



# **Loggerhead Labs Limited**

**wXTM MiCA White Paper**

*White Paper published in accordance with the Markets in Crypto-Assets Regulation  
for the European Union & European Economic Area*

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



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## **FOREWORD**

This document was written by **Loggerhead Labs Limited** (also referred to as “**Loggerhead Labs**” in this document) and constitutes the White Paper for the public offering of the crypto-asset “**Wrapped MinoTari**”, abbreviated “**wXTM**” (also referred to as “**crypto-asset**” or “**token**” in this document) in accordance with the provisions of Article 6 “*Content and form of the crypto-asset white paper*” and Annex I of EU Regulation 2023/1114 (“**MiCA Regulation**” or “**MiCAR**”).

This White Paper aims to provide essential information on the characteristics, functions and risks relating to the wXTM for users located in the European Union (EU) who are considering acquiring it. This White Paper also provides general information about the issuer, the rights and obligations attached to the wXTM, the underlying technology used for the wXTM offer, and the corresponding risks.

*If the content of this White Paper differs from the content of the other documentation provided by Loggerhead Labs Limited, this White Paper will take precedence over the other documents for wXTM holders based in an EU Member State.*

## **LEGAL NOTICES**

**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 offeror of the crypto-asset is solely responsible for the content of this crypto-asset White Paper.

**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 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.

**Statement in accordance with Article 6(5), points (a), (b), (c) of Regulation (EU) 2023/1114.** 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.

**Statement in accordance with Article 6(5), point (d) of Regulation (EU) 2023/1114.** The utility token referred to in this White Paper may not be exchangeable against the good or service promised in the crypto-asset White Paper, especially in the case of a failure.

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

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**

wXTM is an ethereum-wrapped version of MinoTari (XTM), the native utility token on the Tari blockchain. It is used to bridge XTM to the Ethereum protocol.

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

Not applicable.

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

This White Paper was not prepared as part of an initial token offering such as an ICO (*Initial Coin Offering*) or an IDO (*Initial DEX Offering*). Rather, in accordance with the relevant provisions of MiCAR, Loggerhead Labs Limited's communications to EU persons—providing sufficient details on both the conditions of the offering and the nature of WXTM—are considered as an “offer” within the meaning of that regulation.

The offer encompasses the entirety of the WXTM token supply without any specific minimum or maximum subscription goals.

The wXTM token will be listed for secondary trading on various trading platforms for crypto-assets.

Loggerhead Labs Limited may subsequently choose to list the wXTM token on other trading platform for crypto-assets.

The initial supply of XTM is 21,000,000,000 tokens, with a tail emission of 1% per year. The maximum supply of the wXTM token is equivalent to the total supply of XTM.



## **PART A – INFORMATION ABOUT THE OFFEROR OR THE PERSON SEEKING ADMISSION TO TRADING**

### **A.1 Name of the offeror**

Loggerhead Labs Limited

### **A.2 Legal Form**

British Virgin Islands Business Company

### **A.3 Registered Address**

Floor 4, Banco Popular Building

Road Town, Tortola VG1110

BRITISH VIRGIN ISLANDS (VG)

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

Not applicable.

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

2025-11-07

### **A.6 Legal Entity Identifier**

Not available.

### **A.7 Another Identifier Required Pursuant to Applicable National Law**

BVI COMPANY NUMBER: 2144479

### **A.8 Contact Telephone Number**

+13453280951

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

[exchanges@tari.com](mailto:exchanges@tari.com)

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

Five (5) business days

### **A.11 Parent Company**

Star Turtle Foundation, a Cayman foundation



Business address: Floor 4, Willow House, Cricket Square, Grand Cayman KY1-9010

#### **A.12 Members of the Management Body**

Star Turtle Foundation is the sole director of Loggerhead Labs Limited.

Star Turtle Foundation's board of directors consists of Edward Noyons, Campbell Law and Nicholas Talarico.

#### **A.13 Business Activity**

Loggerhead Labs is an operating company, focusing on contributing to the Tari ecosystem. Loggerhead Labs works closely with ecosystem partners to promote the growth and adoption of Tari-based solutions.

#### **A.14 Parent Company Business Activity**

Star Turtle Foundation is a Cayman foundation whose mission is to support, maintain, promote, operate, represent and advance the Tari protocol, and continue to develop technical improvements to the Tari protocol either directly, or indirectly through its subsidiaries, including Loggerhead Labs.

#### **A.15 Newly Established**

False

#### **A.16 Financial Condition for the past three Years**

## **1 THE FINANCIAL POSITION**      :ial position as of 31 October 2025.

<b>Table 1: Statement of financial position as of 31 October 2025</b>			
<b>In USD</b>	<b>31 Oct 25</b>	<b>31 Dec 24</b>	<b>Notes</b>
<b>Assets</b>			
Cash and cash equivalents	55,112	504,275	Note 1.1.1
Accounts receivable	879,725	260,427	Note 1.1.2
Other assets	1,958,345	2,346,300	Note 1.1.3
<b>Total assets</b>	<b>2,893,182</b>	<b>3,111,002</b>	
<b>Liabilities</b>			
Accounts payable	19,427	2,558	Note 1.1.4
Other liabilities	559,488	-	Note 1.1.5
Loan	1,043,060	812,560	Note 1.1.6
Interest accrued	92,020	23,509	Note 1.1.7
<b>Total liabilities</b>	<b>1,713,995</b>	<b>838,626</b>	
<b>Net assets</b>	<b>1,179,187</b>	<b>2,272,376</b>	



## **LIABILITIES**

### **1.1.4 ACCOUNTS PAYABLE**

The accounts payable balance represents outstanding legal fees incurred during September 2025.

### **1.1.5 OTHER LIABILITIES**

As mentioned in Note 1.1.3, the Company borrowed XTM tokens. The “Other liabilities” line item represents tokens payable, which are carried at cost.

### **1.1.6 LOAN**

On 16 August 2024, the Company entered into a revolving credit line agreement. Pursuant to the latest amendment dated 8 July 2025, the total facility limit is USD 1,250,000. As of the date of this report, the Company has drawn down USD 1,043,060.

### **1.1.7 INTEREST PAYABLE**

This line item represents interest accrued on the loan and on the borrowed XTM tokens, as discussed in Sections 1.1.6 and 1.1.5 above. Interest accrued is not yet payable.

## **ASSETS**

### **1.1.1 CASH AT BANK**

As of 31 October 2025, the Company held US dollars and stablecoins totaling USD 55,112, representing a decrease of USD 449,163 from 31 December 2024.

### **1.1.2 ACCOUNTS RECEIVABLE**

During the Period, the Company made payments to cover operating expenses of Group Entities. As a result, amounts receivable from Group Entities totaled USD 879,725 and USD 260,427 as of 31 October 2025 and 31 December 2024, respectively.

### **1.1.3 OTHER ASSETS**

The Company purchased Minotari (XTM) tokens in 2024 and borrowed additional XTM tokens in 2025. The tokens are classified as intangible assets and are carried at cost. Although XTM has been traded on centralized exchanges since 20 May 2025, the criteria for an active market have not been met due to the Company’s token position, market depth and liquidity. As at the date of this report, the market price per XTM was USD 0.005365, which is lower than the book value per token. However, management does not consider this decline to represent a permanent impairment. Therefore, no adjustment has been made to the carrying value of the tokens. The book value of the XTM tokens was USD 1,958,345 and USD 2,346,300 as of 31 October 2025 and 31 December 2024, respectively.



## 2 THE STATEMENT OF INCOME

Set out in table 2 is the income statement for the period from 1 January 2025 to 31 October 2025.

**Table 2: Income Statement for the Period**

<b>in USD</b>	<b>1 Jan 25 – 31 Oct 25</b>	<b>19 Mar 24 – 31 Dec 24</b>	<b>Notes</b>
<b>Revenue</b>			
OTC sales and other	189,287		Note 2.1.1
Total Inflows	189,287		
<b>Expenses</b>			
Operating expenses	(1,074,459)	(4,433)	Note 2.1.2
Other expenses	(136,868)		Note 2.1.3
Interest expense	(68,511)	(23,509)	Note 2.1.4
Total Outflows	(1,282,476)	(27,941)	
Net loss	(1,093,189)	(27,941)	
Contribution		2,300,317	Note 2.1.5
Total	(1,093,189)	2,272,376	

### REVENUE

#### 2.1.1 OTC SALES

The Company generated revenue of USD 189,287, primarily from the sale of tokens through over-the-counter transaction.

### EXPENSES

#### 2.1.2 OPERATING EXPENSES

Operating expenses comprise legal, professional, statutory, tax, exchanges, and intercompany costs.

#### 2.1.3 OTHER EXPENSES

Other expenses comprise the cost of tokens sold.

#### 2.1.4 INTEREST EXPENSE

Interest expense represents interest accrued on the revolving credit facility and on the borrowed XTM tokens.



## CONTRIBUTION

### 2.1.5 CONTRIBUTION

The Company received a contribution of USD 2,300,317 in 2024.

Set out in table 3 is the statement of cash flows for the period from 1 January 2025 to 31 October 2025.

<b>Table 3: Statement of Cash Flows for the Period</b>			
<b>in USD</b>	<b>1 Jan 25 – 31 Oct 25</b>	<b>19 Mar 24 – 31 Dec 24</b>	<b>Notes</b>
<b><u>Opening Cash Balance</u></b>			
Opening cash and equivalents	504,275	-	
<b><u>Inflows</u></b>			
Contribution		2,300,317	Note 2.1.5
OTC sales and other	189,287		Note 3.1.1
Loan received	230,500	812,560	Note 3.1.2
<b>Total Inflows</b>	<b>419,787</b>	<b>3,112,877</b>	
<b><u>Outflows</u></b>			
Operating expenses	(238,140)	(1,875)	Note 3.1.3
Purchase of tokens		(2,346,300)	Note 3.1.4
Intercompany	(630,810)	(260,427)	Note 3.1.5
<b>Net Outflows</b>	<b>(868,950)</b>	<b>(2,608,602)</b>	
<b>Net Cash Movement</b>	<b>(449,163)</b>	<b>504,275</b>	
<b><u>Closing Cash Balance</u></b>			
Closing cash and equivalents	55,112	504,275	

## INFLOWS

### 3.1.1 OTC SALES

The Company generated cash of USD 189,287, primarily from the sale of tokens through over-the-counter transaction.

### 3.1.2 LOAN RECEIVED

The Company drew down USD 230,500 pursuant to the loan agreement referenced in Note 1.1.6 above.

## OUTFLOWS

### 3.1.3 OPERATING EXPENSES

Operating expenses comprise legal, statutory, tax, exchanges, professional services, and intercompany costs.



#### 3.1.4 PURCHASE OF TOKENS

The Company purchased Minotari (XTM) tokens in 2024.

#### 3.1.5 INTERCOMPANY

The Company made payments to cover operating expenses of Group Entities.

See above.

### **PART B – INFORMATION ABOUT THE ISSUER<sup>1</sup>**

- B.1 Issuer different from offeror or person seeking admission to trading:** No.
- B.2 Name:** Not Applicable.
- B.3 Legal Form:** Not Applicable.
- 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.
- B.8 Another Identifier Required Pursuant to Applicable National Law:** Not Applicable.
- B.9 Parent Company:** Not Applicable.
- B.10 Members of the Management Body:** Not Applicable.
- B.11 Business Activity:** Not Applicable.
- B.12 Parent Company Business Activity:** Not Applicable.

### **PART C – INFORMATION ABOUT THE OPERATOR OF THE TRADING PLATFORM<sup>2</sup>**

- C.1 Name:** Not Applicable.
- C.2 Legal Form:** Not Applicable.

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<sup>1</sup> If different from the offeror or person seeking admission to trading.

<sup>2</sup> 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.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 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.

## **PART D – INFORMATION ABOUT THE CRYPTO-ASSET PROJECT**

### ***D.1* Crypto-Asset Project Name**

Tari

### ***D.2* Crypto-Assets Name**

Wrapped MinoTari

### ***D.3* Abbreviation**

wXTM

### ***D.4* Crypto-Asset Project Description**

Tari is an open-source Layer-1 blockchain protocol purpose-built for the creation, management, and exchange of digital assets. Conceived as a sidechain merge-mined with Monero, it combines the robustness of proof-of-work consensus with a privacy-by-design architecture.

The network's native token, XTM, powers transactions and network security. XTM can be mined by participants using accessible hardware, promoting a broad and inclusive ecosystem. The wXTM token is the wrapped version of XTM on Ethereum.



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

<b>Name</b>	<b>Role</b>	<b>Address</b>
Loggerhead Labs	Administration	Floor 4, Banco Popular Building, Road Town, Tortola VG1110, British Virgin Islands
Tari Labs, LLC	Development	6339 Charlotte Pike #508 Nashville, TN 37209
Morgan, Lewis & Bockius (Paris Office)	Legal	47 Avenue Hoche, 75008 Paris, France

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

True.

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

Tari Universe is a revolutionary application that combines a Tari miner, wallet, and application launcher in a single interface. It serves as the primary gateway to the Tari ecosystem, designed to make participation accessible to anyone. Tari mining creates significant distribution for the Tari network by enabling decentralized token generation and broad community involvement in network security. Anyone can download Tari Universe and earn XTM tokens by mining on their existing laptop or desktop, without the need for specialized hardware, thus promoting inclusivity and fair access to token issuance.

In addition to mining, Tari Universe provides users with a secure and intuitive digital wallet to manage, send, and receive XTM, as well as to monitor mining performance in real time. The application also enables seamless interoperability between ecosystems, allowing users to wrap their XTM tokens to create wXTM tokens on Ethereum, which can be used to provide liquidity on decentralized exchanges or to participate in DeFi applications.

Over time, Tari Universe is expected to expand its functionality to support additional use cases within the Tari protocol, including the issuance and management of digital assets such as NFTs, tickets, and loyalty tokens. By integrating mining, asset management, and cross-chain functionality, Tari Universe represents a unified and user-friendly platform designed to drive adoption and utility across the Tari ecosystem.



## D.8 Plans for the Token

### Past achievements (2018 → 2025)

- 2018 – Project founded.
- 2019–2021 – Protocol design + RFCs. Core design published around a Mimblewimble-based base layer with a separate, high-throughput digital assets layer. Key extensions include TariScript, Stealth Addresses, Covenants, Atomic Swaps, and time-related transactions.
- 2021 – Mining stack matures. Merge-mining proxy and standalone SHA3x miner; dual-PoW architecture formalized.
- 2022 – New testnet. Reset and upgrade of public testnet deployed.
- 2024 – Tari Universe desktop miner debuts. Consumer-friendly cross-platform app makes mining approachable.
- 2025-03-06– Mainnet launch. Tari mainnet goes live with the Tari Universe desktop miner and a hybrid PoW. Emission targets 21B XTM with ~27.8-year decay then a perpetual 1% tail emission.

### Upcoming milestones

#### *Near-term (0–3 months)*

- Mining distribution & pool growth: Expand pool options and docs; keep supporting P2Pool paths for merge-miners to discover Tari blocks.
- Mainnet docs & SDK polish: Ship developer-ready packs around the dual-layer model (XTM burn → XTR).
- Short-/mid-term (3–9 months)
- Layer-2 (Digital Assets Network / “Ootle”) public beta: Enable XTM→XTR burn in wallets, validator registration, and first-party tapp examples.
- Validator economics + fee-burn parameters: Finalize the partial burn and validator-fee split on L2 per tokenomics guidance; communicate expected throughput/latency targets.
- Medium-term (9–18 months)
- Asset-layer features to GA: Graduate asset registration, checkpoints, and validator-node flows from RFCs to production, along with wallets/explorer visibility for XTR balances and burns.
- Deeper exchange connectivity: Broaden CEX/DEX support for XTM, with education around the XTM↔XTR relationship and L2 fee-burn dynamics.

#### *Long-term (18+ months)*

- Throughput scaling on L2: Target sharded/BFT-style validator upgrades and long-horizon privacy enhancements as usage grows, while maintaining L1 privacy via Mimblewimble + TariScript.



- Sustainable incentives: Monitor tail-emission onset mechanics and publish periodic economic reviews (issuance vs. XTR burns vs. user growth).

## **D.9 Resource Allocation**

Loggerhead Labs is responsible for managing its financial resources and operational budget.

### **1. Use of Funds**

Since its registration, the Loggerhead Labs has allocated resources across the following categories:

- Operational Expenses: Covering infrastructure costs, legal and compliance efforts, and personnel necessary to support the technical and strategic goals of the Tari ecosystem.
- Ecosystem Incentives: Allocation of XTM tokens to support operator participation, and miner reward mechanisms.
- Treasury Management: Holding a mix of XTM tokens, wXTM tokens, and stablecoins, ensuring financial flexibility and long-term sustainability.

### **2. Budgeting & Financial Planning**

Loggerhead Labs operates with a structured budget and financial strategy to ensure its treasury is managed prudently. The treasury is not actively seeking external funding, and future resource allocation remains subject to market conditions and community needs.

### **3. Financial Controls & Oversight**

To ensure transparency and accountability:

- Loggerhead Labs adheres to BVI financial reporting requirements.
- The treasury strategy prioritizes long-term sustainability over short-term capital deployment.
- Any major financial decisions, such as additional funding rounds or treasury utilization, follow internal governance and compliance reviews.

All resource allocation decisions are made to support the core mission of Loggerhead Labs: to promote the growth and adoption of Tari-based solutions.

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

The funds collected will primarily be used to support the long-term sustainability and operational needs of Loggerhead Labs. Beyond the allocations outlined in D.9, a significant portion will be directed towards exchange listing fees, market maker engagement to ensure liquidity, and legal and compliance expenses related to the token sale. Additionally, funds will support ecosystem growth initiatives to promote the growth and adoption of Tari-based solutions.



## **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**

OTPC

### **E.2 Reasons for Public Offer or Admission to trading**

The reason of this public offer is to facilitate access to the wXTM token on the European market by allowing European Union users to hold wXTM through various CASPs.

### **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**

USD.

### **E.10 Subscription fee**

Not Applicable.

### **E.11 Offer Price Determination Method**

Not Applicable.

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



The initial supply of XTM is 21,000,000,000 tokens, with a tail emission of 1% per year. The maximum supply of the wXTM token is equivalent to the total supply of XTM.

**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 phase**

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**

To hold the wXTM token, users have different options available:

- Centralised exchanges: Users can buy and sell wXTM through a platform that listed the crypto-asset;
- Decentralized Exchange: Alternatively, users can acquire wXTM tokens on decentralised markets. By searching for the token's name or address, they can purchase and store it in a self-hosted wallet that is compatible with the Ethereum network.

**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**

The wXTM token will be listed on several crypto-assets trading platforms. The list of trading platforms where wXTM is traded is subject to change. We recommend that you consult the CoinmarketCap or Coingecko websites, which regularly update the list of trading platforms available in the event of wXTM being listed on a new trading platform.

**E.34 Trading Platforms Market Identifier Code (MIC)**

Not available.



**E.35 Trading Platforms Access**

You can consult the up-to-date list of trading platforms where the wXTM token is listed (see section E.33) and access their website via the instructions given on the same websites.

**E.36 Involved costs**

Not Applicable.

**E.37 Offer Expenses**

Not Applicable.

**E.38 Conflicts of Interest**

Not Applicable.

**E.39 Applicable law**

British Virgin Islands.

**E.40 Competent court**

British Virgin Islands

**PART F – INFORMATION ABOUT THE CRYPTO-ASSETS**

**F.1 Crypto-Asset Type**

Utility token

**F.2 Crypto-Asset Functionality**

See D.8.

**F.3 Planned Application of Functionalities**

See D.8. Timelines subject to change and development times.

**F.4 Type of white paper**

OTHR

**F.5 The type of submission**

NEWT



**F.6 Crypto-Asset Characteristics**

Ethereum ERC-20

Fixed Supply of 150,000,000 wXTM tokens.

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

Tari

**F.8 Website of the issuer**

<https://tari.com/>

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

2026-02-20

**F.10 Publication date**

2026-02-20

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

None

**F.12 Identifier of operator of the trading platform**

Not Applicable.

**F.13 Language or languages of the White Paper**

English.

**F.14 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.15 Digital Token Identifier, where available**

Not Available.

**F.16 Voluntary data flag**

False.

**F.17 Personal data flag**

False.



**F.18 LEI eligibility**

True.

**F.19 Home Member State**

France.

**F.20 Host Member States**

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

## **PART G – INFORMATION ON THE RIGHTS AND OBLIGATIONS ATTACHED TO THE CRYPTO-ASSETS**

**G.1 Purchaser Rights and Obligations**

By acquiring wXTM tokens, purchasers acknowledge and accept the rights and obligations described below. The wXTM token is a utility token designed to facilitate participation in the Tari ecosystem and related network activities. It does not represent ownership, equity, or governance rights in any legal entity or protocol organization associated with the Tari project.

### **1. Rights of wXTM holders**

#### **1.1 Utility rights**

- Access and use within the Tari Ecosystem: wXTM tokens enable holders to engage with applications and services built on or interoperable with the Tari protocol. Holders may use wXTM for network participation, liquidity provision, or access to ecosystem functionalities made available through the Tari Universe application and other connected platforms.
- Cross-chain interoperability: wXTM serves as the wrapped version of the native XTM token, allowing users to interact with decentralized finance (DeFi) applications on Ethereum and other supported networks.
- Participation in network activity: Token holders may contribute to the growth and liquidity of the ecosystem by staking and/or providing liquidity on supported exchanges, or participating in integrations that use wXTM as a transactional or reward medium.

#### **1.2 No governance rights**

Holding wXTM does not grant voting rights, governance participation, equity, or any claim to profits, revenues, or decision-making processes within Loggerhead Labs, the Tari protocol, or any affiliated entity.



### **1.3 Ownership right over the token**

Holders acquire full ownership of the wXTM tokens they purchase, representing a property right over the digital asset itself. This ownership includes the ability to hold, transfer, exchange, or dispose of the tokens at their discretion, subject to applicable laws and the technical features of the underlying blockchain.

## **2. Obligations of wXTM token holders**

- Compliance with the White Paper and applicable laws: Holders undertake to acquire, hold, and use wXTM tokens strictly in accordance with the provisions of this White Paper and all applicable laws and regulations, including those relating to anti-money laundering (AML), counter-terrorist financing (CTF), and financial crime prevention. Holders agree to remain informed of any updates, amendments, or regulatory changes that may affect their rights or obligations in connection with the use of wXTM tokens.
- Age and eligibility requirement: Holders confirm that they are at least eighteen (18) years of age and have full legal capacity to acquire and hold digital assets. They further declare that they are acting on their own behalf and not as representatives, nominees, or custodians for minors or any persons subject to legal restrictions on token ownership.
- Prohibited Uses: wXTM tokens shall not be used for any unlawful or prohibited purpose, including but not limited to money laundering, fraud, market manipulation, terrorist financing, or other illegal activities under applicable law. Holders are solely responsible for ensuring that their use of the tokens complies with all relevant legal and regulatory frameworks in their jurisdiction.
- Consequences of Non-Compliance: Any breach of these obligations may result in the suspension or limitation of access to certain network functionalities or associated services. In cases of serious or deliberate violation, relevant regulatory or governmental authorities may be notified, as permitted or required by applicable law.

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

Holders exercise their utility rights by accessing and using compatible applications such as the Tari Universe interface, participating in liquidity pools, or engaging with decentralized finance (DeFi) platforms that support wXTM. Ownership rights are exercised by maintaining control of the private keys associated with a self-custody wallet or through verified accounts on licensed exchanges, enabling holders to transfer, exchange, or redeem tokens in accordance with network protocols.

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

The rights and obligations of wXTM token holders may be modified under certain conditions as determined by the Loggerhead Labs in accordance with Loggerhead Labs governance and operational needs. Any changes will be communicated to purchasers in a transparent manner.

### **G.4 Future Public Offers**

Not Applicable.



#### **G.5 Issuer Retained Crypto-Assets**

Not applicable.

#### **G.6 Utility Token Classification**

True

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

Tari Universe is a revolutionary application that combines a Tari miner, wallet, and application launcher in a single interface. Tari mining creates significant distribution for the Tari ecosystem. Anyone can download Tari Universe and earn XTM tokens by mining on their existing laptop or desktop. Tari Universe also enables users to wrap their XTM tokens to create wXTM tokens on Ethereum.

#### **G.8 Utility Tokens Redemption**

No redemptions are possible.

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

False

#### **G.10 Crypto-Assets purchase or sale modalities**

Not Applicable.

#### **G.11 Crypto-Assets Transfer Restrictions**

The wXTM token may be subject to certain transfer restrictions to comply with legal, regulatory, and operational requirements. These restrictions ensure that the token remains compliant with Regulation (EU) 2023/1114 and any relevant jurisdictional laws.

##### **1. Jurisdictional Restrictions:**

wXTM tokens cannot be transferred or sold to individuals or entities located in prohibited jurisdictions, as defined by the trading platform. This includes jurisdictions under sanctions or areas where the transfer or trading of crypto-assets may be restricted due to legal or regulatory requirements (e.g., the Russia, China).

##### **2. AML/KYC Compliance:**

Transfers of wXTM tokens may be restricted if the purchaser's identity cannot be verified through the required AML/KYC procedures.

Transactions involving unverified users may be blocked or reversed to maintain compliance with anti-money laundering and counter-terrorism financing regulations.

##### **3. Token Lock-up Periods:**



Certain wXTM tokens may be subject to lock-up periods or vesting schedules as part of the wXTM token sale terms. During these periods, wXTM tokens cannot be transferred or traded. These restrictions will be clearly communicated to purchasers prior to the sale.

#### **4. Secondary Market Restrictions:**

wXTM tokens may face restrictions on secondary market trading depending on the platform and applicable regulations. Loggerhead Labs, in coordination with the platform, may impose temporary or permanent transfer restrictions to ensure compliance with regulatory frameworks and protect the integrity of the market.

These transfer restrictions are designed to protect both the purchasers and the broader ecosystem, ensuring that the wXTM token remains compliant with legal obligations and functions securely within its intended use.

##### **G.12 Supply Adjustment Protocols**

False.

##### **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**

British Virgin Islands

##### **G.19 Competent Court**

British Virgin Islands



## **PART H – INFORMATION ON THE UNDERLYING TECHNOLOGY**

### **H.1 Distributed ledger technology**

Distributed Ledger Technology ("DLT") refers to a digital system for recording transactions in which the transactions and their details are recorded in multiple places at the same time. Unlike traditional databases, distributed ledgers have no central data store or administration functionality. Instead, the ledger is decentralized, and consensus on the transactions is achieved through a process that involves multiple nodes, each maintaining its own copy of the ledger. The benefits of DLT include increased transparency, enhanced security, improved traceability, and greater efficiency of transactions.

One of the most well-known forms of DLT is a blockchain, which is a subtype characterized by its use of a chain of blocks to manage the ledger. Each block contains a list of transactions and is cryptographically linked to the previous block, ensuring that the data once recorded, cannot be altered retroactively without altering all subsequent blocks.

Blockchains also introduce features like smart contracts to automate and enforce pre-defined transactions and logic through code, thereby reducing the need for intermediaries and further boosting efficiency.

Blockchains offer significant benefits for consumer choice and interoperability as well. Consumers have the advantage of accessing the open-source code of these blockchains, allowing them to review, verify, and select the platform that best suits their needs. This transparency empowers users to make more informed decisions. Additionally, the open nature of blockchains promotes interoperability, meaning that any type of application that follows the same technical standards can integrate with the blockchain without anyone's permission. This flexibility enables a wide range of applications to work seamlessly together, fostering innovation and making it easier for different services to connect and interact within the blockchain ecosystem.

Loggerhead Labs issues wXTM tokens on the Ethereum blockchains in order to leverage these benefits.

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

Loggerhead Labs will support wXTM tokens on Ethereum.

### **H.3 Technology Used**

The wXTM token uses the existing ERC-20 fungible token standard on Ethereum.



#### **H.4 Consensus Mechanism**

Blockchains rely on consensus mechanisms to ensure their decentralized network of nodes can reach agreement around transaction validity and ordering. Ethereum relies on Proof-of-Stake consensus, which requires that validators stake the native token (e.g. ETH) as collateral in order to qualify as a validator. Validators are selected for consensus based on the proportion of tokens they have staked, and in some cases can lose some of the staked token if they have been shown to sign invalid transactions.

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

The Ethereum blockchain on which the wXTM token is issued has developed its own incentive mechanisms and request fees to realise transactions. Please refer to the Ethereum website for more details on the mechanisms in place.

Loggerhead Labs does not take additional fees.

#### **H.6 Use of Distributed Ledger Technology**

False. DLT is not operated by the issuer or a third-party acting on the issuer's behalf

#### **H.7 DLT Functionality Description**

Not applicable. See part H.6.

#### **H.8 Audit**

True.

#### **H.9 Audit outcome**

An independent security audit of the wXTM Bridge and associated Omnichain Fungible Token (OFT) contracts was conducted by Coinspect in May 2025.



The assessment covered the contracts hosted at tari-project/wxtm-bridge-contracts, including wXTM.sol, wXTMBridge.sol, and wXTMController.sol.

Coinspect’s review identified two medium-risk issues and three informational findings. All issues were fully remediated prior to deployment. Key fixes included increasing confirmation requirements for cross-chain transfers, enforcing safe ERC-20 transfer handling, and removing unused contract code. The final report verified that all identified vulnerabilities were resolved and that no high-risk issues remained.

All audit findings were reviewed, validated, and remediated prior to launch.

The complete source code for the wXTM contracts is publicly available and open-sourced to enable independent verification and ongoing community review. Responsible disclosure of any newly identified vulnerabilities can be coordinated through the project’s security contact.

## **PART I – INFORMATION ON RISKS**

### **I.1 Offer-Related Risks**

- **Regulatory Limitations:** The public offering of wXTM tokens is subject to varying regulatory regimes across different jurisdictions. In certain regions, local regulatory requirements may restrict or prohibit the acquisition and holding of wXTM tokens by potential investors, thereby limiting market participation and accessibility.
- **Market Access Risks:** wXTM tokens currently listed on various trading platforms may be subject to delisting due to evolving regulatory directives or strategic business decisions made by the platforms. Such actions could adversely affect the token’s liquidity and, in turn, impair investors’ ability to execute timely trades.

### **I.2 Issuer-Related Risks**

- **Financial Risks:** Loggerhead Labs, as the issuer and technical facilitator of the wXTM token, is exposed to financial uncertainties, including challenges related to capital management, liquidity, and operational funding. Unforeseen financial constraints could impair Loggerhead Labs’ capacity to maintain technical infrastructure, support cross-chain functionality, or contribute to the continued development of the Tari ecosystem. Sustained financial instability may adversely affect the long-term value and usability of wXTM.
- **Business Continuity Risks:** The continuity of Loggerhead Labs’ business operations could be affected by adverse market conditions, macroeconomic downturns, or volatility in the cryptocurrency sector. Significant disruptions — such as the failure of critical service providers, infrastructure outages, or cybersecurity incidents — could undermine the company’s ability to operate effectively and support the ongoing maintenance of wXTM-related services.



- **Legal and Regulatory Risks:** Loggerhead Labs operates within a dynamic and evolving regulatory environment for digital assets. Changes in applicable laws or interpretations thereof, or non-compliance with existing obligations, could materially impact the company’s ability to facilitate wrapping and unwrapping mechanisms between XTM and wXTM, or to support trading and liquidity activities. Regulatory actions may include fines, restrictions, or enforcement measures that could delay or limit the project’s operations and token functionality.
- **Third-Party Risks:** The issuance and maintenance of wXTM depend on multiple third-party components, including the Ethereum blockchain, smart contract infrastructure, custodial bridges, and exchange platforms. Failures, vulnerabilities, or non-compliance by these external entities could disrupt the convertibility between XTM and wXTM or limit token liquidity on secondary markets. Loggerhead Labs does not control these external systems and cannot guarantee their continued availability or security.
- **Operational Risks:** Loggerhead Labs is subject to operational risks arising from potential technical failures, smart contract vulnerabilities, cyber-attacks, or other external disruptions. Such incidents could compromise the integrity or functionality of wXTM smart contracts, hinder the wrapping and unwrapping processes, or temporarily interrupt user access. Any prolonged operational disruption could erode user confidence and negatively affect the broader Tari ecosystem.

### I.3 Crypto-Assets-related Risks

- **Volatility Risk:** The wXTM token is subject to substantial price volatility, reflecting the inherent instability of cryptocurrency markets and the speculative nature of digital asset trading. Price fluctuations may result from global macroeconomic conditions, regulatory developments, variations in token liquidity, or market sentiment surrounding both the Tari protocol and the broader crypto ecosystem. Because wXTM derives its value from the underlying XTM token, changes in XTM’s market price directly affect wXTM’s valuation. Limited market depth and variable exchange liquidity may amplify such volatility, potentially resulting in significant financial losses for holders.
- **Fraud and Scams Risk:** As a crypto-asset circulating across decentralized networks, wXTM is vulnerable to fraudulent activities and social engineering schemes. Malicious actors may attempt to impersonate legitimate Tari or Loggerhead Labs channels through counterfeit websites, wallet interfaces, or social media communications designed to extract private keys, seed phrases, or login credentials. Similarly, fake “airdrops,” unauthorized wrapping or unwrapping services, and deceptive investment opportunities may be used to misappropriate funds or tokens. Investors are strongly advised to interact only with verified platforms, the official Tari Universe application, or recognized exchanges such as Kraken, and to remain vigilant against phishing or impersonation attempts.
- **Market Abuse Risk:** The decentralized and largely unregulated nature of digital asset markets exposes wXTM to potential market manipulation. Activities such as pump-and-dump schemes, coordinated trading, wash trading, or other manipulative behaviours may artificially influence the token’s market price, leading to distorted valuations unrelated to its intrinsic or functional value. These practices can create misleading price signals and result in unexpected financial exposure for investors.
- **Smart Contract and Technical Risk:** As a wrapped version of XTM operating on the Ethereum blockchain, wXTM depends on the reliability and security of smart contracts



facilitating the wrapping and unwrapping process. Any vulnerabilities, bugs, or exploits within these smart contracts could lead to the loss, freezing, or misallocation of tokens. Technical failures or disruptions on the Ethereum or Tari networks may also impact the convertibility and functionality of wXTM.

- **Tax and Legal Risk:** The regulatory and tax treatment of crypto-assets, including wrapped tokens such as wXTM, remains uncertain and varies significantly across jurisdictions. Changes in applicable laws, tax classifications, or accounting standards may affect the legal status, exchangeability, or reporting obligations associated with wXTM. Holders are individually responsible for assessing and complying with all relevant tax and legal requirements in their country of residence. Failure to do so may result in legal liabilities, financial penalties, or other adverse consequences.

#### I.4 Project Implementation-Related Risks

- **Development Delay Risk:** The timely implementation and continuous improvement of the Tari protocol and the wXTM ecosystem depend on the successful achievement of key technical and operational milestones. Potential delays may arise from unforeseen technical challenges, dependencies on third-party infrastructure (such as Ethereum bridges or custodial services), or resource limitations affecting Loggerhead Labs and its development partners. Any significant delay in protocol upgrades, wallet integration, or cross-chain functionalities could hinder the project's progress and delay the full realization of wXTM's intended utility.
- **Risk of Technological Obsolescence and Innovation Gaps:** The blockchain industry evolves at a rapid pace, with constant advances in scalability, privacy, and interoperability solutions. If the Tari project fails to adapt to emerging innovations—such as new smart contract standards, zero-knowledge technologies, or improved cross-chain protocols—the ecosystem may face obsolescence risks. A lag in technological advancement or failure to align with user expectations could undermine the competitiveness and long-term sustainability of the Tari and wXTM ecosystem.
- **Interoperability Risk:** The functionality of wXTM is inherently dependent on its interoperability between the Tari and Ethereum networks. Any limitation, malfunction, or incompatibility in the bridge infrastructure, smart contract interfaces, or network synchronization mechanisms could restrict the token's usability. Disruptions to cross-chain conversion (wrapping/unwrapping), or to integrations with DeFi protocols, may reduce liquidity and diminish the token's perceived utility across ecosystems.
- **User Dependency Risk:** The success and resilience of the Tari ecosystem and wXTM depend on the active participation of users, developers, and liquidity providers. A decline in user engagement—whether caused by unfavorable market conditions, reduced incentives, competing protocols, or reputational challenges—could weaken network effects and limit overall adoption. Sustained community activity and ecosystem participation are therefore critical to the long-term viability and functionality of the wXTM project.

#### I.5 Technology-Related Risks

- **Cybersecurity Threats on Trading Platforms:** WXTM tokens, akin to other digital assets, are susceptible to cybersecurity risks on trading platforms where they are listed. These platforms may experience sophisticated cyber-attacks, operational disruptions, or sudden surges in activity, which could lead to unauthorized access, data breaches, or financial losses.



While robust security protocols are implemented, it is not possible to completely eliminate these cybersecurity risks.

- **Network Stability Risks on Ethereum:** The WXTM token is deployed on the Ethereum network. Although this blockchain is well-established and widely used, it can encounter issues such as network congestion and performance degradation during periods of heightened transaction volume. Such conditions may result in slower transaction processing times or temporary outages, potentially impacting overall network stability and the timely execution of transactions.
- **Service Disruptions and Performance Risks:** Ethereum is subject to occasional service disruptions due to technical upgrades, network congestion, or unforeseen technical issues. These disruptions may lead to delays in transaction finality, reduced liquidity, and overall performance challenges that could affect the seamless operation of the WXTM token ecosystem.
- **Smart Contract Vulnerabilities:** The operational framework of the WXTM token relies on smart contracts to facilitate transactions, staking, and governance functions. Despite thorough audits and ongoing security measures, these smart contracts may still harbour coding vulnerabilities or errors. Exploitation of such vulnerabilities by malicious actors could result in compromised functionality or the misappropriation of funds.
- **Irreversibility of Crypto-Asset Transactions:** Transactions involving WXTM tokens are inherently irreversible. Once a transaction is confirmed on the blockchain, it cannot be altered or undone. Consequently, any mistake, such as an erroneous recipient address or fraudulent activity, could lead to a permanent loss of funds. This irrevocability emphasizes the importance of meticulous transaction management by all participants.

## I.6 Unanticipated risks

- Digital assets such as the WXTM are a new and untested technology. In addition to the risks included herein there are potentially other unanticipated risks associated with the purchase, possession, and use of WXTM tokens. Such risks may further materialize as unanticipated variations or combinations of the risks discussed herein.

## I.7 Mitigation measures

Loggerhead Labs has implemented a series of measures aimed at mitigating the various risks associated with the wXTM token and its broader ecosystem. These measures are designed to enhance security, transparency, and operational resilience across both the Tari and Ethereum networks.

- **Smart Contract Audits:** To minimize technological and operational risks, Loggerhead Labs reviews the reports of reputable third-party security firms that conduct comprehensive audits of the smart contracts governing the wrapping and unwrapping of wXTM. These audits are intended to identify and remediate potential vulnerabilities prior to deployment, ensuring the



reliability and integrity of the smart contract infrastructure. Continuous monitoring and periodic code reviews are also performed to maintain ongoing security compliance.

- **Transparent Communication:** Loggerhead Labs is committed to maintaining full transparency regarding the development, functionality, and risks associated with wXTM. Official communication channels — including the Tari website, blog, and documentation portals — provide accurate and timely information about network updates, token operations, and ecosystem integrations. This approach aims to prevent misinformation, foster informed participation, and promote accountability within the community.
- **Open-Source Development and Community Oversight:** In line with the principles of decentralisation and trust, the underlying codebase and smart contract implementations related to wXTM are open source, enabling public review and verification by independent developers and auditors. Community feedback mechanisms and issue-tracking systems are maintained to ensure rapid identification and resolution of potential technical or security issues.
- **Custodial and Exchange Security Standards:** Loggerhead Labs collaborates only with reputable, regulated exchanges and infrastructure partners that adhere to industry-standard security practices, including encryption, cold storage, and multi-signature wallet mechanisms. This alignment with established platforms helps reduce counterparty and custody risks for token holders.

Notwithstanding the implementation of these mitigation measures, Loggerhead Labs cannot guarantee the complete elimination of all risks. By acquiring and holding wXTM tokens, purchasers expressly acknowledge and accept that residual risks — including technical, operational, and market-related uncertainties — may persist. The measures described above are intended to mitigate, but not eliminate, such risks in their entirety.



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

### **Context and Methodology**

In accordance with the Regulatory Technical Standards (RTS) proposed by the European Securities and Markets Authority (ESMA) under MiCA Article 66(6) and Commission Delegated Regulation (EU) 2024/1622, the environmental footprint of the wXTM token has been assessed using the following core indicators:

**Energy Needs:** Total energy consumed in the validation of transactions and maintenance of the underlying distributed ledger (Ethereum).

**Carbon Emissions:** Share of energy consumption derived from renewable and non-renewable sources, expressed as carbon dioxide equivalent (CO<sub>2e</sub>).

**Electronic Waste (WEEE):** Quantified generation of electronic waste associated with validator node hardware.

The wXTM token is an ERC-20 asset deployed on the Ethereum blockchain, which transitioned to a Proof-of-Stake (PoS) consensus mechanism in September 2022 (the "Merge"). As a result, Ethereum's energy and carbon intensity have decreased by approximately 99.95% compared to its previous Proof-of-Work configuration.

The environmental impact of wXTM is therefore primarily determined by its proportional usage of Ethereum's PoS infrastructure, based on the number of wXTM transactions relative to the total Ethereum network activity.

### **2. Baseline Environmental Metrics for Ethereum (PoS)**

<b>Metric</b>	<b>Estimate</b>	<b>Source</b>
Annual electricity consumption	0.0026 – 0.00482 TWh ( $\approx$ 2,600 – 4,820 MWh)	Ethereum Foundation; CCRI
Annual carbon footprint	870 – 1,498.95 t CO <sub>2e</sub>	Ethereum Foundation; CCRI



Energy per transaction (indicative)	~0.02 kWh / tx	Digiconomist (2024)
Carbon per transaction (indicative)	~0.01 kg CO <sub>2e</sub> / tx	Digiconomist (2024)
Renewable energy share	~38-42% (estimated)	Ethereum Validator Surveys; CCRI
Reduction vs PoW	≈ 99.95% lower energy use	Ethereum Foundation

*Disclaimer: Per-transaction intensity figures are indicative only. Validator energy use in PoS systems is block- and time-driven, not strictly proportional to transaction count.*

### 3. wXTM Network Activity and Market Scope

The wXTM token represents native XTM (from the Tari Layer 1 blockchain) on Ethereum in a 1:1 ratio. Based on on-chain data for the 12-month period ending October 31, 2024, wXTM records an average of approximately 300 transactions per day across all markets, combining trading, transfers, and liquidity events.

Assuming this rate remains constant, the indicative annualized transaction volume is approximately 109,000 transactions per year. This figure provides the basis for the environmental assessment below.

### 4. Estimated Environmental Footprint of wXTM

Using Ethereum's per-transaction averages and network-wide renewable energy estimates:

Indicator	Formula	Result (annualized)	Equivalent Share of Ethereum Network
Annual Energy Consumption	109,000 tx × 0.02 kWh	≈ 2,180 kWh (≈ 2.18 MWh)	~0.045% of network total



Energy from Renewable Sources	2,180 kWh × 40%	≈ 872 kWh	—
Energy from Non-Renewable Sources	2,180 kWh × 60%	≈ 1,308 kWh	—
Energy per Transaction	0.02 kWh / tx	0.02 kWh / tx	—
Annual CO <sub>2</sub> Emissions	109,000 tx × 0.01 kg	≈ 1,090 kg CO <sub>2e</sub> (≈ 1.09 t)	~0.07% of network total
CO <sub>2</sub> per Transaction	0.01 kg / tx	0.01 kg CO <sub>2e</sub> / tx	—

## 5. Interpretation and Comparative Perspective

Even if wXTM transaction volume were to increase ten-fold (≈ 1 million tx/year), the resulting footprint would remain modest—around 20 MWh of energy and 10 t CO<sub>2e</sub> per year, equivalent to the annual electricity usage of roughly two average EU households.

### Comparative Context:

- **vs. Bitcoin (PoW):** A single Bitcoin transaction consumes approximately 700 kWh, roughly 35,000 times more energy than a wXTM transaction on Ethereum PoS.
- **vs. Visa Network:** While Visa reports lower per-transaction energy (≈0.001 kWh/tx), the comparison is not direct as blockchain transactions provide different functionality including settlement finality and programmability. wXTM's footprint remains 20x lower than legacy PoW cryptocurrencies.
- **vs. Traditional Banking:** A single bank branch typically consumes 150-200 MWh annually—approximately 70-90 times wXTM's total annual footprint.

These results underscore that, as an ERC-20 token on a PoS chain, wXTM's environmental footprint is negligible relative to traditional PoW assets and comparable to modern digital payment infrastructure.

## 6. Electronic Waste (WEEE) Considerations

Because Ethereum's PoS validation requires minimal hardware (commodity servers or cloud nodes), electronic waste generation is orders of magnitude lower than in PoW networks. Applying ESMA's



indicative weighting methodology, the wXTM-related share of Ethereum validator hardware corresponds to less than 0.01% of the network's total WEEE output, translating to a negligible fraction of one device equivalent per year.

Major Ethereum validators report recycling rates exceeding 80%, consistent with EU WEEE Directive 2012/19/EU standards. Geographic distribution of validators shows concentration in regions with established e-waste management infrastructure (EU, North America, and developed Asia-Pacific markets).

## 7. Consensus Mechanism Participation

The issuer of wXTM does not directly operate Ethereum validator nodes. All validation is performed by the decentralized Ethereum network. As such, there is no direct validator energy consumption attributable to the issuer's operations beyond standard network participation through transaction submission.

## 8. Summary Table

Metric	Value	Basis / Comment
Observation Period	12 months ending Oct 31, 2024	Trailing annual average
Annual Transactions	~109,000	Extrapolated from $\approx 300$ tx/day
Annual Energy Consumption	~2.18 MWh	$0.02 \text{ kWh} \times 109\text{k}$
Renewable Energy Share	~40% ( $\approx 872 \text{ kWh}$ )	Based on Ethereum network average
Non-Renewable Energy Share	~60% ( $\approx 1,308 \text{ kWh}$ )	Based on Ethereum network average



Energy per Transaction	0.02 kWh	Indicative PoS figure
Annual CO <sub>2</sub> Emissions	~1.09 t CO <sub>2</sub> e	0.01 kg × 109k
CO <sub>2</sub> per Transaction	0.01 kg	Indicative PoS figure
Share of Ethereum Network	< 0.1% for energy and carbon	Relative to CCRI totals
WEEE Impact	< 0.01% of network hardware	Negligible

## 9. Update Frequency and Review Commitment

This environmental disclosure will be reviewed and updated annually, or sooner if:

- wXTM transaction volume changes by more than 50% on a sustained basis;
- Material changes occur to Ethereum's consensus mechanism or energy profile;
- Updated regulatory guidance is issued by ESMA or national competent authorities;
- Third-party audits or verification studies provide materially different estimates.

The next scheduled review is planned for Q3 2026.

## 10. Third-Party Verification

The methodologies and baseline data sources used in this assessment (Ethereum Foundation, CCRI, Digiconomist) are publicly available and widely recognized within the crypto-asset industry. While this initial disclosure has not been subject to independent third-party audit, the issuer commits to obtaining verification from a qualified environmental auditor or certification body if wXTM's market capitalization or transaction volume increases materially, or if required by competent authorities.

## 11. Disclaimer and Limitations

These calculations are illustrative and based on best-available estimates. They rely on published estimates for Ethereum's post-Merge performance and on observed wXTM transaction counts from public blockchain explorers and market data. Actual values may vary over time due to changes in:

- Network efficiency and validator hardware improvements;



- Transaction throughput and batching mechanisms;
- Validator geographic distribution and local energy grid composition;
- Renewable energy adoption rates among validator operators;
- Methodological refinements in crypto-asset environmental accounting.

Results should be interpreted as order-of-magnitude indicators consistent with MiCA's environmental disclosure requirements under Article 66(6) and applicable RTS. This disclosure does not constitute investment advice, environmental certification, or a guarantee of future performance.

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