the Ethereum blockchain ^[66], the project did not involve an ICO or any fundraising – all tokens were simply minted and distributed by the deployers (primarily into a Uniswap liquidity pool). PEPE’s core idea was to ride the wave of meme coin culture initiated by tokens like Dogecoin and Shiba Inu, offering the community a new viral token with the popular Pepe meme branding. The project explicitly positions itself as having no inherent utility, no DeFi or governance functions, and no roadmap, branding itself as “the most memeable memecoin in existence” for pure entertainment and speculative trading.

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

There is no formal team roster or disclosed individuals responsible for PEPE’s ongoing implementation, reflecting its decentralized nature. The original developers launched the token anonymously; their identities are not publicly known (a common practice with meme coins). Implementation and maintenance of the “project” largely involve the Ethereum network itself (which is maintained by Ethereum’s global developer and validator community, not by PEPE’s creators). Key roles relevant to PEPE include:

Full Name	Business Address	Function
<i>Anonymous Deployer(s)</i>	<i>Not applicable</i>	<i>Created the PEPE token smart contract and initiated its distribution</i>
<i>Multi-Sig Wallet Signers</i>	<i>Not applicable</i>	<i>(Current Stewards): A group of (unidentified or pseudo-identified) community-trusted individuals control the multi-signature wallet holding the remaining team tokens (~3.79T PEPE).</i>
<i>PEPE Community</i>	<i>Not applicable</i>	<i>The community collectively “implements” the project’s growth by creating demand and narratives, even though no single member has formal responsibility.</i>

<i>Ethereum Network Participants</i>	<i>Not applicable</i>	<i>Transaction Validation & Security (PoS)</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's reason for admitting PEPE to trading and preparing this white paper is to foster transparency and compliance. PEPE token is a well-established crypto-asset, and by providing a MiCA-compliant disclosure, LCX aims to facilitate regulatory clarity and market confidence for European investors trading PEPE. While PEPE is not legally required to have a MiCA white paper, LCX is proactively aligning with MiCA's high standards of disclosure. This initiative supports compliance readiness ahead of MiCA enforcement and underscores LCX's commitment as a regulated exchange to provide comprehensive information about listed assets. Publishing this white paper can also enhance market access for PEPE—by removing regulatory uncertainty, institutional investors and regulated entities in the EU may feel more comfortable engaging with PEPE. In essence, offering PEPE trading under a MiCA framework helps integrate PEPE into the regulated financial ecosystem, potentially broadening its user base. It reinforces LCX's role in shaping a compliant and transparent crypto market by voluntarily applying MiCA's investor protection principles. This should ultimately benefit the PEPE ecosystem through greater trust and participation.

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-Asset

As of Q2 2025, the total supply of PEPE is 420,690,000,000,000 tokens, of which approximately 414 trillion PEPE are in public circulation (the vast majority freely floating) [OBJ] [OBJ]. About 6.69 trillion tokens (~1.59% of supply) have been permanently burned or are otherwise removed from circulation (including the October 2023 burn) [OBJ]. The remaining unburned tokens (circa 3.79 trillion, ~0.9%) are held in the project's multi-sig wallet for potential future uses such as providing exchange liquidity or bridging to other blockchains [OBJ]. All PEPE tokens were created at inception; no additional tokens can or will be created (the contract has no mint capability and is renounced). When admitted to trading on LCX, there is no limitation on how many of those circulating tokens can be traded – effectively, the

entire circulating supply is tradeable, subject to market liquidity. (Initial liquidity on LCX may be augmented by a portion of the team-held tokens if needed to facilitate a healthy market, in coordination with liquidity providers.)

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

To access PEPE trading on LCX Exchange, users must create an account with LCX and complete KYC/AML verification. Once onboarded, users can access the trading platform via LCX's web interface or API. The PEPE/EUR market on LCX will be accessible to customers in permitted jurisdictions, offering the ability to trade against fiat with the confidence of LCX's compliance oversight. Beyond LCX, PEPE remains available on decentralized platforms (like Uniswap) and other CEXs, but those venues may not offer the same investor protections. LCX's listing of PEPE provides a bridge for European users to trade this memecoin under a compliant framework (e.g., with euro pairing and proper custodial security).

E.36 Involved Costs

Not applicable

E.37 Offer Expenses

Not applicable

E.38 Conflicts of Interest

Not applicable

E.39 Applicable Law

For admission to trading of PEPE on LCX, the applicable law is Liechtenstein law, in accordance with MiCA and EU regulations.

E.40 Competent Court

Any disputes related to services provided by LCX fall under the jurisdiction of the Courts of Liechtenstein. For on-chain transfers of PEPE outside LCX, no centralized legal recourse applies.

F. PART F - INFORMATION ABOUT THE CRYPTO-ASSETS

F.1 Crypto-Asset Type

Other Crypto-Asset

F.2 Crypto-Asset Functionality

PEPE's functionality is simple and limited: it is a fungible ERC-20 token that can be held, transferred, and traded on the Ethereum blockchain. The token does not have any inherent utility or governance functions – owning PEPE grants no access, no dividends, and no control over any platform. Its primary practical use is as a speculative asset or a community token for meme enthusiasts. Nevertheless, PEPE can technically be integrated into decentralized applications as any ERC-20 could (e.g., provided as liquidity in DEX pools, used in third-party games or NFTs as a unit of account, etc.), but these are ancillary uses created by external parties, not built-in functionalities.

F.3 Planned Application of Functionalities

There are no new functionalities planned for PEPE. The token is already fully released in its final form; its role as a memecoin is static. Unlike a software project that might introduce new features or uses for its token, PEPE's value proposition lies in viral popularity, not technical evolution. Therefore, the current functionalities (basic token transferability and community-driven usage) will continue as-is. The creators have not announced nor do they maintain any roadmap for additional features. The community may organically find creative uses for PEPE (such as integrating it into meme contests, or DeFi protocols might list PEPE as collateral, etc.), but those are not centrally planned nor guaranteed. In summary: PEPE will continue to be used as it is now – a freely tradable token with no expected expansion of its on-chain feature set.

F.4 Type of white paper

OTHR

F.5 The type of submission

NEWT

F.6 Crypto-Asset Characteristics

Blockchain and Standard: PEPE is issued on Ethereum and conforms to the ERC-20 token standard [00]. This means it leverages Ethereum's established infrastructure: it's stored in Ethereum addresses and requires Ethereum gas (ETH) to move. Being ERC-20 ensures compatibility with a wide range of wallets, exchanges, and smart contracts.

Decentralization: There is no central authority controlling PEPE. Once the contract was deployed and renounced, the token's existence and rules are purely governed by the smart contract code and Ethereum's consensus. No one can arbitrarily freeze accounts or alter balances. The token's ledger is maintained across Ethereum's distributed network.

Fixed Supply & Distribution: All 420.69 trillion PEPE were minted at inception [00]. No inflation or further minting is possible (the contract's mint function was only used at deployment, then ownership was renounced). This fixed supply makes PEPE deflationary in practice, as any tokens lost (e.g., sent to burn addresses or lost private keys) reduce circulating supply over time. Indeed, token burns have already slightly reduced supply (see Part E.12). The initial distribution saw a large public float via Uniswap and no tokens reserved for the team aside from the 6.9% (much of which was later burned), aligning with a "fair launch" ethos (no pre-sale or preferential allocation).

No Intrinsic Value / Backing: PEPE is unbacked. It is not tied to any asset (unlike stablecoins) and not pegged to any currency. Its market price is purely a function of what traders are willing to pay. There is also no promise of any future cash flows or benefits from holding PEPE; it is not a claim on any revenue or project.

Volatility and Market Behavior: As a memecoin, PEPE often experiences extreme price volatility. It can undergo rapid appreciation or depreciation due to social media trends or sentiment swings. Liquidity is provided by the community (especially via DEX pools and on exchanges); during calm market conditions liquidity can be adequate, but in times of stress, slippage can be significant. Price movements are often disconnected from broader market or fundamental analysis, being heavily influenced by meme trends and speculative cycles.

Technical Simplicity: PEPE's smart contract is deliberately very simple. It does not implement complex logic beyond standard token functions [OBJ] [OBJ]. There are no mechanisms like automatic burns, reflections, staking, or multi-tiered governance. The simplicity reduces potential attack vectors and gas costs for transfers. It also means low ongoing maintenance – there's no operational infrastructure like nodes or oracles specific to PEPE that need upkeep, aside from Ethereum itself.

Interoperability: As an ERC-20, PEPE can be bridged to other chains (and indeed unofficial bridges have allowed PEPE to exist on BSC, Arbitrum, etc., as evidenced by holders on those chains [OBJ]). These are typically wrapped versions and not directly the concern of this white paper, but it highlights that the token can circulate beyond Ethereum via wrapping mechanisms, with corresponding interoperability risks. The primary and canonical form of PEPE remains on Ethereum.

F.7 Commercial name or trading name

PEPE

F.8 Website of the issuer

Not applicable. (No official issuer entity with a corporate website exists.) However, for informational purposes, the community-maintained official website for the PEPE project is pepe.vip

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

2025-10-01

F.10 Publication date

2025-10-01

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

Not available

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

No FFG-DTI is currently assigned to PEPE. This field will be updated upon issuance of a group identifier by the Digital Token Identifier Foundation or another competent authority, as per MiCA RTS Article 5.

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 or holders of PEPE do not acquire any specific contractual rights or legal claims against an issuer or anyone else by holding the token. PEPE is a decentralized network token, not a share or debt instrument; therefore, owning PEPE grants no governance rights in a legal entity, no entitlement to dividends, profits, or any form of interest, and no claim on any underlying assets or collateral.

G.2 Exercise of Rights and Obligation

Because holding PEPE does not bestow contractual rights, there is no traditional “exercise” of rights as one might have with a security or utility token tied to services. The rights that do exist (use of the network) are exercised simply by using the token: e.g., to exercise the “right” to transfer PEPE, the holder creates a transaction and signs it with their private key. These actions are carried out on-chain and are validated by the decentralized network.

G.3 Conditions for Modifications of Rights and Obligations

Since there are no formal contractual rights attached to PEPE, modifications in the “rights and obligations” sense mostly pertain to changes in the protocol rules of the PEPE network. Any changes to how PEPE works (for example, changes to staking yield, fee structure, or adding on-chain governance features in the future) would require a network upgrade. Avalanche’s upgrade process is decentralized: core developers may propose changes via software updates, but these changes only take effect if a sufficient portion of the community (especially validators) adopts the new software version.

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

Not applicable. PEPE has a fixed one-time issuance with no ongoing supply adjustments. Unlike some tokens that have inflationary or deflationary protocols, PEPE’s monetary policy is static – all tokens were created at launch and no algorithm governs further supply changes. Specifically, no protocol mints new PEPE and no automatic burning mechanism exists (aside from the tokens manually burned by the team which was a one-off event, not a programmed feature).

G.13 Supply Adjustment Mechanisms

Not applicable.

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

For admission to trading of PEPE on LCX, the applicable law is Liechtenstein law, in accordance with MiCA and EU regulations.

G.19 Competent Court

Any disputes related to services provided by LCX fall under the jurisdiction of the Courts of Liechtenstein. For on-chain transfers of PEPE outside LCX, no centralized legal recourse applies.

H. PART H – INFORMATION ON THE UNDERLYING TECHNOLOGY

H.1 Distributed ledger technology

PEPE is built on Ethereum, a public, permissionless distributed ledger (blockchain) known for its smart contract functionality. Ethereum serves as the underlying DLT that records PEPE token transactions and balances.

Ethereum's ledger is decentralized, maintained by a global network of nodes (validators) without a central administrator [OBJ]. Each transaction (including PEPE transfers) is grouped into blocks and validated by Ethereum's consensus mechanism (currently Proof-of-Stake). The Ethereum blockchain provides high reliability and security through this decentralization—no single party can alter transaction history arbitrarily, and the ledger has inherent immutability once blocks are finalized.

Key characteristics of Ethereum relevant to PEPE's DLT use:

Account Model: Ethereum uses accounts (EOAs and contract addresses) to track token balances. PEPE is an ERC-20 contract at a specific address on Ethereum; it maintains an internal ledger of addresses and token balances, updated with each transfer. This ledger of PEPE balances is itself stored on the Ethereum blockchain as part of the contract state.

Transparency: All PEPE transactions are visible on the Ethereum ledger via block explorers (such as Etherscan). This means movements of tokens (including large holder transfers, burns, etc.) are publicly observable, contributing to market transparency.

Security: Ethereum's cryptographic algorithms (Elliptic Curve (secp256k1) for keys, keccak-256 for hashing, etc.) secure the authenticity of transactions. A PEPE transfer requires a valid digital signature from the sender's private key, preventing unauthorized transfers. The network's economic security (stake) and large number of validators make it extremely difficult and costly to attack or double-spend transactions.

In summary, Ethereum is the DLT that underpins PEPE, providing a robust and widely-used platform. Ethereum's long operational history (since 2015 for PoW, and now upgraded PoS consensus) and large developer community add confidence in the stability of the ledger technology. PEPE benefits from Ethereum's features like composability (it can interact with other smart contracts, enabling trading in DEXs, etc.) without needing its own blockchain infrastructure.

PEPE Whitepaper: <https://www.pepe.vip/>

Public block explorer: <https://etherscan.io/>

H.2 Protocols and Technical Standards

PEPE conforms to the ERC-20 standard on Ethereum. ERC-20 is a technical standard (a Ethereum Request for Comments proposal) that defines a common interface for fungible tokens. By adhering to ERC-20, PEPE's smart contract implements a set of functions and events:

Functions: totalSupply(), balanceOf(address), transfer(address, uint256), approve(address, uint256), allowance(address, address), transferFrom(address, address, uint256).

Events: Transfer(from, to, value) and Approval(owner, spender, value).

These ensure any wallet or application that is ERC-20 compatible can correctly interact with PEPE. The PEPE contract's code (which has been published on Etherscan for transparency) follows the

standard: storing balances in a mapping, and updating allowances and balances according to the ERC-20 logic.

Smart Contract Implementation: The contract is written in Solidity. It uses standard libraries/patterns prevalent at the time of deployment (April 2023). The code is relatively simple: aside from basic ERC-20 functionality, it included (based on audit notes) some functions like the ability to blacklist certain addresses (likely to block known bots early on) and functions to renounce ownership, which were executed. After renunciation, those functions like blacklist have no effect because no owner can call them. Essentially, the contract now is locked in a standard ERC-20 mode with no admin.

Token Decimals and Symbol: The contract defines the token decimals (which is 18, typical for ERC-20, meaning the smallest unit is 10^{-18} PEPE) and symbol “PEPE”. This aligns with standard practice and allows user interfaces to display values correctly.

Interoperability and Standards Use: By complying with ERC-20, PEPE can interact with Ethereum’s vast ecosystem: for example, Uniswap’s contracts could accept PEPE because they require tokens to have the transferFrom function; lending protocols or custodians can easily integrate it. No custom protocol beyond ERC-20 is needed to use PEPE.

The token does not implement more complex standards like ERC-777 or ERC-20 extensions (like permit via EIP-2612). Only the basic standard is in play, which is widely sufficient for trading tokens.

Off-Chain Infrastructure: Ethereum’s peer-to-peer networking and client protocols handle block propagation and transaction broadcasting. PEPE doesn’t alter any of these; it rides on Ethereum’s protocols (like JSON-RPC is used by wallets to call Ethereum nodes, etc.).

Conclusion on Standards: PEPE leverages established Ethereum standards and protocols, ensuring maximum compatibility. There is no proprietary protocol aspect to PEPE – it is one token among many on Ethereum abiding by the same ERC-20 rules [66], [67]. This standardization is beneficial for security and integration but also means PEPE has no unique technical advantage or differentiation at the protocol level.

H.3 Technology Used

The technology stack for PEPE is essentially the **Ethereum blockchain and related tools**:

Blockchain Core: Ethereum (layer 1). Utilizes Ethereum’s runtime (EVM – Ethereum Virtual Machine) for executing the PEPE contract code. The EVM handles the logic of updating balances on each transfer execution.

Programming Language: Solidity (for the token smart contract). The contract was compiled likely with a Solidity compiler (version around 0.8.x) and deployed via a standard Ethereum transaction. The bytecode now lives on-chain.

Consensus & Networking: As part of Ethereum, PEPE transactions are processed by Ethereum’s consensus (which is Proof-of-Stake with the Beacon Chain since The Merge in September 2022). Networking uses Ethereum’s devp2p protocol among nodes to propagate transactions/blocks.

Client Software: Ethereum nodes (like Geth, Nethermind, Besu, etc.) execute the transactions. Wallet software (like MetaMask, hardware wallets, etc.) are used by users to interface with the token.

Smart Contract Infrastructure: The contract itself doesn’t require off-chain infrastructure (no oracle feeds, no external API calls). It’s self-contained. The only external dependency is Ethereum’s state (which includes the contract itself and accounts).

Security Tools: The code has been audited with automated and manual review tools (as referenced earlier), though those are off-chain processes. On-chain, Ethereum’s built-in security (reversion on failure, gas limits to prevent infinite loops, etc.) protects against typical issues. There is no pausable or

emergency-stop mechanism in the token, so no admin tech there.

Storage of Data: All token balances and allowances are stored in Ethereum's blockchain state, specifically under the contract's storage slots. Each user's balance is keyed by their address in the contract's mapping structure. This means data integrity relies on Ethereum's blockchain integrity and the cryptographic proofs of blocks.

To summarize, **the PEPE token uses the standard Ethereum tech stack** without modifications. The complexity is low: end-users just see Ethereum addresses and token amounts. The reliability and performance of PEPE thus directly correspond to that of Ethereum. If Ethereum runs smoothly (which it generally does aside from occasional congestion), PEPE transactions will run smoothly. Conversely, any technology risks on Ethereum (like a vulnerability in the EVM or a bug in consensus client) could indirectly affect PEPE (but such risks are extremely low given Ethereum's maturity and continuous monitoring/upgrades).

No novel technology was introduced by PEPE's launch – it exemplifies a straightforward use of existing blockchain tech to issue a token.

H.4 Consensus Mechanism

Ethereum currently operates on a Proof-of-Stake (PoS) consensus mechanism (specifically Ethereum's Casper consensus via the Beacon Chain, often just called Ethereum 2.0). Under PoS, network validators stake the blockchain's native cryptocurrency (ETH) to earn the right to propose and attest to new blocks.

Key points about Ethereum's PoS consensus relevant to PEPE:

- **Validators:** There are over ~500k active validators (as of early 2025) each staking 32 ETH to participate. These validators are chosen pseudo-randomly to propose blocks and a committee of validators votes (attests) on each block.
- **Finality:** Ethereum's consensus has a concept of finality through checkpoints (epochs). Once finalized (after ~2 epochs or ~13 minutes with sufficient participation), a block and its transactions (which could include many PEPE transfers) are extremely unlikely to be reverted due to the economic penalties a malicious actor would face (slashing of staked ETH).
- **Security:** Proof-of-Stake in Ethereum has drastically reduced energy consumption by ~99.95% [90]. Instead of miners expending computational work, validators perform lightweight duties but are penalized for misconduct. The security assumption is that an attacker would need to control 1/3 or more of the total stake to disrupt finality, which given the wide distribution of ETH stake, is economically prohibitive.
- **Implication for PEPE:** Transactions involving PEPE are processed in blocks just like any transaction. They require confirmations by validators. Typically within ~12 seconds a new block containing a PEPE transfer might be produced, and within 6-12 minutes that block is finalized and irreversible barring an unlikely chain reorganization.
- **Consensus Algorithm:** Ethereum's consensus combines elements of Casper FFG (Friendly Finality Gadget) and LMD-GHOST fork choice rule. But in simpler terms, validators follow rules to propose blocks, aggregate attestations, and finalize checkpoints. This ensures network agreement on the ledger state.
- **Decentralization and Censorship Resistance:** The large number of validators and distribution across many operators means no single entity controls block inclusion. There were concerns about validators censoring transactions post-Merge due to regulatory issues (MEV-relays, etc.), but as of 2025 the network remains censorship-resistant for normal transactions like

PEPE transfers (some MEV boosting does reorder transactions, but that doesn't stop execution eventually).

- Upgrades: Ethereum's consensus is evolving (e.g., pending upgrades like sharding, PBS etc.), but these are handled at protocol level. None of those upgrades require action from PEPE holders; they will transparently improve capacity or security.

In summary, Ethereum's PoS consensus ensures that the PEPE token transactions are validated in an energy-efficient yet secure manner [OBJ] [OBJ]. The elimination of proof-of-work means PEPE's carbon footprint per transaction is negligible (see Part J). The consensus mechanism is robust, having functioned since September 2022 without major incident. It relies on a broad community of stakers and has built-in incentives (rewards) and disincentives (slashing for misbehavior) to maintain integrity.

H.5 Incentive Mechanisms and Applicable Fees

On the Ethereum network, validators are incentivized with block rewards and transaction fees, but those rewards are in ETH (the native currency). This means that PEPE transactions indirectly involve fees but denominated in ETH.

For a user to send PEPE, they must pay a gas fee in ETH to the validators who include the transaction. Typically, an ERC-20 transfer might cost a few tens of thousands of gas. The exact fee in ETH depends on network demand (gas price). None of this fee is in PEPE; PEPE itself does not have an internal fee mechanism (transfer of PEPE doesn't burn or distribute any PEPE as a fee).

From the token's perspective, there are no built-in incentive mechanisms like staking rewards or inflation distribution. Holding PEPE yields no automatic increase in PEPE count. Validators are not rewarded in PEPE for processing PEPE transactions (they just get ETH from gas). The PEPE contract doesn't have a provision for paying anyone in PEPE for anything.

H.6 Use of Distributed Ledger Technology

True

H.7 DLT Functionality Description²

This refers to describing the specific functionality of the DLT with respect to the crypto-asset. We have touched on many already, but let's outline how Ethereum's DLT handles typical operations of PEPE:

- Transaction Processing: A user signs a transaction (e.g., "transfer 1,000,000 PEPE to Bob's address"). This is broadcast to Ethereum's network. Ethereum nodes verify the signature (to ensure the sender is authorized), check the sender's account has enough PEPE (via the contract's state), and that the sender has enough ETH to pay gas. The transaction includes a gas limit and fee. A validator then includes this transaction in a new block (if the fee is sufficient relative to others). The transaction is executed in the EVM: this means the EVM will load the PEPE contract code, run the transfer function, subtract the amount from sender's balance and add to receiver's balance in the contract's storage, then record a Transfer event. If any step fails (insufficient balance, etc.), the EVM reverts all changes. Assuming success, the updated balances become part of the global state. This block is propagated and eventually finalized via consensus, making the transfer permanent.
- Confirmation and Finality: After about 12 seconds, one block containing the transaction is created (on average). Ethereum's PoS provides probabilistic finality quickly, and checkpoint finality within a few minutes. For practical use, 1 confirmation is usually enough for small transfers, but exchanges might wait 12+ confirmations (~2-3 minutes) to be safe. Once final,

that transfer is irreversible.

- **Smart Contract Autonomy:** The PEPE smart contract is autonomous on the DLT. It runs exactly as coded with no external triggers needed except transactions invoking it. For example, if someone calls `approve()` to allow a DApp to spend their PEPE, the contract will update allowances accordingly and emit an Approval event. Later the DApp (or another user) can call `transferFrom()` and the contract will autonomously check if the allowance exists and then execute transfer. All these rules enforce themselves on-chain.
- **Scalability and Limitations:** Ethereum currently handles around 15-30 transactions per second overall. During the height of memecoin trading, the demand spiked and gas prices soared, leading to \$20-\$40 fees per transaction (some PEPE traders paid even more to outbid others) [08]. This is a limitation of the base layer. Ethereum's roadmap includes scaling solutions (like danksharding, rollups) which should alleviate such congestion. In the interim, some trading activity moves to Layer 2 networks or centralized exchanges to avoid these limits. But on the base DLT, if usage skyrockets, PEPE users must contend with that environment – which is a known characteristic of Ethereum.
- **Contract Upgradability and Admin functions:** As mentioned, none remain. Many tokens incorporate proxy patterns to upgrade or admin roles to pause trading, etc. PEPE has none of that after renounce. That means the DLT will treat the PEPE contract as immutable code. If a problem were to be discovered, the only solution would be to deploy a new token contract; the existing one cannot be changed by any admin transaction.

Summary of Ethereum DLT functionality for PEPE: It ensures ledger integrity, autonomous execution of token logic, openness for integration, and immutability. The downside is performance constraints and finality time, which users mitigated by sometimes using centralized exchanges for quicker trades. However, Ethereum's move to PoS and continued upgrades are steadily improving throughput and reducing costs, benefiting tokens like PEPE.

H.8 Audit

True

H.9 Audit Outcome

Fairyproof Audit (August 2023): The Fairyproof Security Team audited PEPE's contract (covering code at the Ethereum address and referencing the official website for specs) [08]. The result was a "Passed" audit with 0 critical findings – effectively no vulnerabilities were found [08]. All issues, if any, were resolved, and the audit summary reported "no issues uncovered" [08]. This indicates the contract is secure against common attack vectors (overflow/underflow, reentrancy, etc., which mostly don't apply to simple tokens).

EtherAuthority Audit (May 2023): EtherAuthority performed a free security audit on PEPE. In their conclusion, they found the contract to be "Secured" and "good to go for production," observing only one low-severity and two informational issues [08] [08]. They highlighted that certain admin functions (like blacklist) existed but recommended renouncing ownership to fully decentralize the token [08]. Indeed, the ownership was renounced, addressing those concerns.

Other Reviews: The security community and automated scanners also looked at PEPE due to its popularity. For instance, DeFi safety tools and the community inspected the code for any hidden tricks (like mint functions or honeypot traps) and none were present beyond what's been discussed (an optional blacklist that was likely used to block a known MEV bot early on, then removed by renounce).

Cyberscope/Other Ratings: Websites like Cyberscope gave PEPE a security score (Cyberscope lists 88% "Very Low Risk") [08], and noted things like Ownership renounced: Yes, No proxies, No mint functions, No hidden blacklist after renounce, etc. [08] [08]. These automated checks align with the audit findings that PEPE's contract is straightforward and safe for investors (from a smart contract standpoint).

In conclusion, the PEPE smart contract has undergone and passed third-party security audits, instilling confidence that:

- There are no backdoors or malicious code (e.g., the contract deployers cannot stealthily mint new tokens or steal tokens).
- The contract adheres to standard practices, reducing risk of unforeseen bugs.
- Functions that could be abused (like blacklist) are no longer usable after ownership renouncement.

The audits are publicly accessible .(It is important to note that while the contract is secure, this doesn't protect against market risks or user errors, but strictly technical contract exploits are unlikely.)

Cyberscope Audit link: <https://www.cyberscope.io/audits/coin-pepe>

FairyProof Audit link: <https://fairyproof.com/report/Pepe>

I. PART I – INFORMATION ON RISKS

I.1 Offer-Related Risks

•**Market Volatility Risk:** PEPE's price is highly volatile. Buyers can experience rapid price swings even within minutes. Admission to trading on LCX will expose new users to that volatility. The token's value can plummet or spike unpredictably due to market sentiment or coordinated speculative activity [OBJ] [OBJ]. Investors should be prepared for extreme fluctuations, potentially losing a large portion of their investment in a short time if the market moves against them.

•**Liquidity Risk:** While PEPE often had high trading volumes during peak hype (sometimes in the hundreds of millions of USD per day), liquidity can dry up if interest fades. There is a risk that at certain times (especially if meme fervor moves elsewhere or in a market downturn), order books may thin out, causing large price slippage for trades or difficulty selling large positions [OBJ] [OBJ]. Additionally, reliance on a few liquidity pools or market makers means if they withdraw, the market could become much less liquid. LCX will provide a new liquidity venue, but its depth is initially uncertain.

•**Exchange Concentration Risk:** Initially, a few exchanges (and Uniswap) dominated PEPE trading. If one major exchange were to halt trading or delist PEPE due to regulatory concerns or internal policies, it could significantly impact the market price and liquidity across the board (due to arbitrage and sentiment). Relying on centralized platforms means if they face downtime or issues, trading access is temporarily restricted, which could be detrimental during volatile periods [OBJ] [OBJ].

•**Regulatory Risk (Trading Restrictions):** Different jurisdictions may view meme tokens with skepticism. While MiCA doesn't ban such tokens, regulators or banks could impose restrictions (for example, banks limiting transfers to crypto exchanges over concerns of speculative mania). In extreme scenarios, if authorities perceived widespread trading of PEPE as a consumer harm issue, they could issue warnings or require exchanges to implement stricter suitability checks. Any such development would affect the ease of trading or even the ability to trade in certain regions [OBJ] [OBJ]. A specific worry is that if a regulator deemed promotion of PEPE as irresponsible, they might pressure certain exchanges to delist it as a protective measure.

•**Operational Risks on Trading Platforms:** If a trading platform (like LCX or others) has technical failures, hack incidents, or insolvency, traders could be unable to access funds or execute trades. While LCX has robust security and regulatory oversight, the broader environment includes unregulated exchanges where many trade PEPE; those carry platform risk. An operational failure during a period of high volatility could lock in losses for traders who cannot exit position.

I.2 Issuer-Related Risks

PEPE doesn't have an "issuer" risk in the classical sense, it's subject to ecosystem risks: the health, actions, and continuity of its core contributing organizations and individuals. Holders should understand that their investment's success partly rides on the continued development and adoption of PEPE. A failure or major setback in development (or a fracture in the community consensus about direction) could impair the functionality and appeal of PEPE, which would likely depress PEPE's value. Conversely, PEPE's decentralization means no single failure can kill the project outright, but it can still be severely hindered by loss of community or developer support.

I.3 Crypto-Assets-Related Risks

- **Extreme Price Volatility:** As emphasized, PEPE's price can move dramatically. It's not uncommon for memecoins to gain 1000% and then lose 90%+ of value. For example, PEPE's price skyrocketed in its first weeks and then subsequently fell sharply from all-time highs (a pattern of boom-bust) . This volatility means investment in PEPE can result in significant losses very quickly. Unlike more established assets, PEPE has no price floor anchored by fundamentals; it could theoretically go to near-zero if market interest evaporates.

- **Lack of Intrinsic Value:** PEPE does not produce revenue, does not represent ownership, and has no utility, thus its valuation is entirely speculative. This means its market price is driven by collective belief and momentum. If the community sentiment shifts (e.g., the meme stops being funny or attention moves to the next meme token), demand could drop precipitously. With nothing fundamental to catch that fall, the value could drop to essentially zero. Investors must recognize they are trading something whose value is what the next person will pay, no more.
- **Herd Behavior and FOMO:** The memecoin market is fueled by social media (Twitter, Reddit, Telegram groups) and often by hype and fear-of-missing-out. This can lead to bubbles. Conversely, negative narratives (like a rumor that “the devs rugged” or “PEPE is dead now”) can cause herd selling. The psychology-driven nature of this asset increases unpredictability. It also opens potential for market manipulation: e.g., pump-and-dump schemes orchestrated by groups since it’s easier to sway sentiment on a meme than on a well-studied asset.
- **Liquidity and Slippage:** Covered above but to reiterate: in tight conditions, trying to sell a large amount of PEPE may lead to selling at much lower prices due to order book gaps (slippage). Or if using DEX liquidity pools, a large trade can move the price significantly due to the AMM curve. This means even the quoted market price might not be what an investor actually gets when executing a sizable trade. Also, if trading on DEX, impermanent loss affects liquidity providers, and on CEX, withdrawal congestion or limits might appear in peak times.
- **Custodial Risks:** If holders keep PEPE on exchanges or custodial wallets, they face typical crypto risks like exchange hacks, freezes, or insolvency (as seen in past with some platforms). If on personal wallets, there’s risk of losing private keys or falling for phishing scams (especially as scammers may target PEPE holders with fake airdrop schemes or support scams). Because memecoin investors are sometimes less experienced (drawn by hype), they may be more vulnerable to such scams. So, operational security risk is real – losing one’s PEPE due to user error is irreversible.
- **Regulatory and Taxation:** Owning and trading PEPE could have tax implications (e.g., capital gains taxes on trades, which users must track even if small trades). If a jurisdiction bans or restricts crypto trading, PEPE would be included. Regulatory actions against anonymity (e.g., enforcing KYC on DEX interfaces or sanctioning mixing services if people try to hide large PEPE profits) could indirectly affect usage. Also, as a note from Solana’s risk discussion, classification uncertainty: while currently PEPE is just an “other crypto-asset,” future regulatory frameworks might impose new rules (like requiring memecoin issuers to do X, or exchanges to apply higher disclosures for high-risk tokens). Such changes could affect PEPE’s legal status or accessibility.

I.4 Project Implementation-Related Risks

While there is no active technical implementation (no evolving protocol or software updates for PEPE itself), we can interpret this as risks related to how the “project” (loosely defined, mainly community and any future attempts to do something with PEPE) could fail or face challenges:

- **No Ongoing Development, Stagnation Risk:** Because there is no roadmap or development, PEPE as a “project” could lose relevance over time. Unlike projects that add features or expand utility (which might attract new users), PEPE might not have any new catalysts once the initial hype fades. This stagnation could result in gradual decline of interest and value. Essentially, the project might not have longevity beyond the meme cycle.
- **Community Attrition:** Memecoin communities can be very exuberant in bull runs but evaporate in bear markets. If the PEPE community fails to sustain engagement (through memes, events, etc.), the project narrative dies off. There’s risk the core community moves on to other memes (“rotation” is common — e.g., when PEPE boomed, others like WOJAK, etc., also boomed; eventually attention shifts). Without a strong, lasting community, PEPE doesn’t have fundamentals to support it. So far, the community has been strong (hundreds of thousands of holders and online mentions), but this could wane.

- **Mismanagement of Multi-sig Treasury:** The team/community still holds ~3.79T PEPE for potential “project purposes” (like providing liquidity on new exchanges or maybe some future initiative). The risk is if those managing it misuse it. For example, if they promise to use tokens for development but instead they sell them gradually (which is effectively what some of the original rogue devs did, prompting the burn), it could depress price and destroy trust. Though the new guardians are supposedly trustworthy, that’s not guaranteed long-term. There’s also operational risk – if signers lose keys or fall out, access to those tokens could be lost or mismanaged.
- **Attempted Utility Projects Failing:** If community or third parties try to build something around PEPE (like a Pepe-themed game, or NFT collection using PEPE token, etc.), those could fail or even turn into scams. Failure of such side projects could reflect poorly on PEPE’s reputation or simply not add any value as hoped. Many memecoins attempt to later add some utility to remain relevant (“Now our coin will be used in a metaverse!” etc.), and if PEPE attempts something like that and it fails, it could show that the token remains a pure meme, which might already be obvious, but some holders might be hoping for eventual utility – those hopes being dashed can cause sell-off.
- **Scalability of Hype:** The “project” relies on sustaining hype. There is a risk that it cannot scale beyond a certain point – e.g., the number of meme enthusiasts is finite, and once those are in, growth stagnates. Or if marketing (mostly organic) fails to reach new audiences, the project can’t implement growth in user base. The initial implementation (launch and listing on major exchanges) was successful, but implementing further adoption might be hard without any real project fundamentals.

I.5 Technology-Related Risks

- **Ethereum Network Congestion and Fees:** As experienced, a surge in PEPE transactions can congest Ethereum, leading to high gas fees that make small transactions impractical. If Ethereum’s throughput doesn’t improve or if another memecoin frenzy (including PEPE or others) clogs the network, PEPE holders might find it difficult to move their tokens quickly or cost-effectively. This is a risk because it can impede trading or arbitrage, possibly causing price disparities or inability to react to market conditions. Ethereum is working on scaling (layer-2s mitigate this somewhat), but base layer congestion remains a risk.
- **Ethereum Security Risks:** While highly secure, if a fundamental vulnerability in Ethereum’s PoS or cryptography were discovered (e.g., a break in the elliptic curve signature, or a successful 51% attack by stakers colluding), it could compromise token security. This is very theoretical; Ethereum has strong security practices. But one horizon risk is quantum computing: in the far future, quantum attacks could break current cryptography. That’s already mentioned in other whitepapers like Solana’s. If Ethereum doesn’t upgrade in time for quantum resistance (again, a long-term risk), all tokens including PEPE would be at risk. Ethereum devs are aware and will likely upgrade if needed, but it’s a tail risk.
- **Smart Contract Bug or Exploit:** Although audits were clean, if any undiscovered bug existed in the PEPE contract or ERC-20 standard implementation on Ethereum, it could be exploited. For example, some ERC-20 tokens historically had bugs in approve/transferFrom patterns (the known double-spend if not careful updating allowance – mitigated by using increaseAllowance). If a PEPE user misuses these functions (e.g., doesn’t manage allowances properly), they could be phished by malicious contracts to spend their tokens – not a bug in PEPE contract per se, but an *interaction risk* that exists with any ERC-20 (e.g., giving unlimited allowance to a DeFi app that turns out malicious can result in theft of all your PEPE). So user error with smart contracts (approving malicious spender) is a tech risk common in DeFi usage.
- **Dependent Service Risks:** Tools like block explorers (Etherscan) or RPC node services (Infura, Alchemy) are often used by holders to monitor and send transactions. Outages or errors in these can cause temporary confusion (e.g., if a block explorer mis-reports data,

users might panic). While the blockchain itself might be fine, if major interface tools go down, average users may have difficulty interacting with the chain. This is minor and usually short-lived, but a consideration (Solana's doc noted reliance on RPC providers as a risk, analogously, Ethereum has many alternative providers though).

- **Censorship/OFAC Risks:** There was a period after Ethereum's Merge where many blocks were OFAC-compliant (not including transactions interacting with Tornado Cash, etc.). If in the future regulators push validators to censor certain transactions (maybe not directly PEPE, but say if a large portion of PEPE is on addresses deemed illicit), it could in theory slow down or censor those addresses' transactions. Currently Ethereum is resisting censorship (inclusion rate for all tx is high), but if regulatory pressure increased on validators, that's a risk (generally to Ethereum's neutrality). For most PEPE users this likely won't be an issue, but it's in the realm of tech-regulatory risk.
- **Bridge Risks:** Many holders have bridged PEPE to other chains (as evidenced by holders on BSC, Arbitrum). Using bridges carries risk: if a bridge were hacked, the bridged PEPE (wrapped PEPE on other chain) could lose its value or backing. While not directly Ethereum's fault, if users consider their bridged tokens as good as native, a bridge failure could cause loss and shake confidence (e.g., if someone had their PEPE on BSC and the bridge provider got hacked, their representation of PEPE might become worthless while the real ones remain on Ethereum). This could cause some cross-chain market confusion.
- **Interoperability Bugs:** Interacting with other smart contracts (like liquidity pools, lending protocols) introduces risk that those contracts might malfunction or be exploited, indirectly affecting PEPE's market (if a major pool is drained, etc.). Not a fault of PEPE, but a risk to holders using such tech. For example, if someone locked a ton of PEPE in a DeFi contract and that contract was hacked, those tokens could flood the market or be lost, impacting price and holder distribution.

I.6 Mitigation Measures

- **Voluntary Transparency (White Paper):** This very document is a mitigation. By providing clear information on PEPE's nature, supply, and risks, LCX aims to ensure investors are making informed decisions, thereby mitigating the risk of misunderstanding or misinformation-related losses. While it doesn't reduce volatility, it reduces informational asymmetry.
- **Exchange Compliance and Monitoring:** LCX, as a regulated exchange, will monitor PEPE trading for market abuse (unusual trading patterns, insider trading by known addresses, etc.). If any suspicious activities occur (like attempted wash trading or manipulation on the LCX platform), LCX can intervene (pause trading, investigate accounts). This oversight can mitigate some market manipulation risk at least on the LCX venue, contributing to overall market integrity.
- **Liquidity Support:** To reduce initial liquidity risk on LCX, LCX may work with liquidity providers or market makers who will provide buy/sell orders within reasonable spreads. Ensuring a basic level of order book depth mitigates extreme slippage for moderate trade sizes. Additionally, the presence of many trading venues provides arbitrage opportunities that tend to equalize prices and provide some liquidity backstop (if one exchange's price diverges, arbitrageurs trade to bring it in line). That network of arbitrageurs is a mitigating factor against prolonged illiquidity or mispricing.
- **Smart Contract Security Measures:** The PEPE contract's simplicity and completed audits are themselves mitigations of technical risk. By having no complex functions, it avoids many potential bugs. The renouncement of ownership mitigated the risk of any malicious admin action  . Essentially, code immutability now serves as a security measure – nothing can be changed or abused by insiders in the contract.

- **Decentralized Distribution / Burn:** The initial distribution (93.1% to liquidity) and burning of LP tokens removed the possibility of a traditional rug pull by the deployers pulling liquidity [08]. The further burn of 6.9T in Oct 2023 mitigated the risk from the rogue insiders and demonstrated commitment to the community [08], [08]. That action restored some trust and reduced the supply overhang. Now, with only ~0.9% in the multi-sig, the potential damage from those tokens is much smaller (and presumably, the new signers are more trustworthy). This mitigation came in response to community pressure – showing that community oversight can prompt corrections to issues.
- **Community Vigilance and Governance (informal):** The PEPE community, while not formal, has active participants who track large holders and report unusual movements on social media (essentially acting as on-chain analysts). For instance, whale watch bots announce if a big holder sends PEPE to an exchange. This transparency allows mitigation of insider dumps: when the community spotted devs moving funds, they publicized it and caused a broad reaction that forced a burn and new management. So, an ongoing mitigation is real-time public scrutiny via blockchain analytics – large moves cannot easily hide, thereby discouraging bad actors to an extent (they know they'll be noticed).

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 Information on principal adverse impacts on the climate and other environment-related adverse impacts of the consensus mechanism

The PEPE token operates on the Ethereum blockchain, which utilizes a Proof-of-Stake (PoS) consensus mechanism following its transition from Proof-of-Work (PoW) in 2022. This PoS model eliminates the need for energy-intensive mining by replacing it with validator-based staking, significantly reducing the relative computational demands compared to traditional PoW systems. However, it is important to clarify that this does not imply an absolute reduction of energy consumption or environmental impact. Rather, it represents a comparatively less burdensome model in terms of energy use and carbon footprint.

In accordance with MiCA's regulatory requirements for climate-related disclosures, the sustainability indicators related to PEPE are tied to Ethereum's network-level operations and validator infrastructure

General information	
S.1 Name <i>Name reported in field A.1</i>	LCX
S.2 Relevant legal entity identifier <i>Identifier referred to in field A.2</i>	529900SN07Z6RTX8R418
S.3 Name of the crypto-asset <i>Name of the crypto-asset, as reported in field D.2</i>	PEPE
S.4 Consensus Mechanism <i>The consensus mechanism, as reported in field H.4</i>	The crypto-asset's Proof-of-Stake (PoS) consensus mechanism, introduced with The Merge in 2022, replaces mining with validator staking. Validators must stake at least 32 ETH every block a validator is randomly chosen to propose the next block. Once proposed the other validators verify the blocks integrity. The network operates on a slot and epoch system, where a new block is proposed every 12 seconds, and finalization occurs after two epochs (~12.8 minutes) using Casper-FFG. The Beacon Chain coordinates validators, while the fork-choice rule (LMD-GHOST) ensures the chain follows the heaviest accumulated validator votes. Validators earn rewards for proposing and verifying blocks, but face slashing for malicious behavior or inactivity. PoS aims to improve energy efficiency, security, and scalability, with future upgrades like Proto-Danksharding enhancing transaction efficiency.
S.5 Incentive Mechanisms and Applicable Fees	The crypto-asset's PoS system secures transactions through validator incentives and economic penalties. Validators stake at least 32

Incentive mechanisms to secure transactions and any fees applicable, as reported in field H.5	ETH and earn rewards for proposing blocks, attesting to valid ones, and participating in sync committees. Rewards are paid in newly issued ETH and transaction fees. Under EIP-1559, transaction fees consist of a base fee, which is burned to reduce supply, and an optional priority fee (tip) paid to validators. Validators face slashing if they act maliciously and incur penalties for inactivity. This system aims to increase security by aligning incentives while making the crypto-asset's fee structure more predictable and deflationary during high network activity.
S.6 Beginning of the period to which the disclosure relates	2024-05-18
S.7 End of the period to which the disclosure relates	2025-05-18
Mandatory key indicator on energy consumption	
S.8 Energy consumption 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	8809.82140 kWh per year
Sources and methodologies	
S.9 Energy consumption sources and Methodologies Sources and methodologies used in relation to the information reported in field S.8	For the calculation of energy consumptions, the so called "bottom-up" approach is being used. The nodes are considered to be the central factor for the energy consumption of the network. These assumptions are made on the basis of empirical findings through the use of public information sites, open-source crawlers and crawlers developed in-house. The main determinants for estimating the hardware used within the network are the requirements for operating the client software. The energy consumption of the hardware devices was measured in certified test laboratories. 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.

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

Supplementary key indicators on energy and GHG emissions	
S.10 Renewable energy consumption 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.	14.770208242%
S.11 Energy intensity Average amount of energy used per validated transaction	0.00000 kWh
S.12 Scope 1 DLT GHG emissions – Controlled Scope 1 GHG emissions per calendar year for the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions	0.00 tCO ₂ e per year
S.13 Scope 2 DLT GHG emissions – Purchased Scope 2 GHG emissions, expressed in tCO ₂ e per calendar year for the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions	1873.14310 tCO ₂ e/a
S.14 GHG intensity Average GHG emissions (scope 1 and scope 2) per validated transaction	0.00000 kgCO ₂ e per transaction
Sources and methodologies	
S.15 Key energy sources and methodologies Sources and methodologies used in relation to the information reported in fields S.10 and S.11	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.
S.16 Key GHG sources and methodologies Sources and methodologies used in relation to the information reported in fields S.12, S.13 and S.14	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.
--	---