

CRYPTO-ASSET WHITE PAPER

PingPong

PNGP Utility Token

Grid Trading Protocol on BASE (Coinbase L2)

White Paper Details	
Issuer	PingPong Trading DApp (to be incorporated)
Token Name	PingPong
Token Ticker	PNGP
Token Standard	ERC-20 (BASE Network — Coinbase L2)
Max Supply	100,000,000 PNGP
Launch Price	EUR 0.10 per PNGP
Fully Diluted Valuation	EUR 10,000,000
Jurisdiction	Netherlands (EU)
Regulatory Framework	EU Regulation 2023/1114 (MiCA)
Token Category	Utility Token (MiCA Art. 4)
White Paper Version	1.0 — Draft for Legal Review
Date	15 March 2026

IMPORTANT NOTICE

This white paper has been prepared in accordance with Article 5 of Regulation (EU) 2023/1114 (MiCA). PNGP is a utility token. It is not a security, financial instrument, investment product or e-money token. This document does not constitute investment advice. Acquiring PNGP involves risk. Not available to persons residing in the United States of America.

1. Introduction

PingPong is a non-custodial, decentralised grid trading application built on the BASE network (Coinbase Layer 2). PingPong enables retail and professional traders to deploy automated grid trading strategies across major cryptocurrency exchanges including Bitvavo and Coinbase Advanced Trade, with planned support for Binance and OKX.

The PNGP token is the native utility token of the PingPong ecosystem. It grants holders access to the Premium tier of the PingPong platform, enables discounted trading fee payments, and provides staking rewards derived from platform fee revenue. PNGP does not represent ownership, equity, profit rights or any claim against the issuer.

This white paper is published in accordance with Article 5 of Regulation (EU) 2023/1114 on Markets in Crypto-Assets (MiCA) and has been prepared for notification to the Autoriteit Financiële Markten (AFM) prior to the public offer of PNGP in the European Union.

1.1 Mission

To provide retail traders with institutional-quality grid trading tools — powered by AI, accessible through any connected exchange, and governed by a transparent on-chain token economy.

1.2 Document scope

This white paper covers the following as required by MiCA Annex I:

- Description of the issuer and project team
- Description of the crypto-asset project and intended use of proceeds
- Description of the PNGP token, including rights and obligations
- Tokenomics, supply schedule and allocation
- Technology and smart contract description
- Risk factors
- Applicable legal framework

2. Issuer and Project Team

PingPong is currently operated as an unincorporated development project. Prior to the public token offering, the issuer will incorporate a legal entity under Dutch law (Besloten Vennootschap — BV) registered with the Kamer van Koophandel (KvK). The BV will serve as the legal issuer of PNGP and will apply for registration with the AFM.

2.1 Planned legal structure

Entity detail	Information
Legal form	Besloten Vennootschap (BV)
Jurisdiction	Netherlands
Regulator	Autoriteit Financiële Markten (AFM)

Regulatory basis	MiCA Regulation (EU) 2023/1114
LEI	To be obtained prior to public offer
KvK registration	To be obtained prior to public offer

2.2 Core team

The founding team combines expertise in algorithmic trading, blockchain development and financial technology. Full team biographies will be published on the official project website and updated white paper prior to AFM notification.

Team disclosure note

In accordance with MiCA Article 6(1)(b), complete team member identities, professional backgrounds and any conflicts of interest will be disclosed in the final white paper version submitted to the AFM. This draft contains placeholder references pending legal entity incorporation.

2.3 Advisors

PingPong is seeking advisors in the following domains: Dutch crypto regulatory law (MiCA compliance), DeFi protocol security, institutional market making and exchange relations. Advisor appointments will be disclosed upon confirmation.

3. Project Description

PingPong is a grid trading DApp that allows users to automatically place buy and sell orders across a defined price range — a strategy known as grid trading. The application connects to centralised exchanges via API and executes orders on the user's behalf within limits set by the user.

3.1 What is grid trading?

Grid trading is a market-neutral strategy that profits from price oscillation within a defined range. A grid is defined by a lower bound, an upper bound, and a number of price levels. The bot places limit buy orders below the current price and limit sell orders above it. When a buy order fills, a corresponding sell order is placed higher, and vice versa. The strategy generates profit from the spread between buy and sell orders.

3.2 Platform features

Free plan

- Grid trading on one pair simultaneously
- Up to 5 active grid lines

- Manual grid setup with visual grid builder
- Open order tracking
- Supports Bitvavo and Coinbase Advanced Trade

Premium plan — requires holding or staking 1,000 PNGP (EUR 100 at launch price)

- Unlimited concurrent grids across all supported exchanges
- All 437+ Bitvavo trading pairs supported
- Claude AI trading agent — semi-automatic grid optimisation
- Market sentiment analysis powered by Claude (Anthropic)
- AI-driven risk management including stop-loss positioning
- Multi-pair portfolio balancing
- Live price charts and performance analytics
- Backtesting engine
- Portfolio dashboard with P&L tracking

Supported exchanges (at launch)

- Bitvavo (EUR pairs — MiCA-licensed European exchange)
- Coinbase Advanced Trade (USD and EUR pairs)

Planned exchange integrations

- OKX — planned Phase 2
- Binance — planned Phase 2

4. PNGP Token — Description and Utility

PNGP is an ERC-20 utility token deployed on the BASE network (Coinbase Layer 2, Ethereum chain ID 8453). It was designed solely to provide access to platform services and to incentivise participation in the PingPong ecosystem.

PNGP is a utility token as defined in Article 3(1)(5) of MiCA. It is not an asset-referenced token, e-money token, security, financial instrument, or investment product. Holding PNGP does not confer ownership rights, equity interests, voting rights over the issuer, or any claim to the issuer's assets or profits.

4.1 Token utility functions

Utility	Description
Premium plan access	Hold or stake 1,000 PNGP (EUR 100 at launch) to unlock the Premium tier permanently, with no monthly subscription required
Trading fee discount	Pay grid trading fees in PNGP instead of EUR — total fee 5% of fee amount split: 1% burned, 1.5% treasury, 2.5% staker rewards

Staking rewards	Lock PNGP in the staking contract to earn a proportional share of all PNGP fee revenue. No lock-up period — withdraw any time
Deflationary burn	1% of every PNGP fee payment is permanently burned, reducing total supply over time
Marketing allocation	83,333 PNGP released monthly over 36 months to fund advertising, influencer campaigns, airdrops and conference sponsorship

4.2 Token technical specifications

Parameter	Value
Token name	PingPong
Token symbol	PNGP
Blockchain	BASE (Coinbase L2, Ethereum-compatible)
Token standard	ERC-20 + ERC-20Permit + ERC-20Burnable
Smart contract	PingPongToken.sol (OpenZeppelin v5)
Max supply	100,000,000 PNGP (hard cap — cannot be exceeded)
Decimals	18
Premium threshold	1,000 PNGP (EUR 100 at EUR 0.10 launch price)
Contract verified	Basescan.org (upon deployment)
Audit status	Security audit recommended prior to mainnet deployment

4.3 Token holder rights and obligations

By acquiring PNGP, holders accept the following:

- PNGP grants access to PingPong platform services as described in Section 4.1
- PNGP does not represent equity, shares, ownership or voting rights in the issuer
- PNGP does not represent a claim to profits, dividends or distributions from the issuer
- PNGP staking rewards are derived entirely from platform fee revenue, not from the issuer's profits
- The issuer may update the platform and its fee structure at any time with reasonable notice to holders
- PNGP is subject to market risk and its value may decrease to zero

5. Tokenomics and Token Distribution

5.1 Supply allocation

Allocation	PNGP	Percentage	EUR value at launch	Vesting
Ecosystem / staking rewards	35,000,000	35%	EUR 3,500,000	Released via staking contract
Team	20,000,000	20%	EUR 2,000,000	2 years, 6-month cliff
Private ICO investors	15,000,000	15%	EUR 1,500,000	12–24 months (tier-dependent)
Public sale / IDO	10,000,000	10%	EUR 1,000,000	None — liquid at TGE
Advisors and partners	10,000,000	10%	EUR 1,000,000	1 year, 3-month cliff
Exchange listing liquidity	5,000,000	5%	EUR 500,000	Locked until exchange listing
Marketing and advertising	3,000,000	3%	EUR 300,000	Monthly drip over 36 months
Treasury operations	2,000,000	2%	EUR 200,000	Liquid — day-to-day expenses
TOTAL	100,000,000	100%	EUR 10,000,000	

5.2 Private ICO pricing and vesting tiers

Round	Price	Discount	Allocation	TGE unlock	Vesting	Min investment
Seed	EUR 0.06	40% off	5,000,000 PNGP	10%	24 months / 6-month cliff	EUR 500
Private	EUR 0.08	20% off	7,500,000 PNGP	15%	18 months / 3-month cliff	EUR 250
Strategic	EUR 0.10	Launch price	2,500,000 PNGP	20%	12 months / 1-month cliff	EUR 1,000

5.3 Marketing vesting schedule

The 3,000,000 PNGP marketing allocation is locked in the PingPongToken smart contract and released automatically via a permissionless monthly drip function. The release schedule is as follows:

- Total allocated: 3,000,000 PNGP (EUR 300,000 at launch price)
- Monthly release: 83,333 PNGP per 30-day window (EUR 8,333 per month)
- Duration: 36 months from Token Generation Event

- Destination: dedicated marketing multisig wallet (Gnosis Safe on BASE)
- Budget split: 40% advertising, 25% influencers/KOLs, 20% airdrops, 15% events

The monthly release function is permissionless — any address may call it, but tokens always transfer exclusively to the registered marketing wallet. The issuer may pause the schedule if platform operations require adjustment, with notice to token holders.

5.4 Fee distribution model

When users elect to pay trading fees in PNGP, the token flow is as follows:

Recipient	Percentage	Amount (per 1,000 PNGP fee)	Purpose
Burned permanently	1%	10 PNGP	Deflationary pressure
Treasury wallet	1.5%	15 PNGP	Operational expenses
Staking reward pool	2.5%	25 PNGP	Distributed to PNGP stakers
Total fee	5%	50 PNGP	

6. Technology and Architecture

6.1 BASE network

BASE is an Ethereum Layer 2 network developed and maintained by Coinbase, Inc. It uses Optimistic Rollup technology to provide Ethereum-equivalent security with significantly lower transaction costs. BASE is fully EVM-compatible, meaning all Ethereum smart contract standards (including ERC-20) operate identically on BASE.

BASE was chosen for PNGP deployment for the following reasons:

- Coinbase-backed infrastructure with institutional-grade reliability
- Transaction costs of less than EUR 0.01 per transaction
- Full EVM compatibility with OpenZeppelin smart contract standards
- Native integration with Coinbase Advanced Trade exchange
- Uniswap V3 available on BASE for immediate post-TGE liquidity

6.2 Smart contract architecture

PingPong consists of two primary smart contracts:

PingPongToken.sol — ERC-20 utility token

- Inherits OpenZeppelin ERC20, ERC20Permit, ERC20Burnable, Ownable, ReentrancyGuard
- Hard-capped at 100,000,000 PNGP — mint function enforces cap
- isPremium(address) — on-chain verification of Premium status
- payFee(uint256) — handles fee splitting, burning and reward distribution

- `stake(uint256) / unstake(uint256) / claimRewards()` — staking module
- Marketing vesting: `MarketingVesting` struct with monthly release, pause and redirect controls
- General vesting: `VestingSchedule` for team and advisors with cliff periods
- `mintForICO(address)` — mints 15% ICO allocation to `PingPongICOVesting` contract

PingPongICOVesting.sol — investor token distribution

- Stores investor allocations with wallet, amount, tier, cliff and vesting duration
- Supports batch whitelisting via `addInvestorsBatch()`
- TGE trigger: owner calls `triggerTGE()` — releases TGE percentage instantly
- Linear daily vesting after cliff period
- Permissionless `claim()` function — investor calls to receive unlocked tokens
- Emergency pause functionality for issuer
- KYC/AML reference storage per investor (`refId` field)

6.3 Security measures

- ReentrancyGuard on all state-changing functions
- Ownable access control with two-step owner transfer recommended
- OpenZeppelin v5 audited library base
- No proxy contracts — immutable deployment
- Treasury wallet recommended as Gnosis Safe multisig (minimum 2-of-3)
- Marketing wallet recommended as Gnosis Safe multisig (minimum 2-of-3)
- Independent security audit recommended prior to mainnet deployment
- Bug bounty programme planned post-launch

6.4 PingPong trading infrastructure

The trading bot infrastructure operates as follows:

- Frontend: HTML/JavaScript single-page application — hosted by user or on IPFS
- Backend server: Node.js/Express proxy — runs locally on user's machine
- Exchange APIs: Bitvavo API v2, Coinbase Advanced Trade API v3
- AI agent: Claude (Anthropic claude-sonnet-4-20250514) — semi-automatic trade recommendations
- API keys: stored exclusively in user's local `.env` file — never transmitted to PingPong servers
- Non-custodial: PingPong never holds user funds or API keys

7. Use of Proceeds from the Token Offer

The proceeds from the private ICO and public token sale will be applied as follows:

Category	Allocatio	Purpose
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Technology development	35%	Smart contract audit, backend infrastructure, mobile application
Exchange listings	20%	Bitvavo listing compliance, Uniswap V3 liquidity pool, future exchange listings
Marketing and growth	20%	User acquisition, influencer campaigns, conference presence, airdrops
Legal and regulatory	15%	MiCA compliance, white paper iXBRL conversion, AFM notification, ongoing legal
Operations	10%	Team salaries, servers, insurance, accounting

7.1 Legal and regulatory budget detail

- MiCA white paper legal review: EUR 3,000–8,000
- iXBRL format conversion: EUR 2,000–5,000
- LEI number registration: EUR 65–150 per year
- AFM notification preparation: EUR 1,000–3,000
- Bitvavo listing compliance documentation: EUR 5,000–15,000
- Ongoing legal retainer: EUR 500–2,000 per month

8. Risk Factors

Acquiring PNGP involves material risks. Prospective acquirers should carefully consider the following risk factors before making any acquisition decision. This list is not exhaustive.

8.1 Market risks

- The value of PNGP may fluctuate significantly and may decrease to zero
- Cryptocurrency markets are highly volatile and may be subject to manipulation
- The launch price of EUR 0.10 per PNGP does not guarantee future market value
- There is no guarantee that a secondary market for PNGP will develop or be maintained
- Exchange listings are subject to regulatory approval and exchange discretion

8.2 Technology risks

- Smart contracts may contain vulnerabilities not identified in security audits
- BASE network may experience technical failures, downtime or forks
- Ethereum Layer 2 technology is relatively new and may face unforeseen issues
- Exchange APIs may change, deprecate or become unavailable
- The AI agent relies on the Anthropic Claude API — service interruptions may affect functionality

8.3 Regulatory risks

- Cryptocurrency regulation is evolving rapidly across all jurisdictions
- MiCA implementation may impose additional requirements on the issuer
- The token may be classified differently by regulators in different jurisdictions
- PNGP is explicitly not available to US persons due to SEC regulatory uncertainty
- The issuer must maintain MiCA compliance on an ongoing basis — failure may affect the token

8.4 Operational risks

- The project is at an early stage and depends on the continued efforts of the founding team
- Key personnel risk — loss of key team members could affect development
- The issuer has not yet incorporated a legal entity — incorporation delays are possible
- ICO proceeds may not be sufficient to complete planned development
- Competition from established grid trading platforms (3Commas, Pionex, Bitsgap) is significant

8.5 Liquidity risks

- PNGP token holders may not be able to sell their tokens at desired prices
- ICO investors are subject to vesting periods that restrict transferability
- Marketing and team allocations are subject to vesting — early sell pressure is limited
- The exchange listing pool may not be sufficient for deep liquidity on all listed exchanges

9. Legal and Regulatory Framework

9.1 MiCA classification

PNGP is classified as a utility token under Article 3(1)(5) of Regulation (EU) 2023/1114 (MiCA). A utility token is defined as a type of crypto-asset that is intended to provide digital access to a good or service, available on distributed ledger technology, and is only accepted by the issuer of that token.

PNGP satisfies this definition because:

- It provides digital access to the Premium tier of the PingPong platform (a functioning service)
- The platform operates on the BASE distributed ledger
- Premium plan access is exclusively available to PNGP holders — no alternative acquisition method
- PNGP is not backed by assets, does not maintain price stability, and is not pegged to a currency

9.2 Exemption analysis

Under MiCA Article 4(2), utility tokens that provide access to an already existing and operational service may benefit from a simplified white paper procedure. PingPong will ensure the trading DApp is operational prior to the public token offering to qualify for this provision.

9.3 Applicable Dutch law

The issuer is domiciled in the Netherlands. The Netherlands has implemented MiCA with a transition deadline of July 2025. The AFM is the competent authority. The issuer will:

1. Incorporate a Dutch BV prior to public offer
2. Register a Legal Entity Identifier (LEI)
3. Prepare and convert this white paper to iXBRL format
4. Notify the AFM at whitepapers.submission@afm.nl prior to public offer
5. Maintain ongoing MiCA compliance obligations

9.4 KYC/AML

The ICO registration process requires all investors to provide full name, email address, BASE wallet address and country of residence. The issuer will implement Know Your Customer (KYC) and Anti-Money Laundering (AML) procedures prior to whitelisting investors and distributing tokens. US persons are excluded from participation.

9.5 Tax

The tax treatment of PNGP may vary by jurisdiction. Holders are responsible for determining their own tax obligations. The issuer does not provide tax advice. Dutch holders should consult with a tax advisor regarding the treatment of utility tokens under Dutch income tax law.

10. Principal Adverse Impacts

In accordance with MiCA Article 6, the issuer provides the following information on principal adverse impacts of the crypto-asset project on climate and the environment:

10.1 Energy consumption

PNGP is deployed on BASE, which is an Ethereum Layer 2 Optimistic Rollup network. BASE settles transactions to Ethereum mainnet, which has used Proof of Stake consensus since September 2022 (The Merge). Proof of Stake consumes approximately 99.95% less energy than Proof of Work consensus mechanisms.

The estimated annual energy consumption of PNGP smart contract transactions is negligible relative to traditional financial infrastructure, estimated at less than 0.001% of the energy consumption of a comparable traditional settlement system.

10.2 Consensus mechanism

- BASE network: Optimistic Rollup — no mining, no Proof of Work

- Ethereum mainnet: Proof of Stake — validators replace energy-intensive miners
- No dedicated PNGP mining operations exist or are planned

10.3 Carbon footprint

The issuer commits to monitoring the carbon footprint of its smart contract operations and will publish annual environmental impact disclosures. The issuer does not operate data centres for blockchain validation purposes.

11. Governance

PNGP does not currently include on-chain governance mechanisms such as voting rights or proposal systems. The token does not confer any rights to participate in the governance of the issuer.

11.1 Smart contract upgrades

PingPongToken.sol is deployed as a non-upgradeable contract. Once deployed, the core token mechanics (supply cap, ERC-20 functions, vesting schedules) cannot be modified. The following parameters may be adjusted by the contract owner (issuer):

- Fee configuration (burn, treasury, staking percentages) — capped at maximum 10% total
- Treasury address — transfer to new multisig if required
- Marketing wallet address — transfer to new agency or multisig
- Marketing schedule pause/resume

11.2 Owner controls

The contract owner is the deploying address (issuer). The issuer recommends immediate transfer of the contract owner role to a Gnosis Safe multisig wallet upon deployment to prevent unilateral control. A minimum 2-of-3 multisig structure is recommended.

12. Complaints and Dispute Resolution

In accordance with MiCA Article 6(1)(l), the following complaints procedure applies:

- Complaints should be submitted by email to the issuer's official contact address (to be published on the platform website)
- The issuer will acknowledge complaints within 5 business days
- The issuer will provide a substantive response within 20 business days
- If a complaint is not resolved to the complainant's satisfaction, the matter may be referred to the AFM
- Dutch law applies to all disputes. The competent court is the court of Amsterdam

13. Glossary

Term	Definition
AFM	Autoriteit Financiële Markten — Dutch financial market regulator
BASE	Coinbase Layer 2 blockchain network, Ethereum-compatible
DApp	Decentralised Application — software running on a blockchain
ERC-20	Ethereum token standard; the technical specification for PNGP
FDV	Fully Diluted Valuation — total supply x token price
Grid trading	Automated strategy placing buy/sell orders at regular price intervals
IPFS	InterPlanetary File System — decentralised file storage
iXBRL	Inline eXtensible Business Reporting Language — MiCA required white paper format
KYC/AML	Know Your Customer / Anti-Money Laundering — identity verification procedures
Layer 2	Blockchain scaling solution that settles transactions to a base blockchain
LEI	Legal Entity Identifier — unique code identifying legal entities globally
MiCA	Markets in Crypto-Assets Regulation (EU) 2023/1114
Multisig	Multi-signature wallet requiring multiple approvals for transactions
OpenZeppelin	Industry-standard audited smart contract library used for PNGP
PNGP	PingPong — the utility token of the PingPong trading platform
Proof of Stake	Ethereum consensus mechanism replacing energy-intensive Proof of Work
TGE	Token Generation Event — the date PNGP first becomes transferable
Uniswap V3	Decentralised exchange on BASE where PNGP will trade post-TGE

14. Important Notices and Disclaimers

This white paper is published for information purposes only. It does not constitute an offer to sell or solicitation of an offer to buy any security, financial instrument or investment product in any jurisdiction.

This white paper has not been reviewed or approved by any financial regulator. PNGP is not a security, financial instrument, investment product, collective investment scheme or deposit. The value of PNGP may decrease to zero.

This white paper is not directed at, and PNGP is not available to, persons residing in the United States of America, nor to US persons as defined under US securities law, regardless of where they are located.

Past performance of any crypto-asset is not indicative of future results. Acquiring PNGP involves material risk. Do not acquire PNGP unless you are prepared to lose the entire amount invested.

The forward-looking statements in this white paper involve known and unknown risks and are based on the issuer's current plans and expectations. Actual results may differ materially from those described.

END OF WHITE PAPER

PingPong — PNGP Token White Paper v1.0 — 15 March 2026