Oxano (OXN) Tokenomics

Issuance, distribution and use of the OXN token

0. Executive Summary

Oxano (OXN) is a utility/reward token with a PoW issuance mechanism on BNB Smart Chain, implemented to the ERC-20 (BEP-20) standard with ERC-20 Permit support.

OXN is issued exclusively through mining and exists within a fixed maximum supply of 8,000,000,000 OXN. The token has no pre-issuance for the team, a foundation, private investors or hidden distribution pools.

OXN issuance involves three different time scales that should not be confused:

- **10 minutes** — the target interval between successful minings. It is maintained by automatic difficulty: the greater the miners' total hashpower, the harder it is to find a solution, and vice versa. During sharp changes in hashrate, the actual interval may temporarily deviate in either direction.
- **About 2 years** — the step over which the reward halves. Each successive successful mining yields less OXN than the previous one (by approximately 0.00066%). Over 105,192 successful minings — about 2 years at the target interval — the reward smoothly decreases by half. Mining then continues: over the next ~2 years the reward halves again, and so on.
- **About 119.6 years** — the formal end of emission under the contract (6,289,925 successful minings). By this point the reward per issuance falls to 52,714 wei (≈ 5.3×10^{-14} OXN). After that, due to rounding down, it becomes zero and mine() is no longer accepted. However, long before this point the reward per issuance becomes lower than the gas cost of the mine() transaction and the cost of the issuance itself. Mining in the tail of emission loses economic sense.

The bulk of the supply is issued in the first years: about 50% of the maximum supply within the first ~2 years, and about 99.6% within ~16 years. The remaining time is a long emission tail with a very small reward (Section 2).

The smart contracts have been audited by Hexens (August–September 2026): no critical or high-severity vulnerabilities were found, and all findings have been fixed.

The OXN economic model is based on the following key principles:

- the maximum supply is capped at 8,000,000,000 OXN;
- the initial supply is 0 OXN;
- tokens are created at the moment of claim directly in the user's wallet and belong to the user: the project provides the technology and is not a holder or custodian of users' tokens (Section 3.3);
- at launch, a single project pool operates — the Official OXN Pool. It is needed for a balanced launch and fair distribution of rewards; as total hashpower grows and becomes more distributed, mining is planned to be opened to independent pools (Section 3); subsequently, the pool software is planned to be open-sourced, and pool admission is to be handed over to an on-chain vote of OXN holders (DAO);
- during the first 17,532 issuances (≈ 4 months), a liquidity formation period applies: the Official OXN Pool fee is temporarily 25% / 25% / 12% / 8% and is directed to the OXN/USDT liquidity pool, as well as to supporting the token's utility; thereafter, the standard 2% applies (Section 5.1);
- OXN is used as a portable settlement and reward asset, including in loyalty programs, and not as an investment instrument.

OXN is not a promise of yield, price growth, passive income, guaranteed liquidity, mandatory buyback, guaranteed exit from a position or mandatory listing on centralized exchanges.

1. Token Parameters

Parameter	Value
Name	Oxano
Ticker	OXN
Network	BNB Smart Chain
Standard	ERC-20 (BEP-20) + ERC-20 Permit
Maximum supply	8,000,000,000 OXN
Initial supply	0 OXN
Emission	Proof-of-Work mining
Target issuance interval	600 seconds (10 minutes)
Reward half-life (H) — the halving step	105,192 issuances (~730.5 days, about 2 years at the target interval). The reward decreases continuously after each issuance; there are no halvings
End of emission	After 6,289,925 successful minings (~119.6 years at the target interval)
Premine	None
Private sale allocation	None
Team allocation at launch	None
Pre-allocated foundation/project allocation	None
Official OXN Pool fee	2% of the reward mined through this pool; during the liquidity formation period — 25% / 25% / 12% / 8% (Section 5.1). There is no fixed project share of total emission (Section 5)
Liquidity formation period	Issuances 1–17,532 (≈ 4 months at the target interval); ≈ 154.8 million OXN are directed to the OXN/USDT liquidity pool and to supporting the token's utility
Token recipient at claim	The user's wallet: tokens are minted directly to it
Hidden allocations	None
Transfer tax	None
Rebasing/reflection	None
Contract upgradeability	Not upgradeable (no proxy)
Audit	Hexens, final report dated 10.09.2026 (Section 9)
Launch pool	Official OXN Pool — the project's launch pool; admission of independent pools is planned later (Section 3)

The contract retains standard ERC-20 behavior. OXN transfers are not subject to built-in fees. The contract does not recalculate holders' balances on its own (rebasing) and does not withhold a portion of each transfer in favor of other holders (reflection). An OXN balance changes only through the holder's own transfers and receipt of rewards.

The token and vault contracts are not upgradeable: they are deployed without a proxy, and their code cannot be changed after deployment. The guarantees in Section 8 are based on this.

2. Supply and Emission Model

The maximum supply of OXN is hard-capped at 8,000,000,000 OXN.

No tokens are created in advance at contract deployment: the initial supply is zero.

The right to new OXN arises exclusively through mining, and the tokens themselves are created (minted) only at the moment of claim, when the user withdraws the mined amount to their wallet. No tokens are created upon successful mining: the smart contract records in the vault the reward accrued to the pool and a Merkle root, and tokens appear on-chain only when the user claims their share.

Terms.

Successful mining — one successful call of the mine() function confirming a found PoW solution. A mine() call does not create tokens: it records the reward in the pool's accounting. Tokens are created only at claim. In this document, "issuance" and "successful mining" mean the same thing.

Reward half-life (H) — 105,192 issuances, over which the smoothly decreasing reward per issuance falls by half. This is a step of the curve, not a mining term: after the first period mining continues, and over each subsequent period the reward halves again. It is not a cycle: there are no boundaries between periods and no sharp drops.

Claim epoch (epochId) — a separate concept relating to claim accounting (Section 4).

Basic supply constraint:

```
totalCommitted + effectiveReward <= 8,000,000,000 OXN
```

Emission follows a geometric reward curve with continuous decrease: the reward does not drop in a sharp step on a single date but decreases smoothly after each issuance. Over one half-life (105,192 issuances) the reward per issuance falls by roughly half, but without sharp jumps.

```
reward(n) = R0 * decayWad^n

where:
n        = number of issuances before the current mine() call
R0       ≈ 52,714.65 OXN per issuance
decayWad = 999993410669092047
H        = 105,192 issuances, reward half-life
CAP      = 8,000,000,000 OXN
```

R0 is not set at deployment but is computed by the contract from CAP and decayWad: R0 = CAP × (1 − decayWad) = 52,714.647264 OXN. Therefore the sum of rewards over all issuances converges exactly to CAP. The half-life H = 105,192 is the smallest number of issuances after which the reward per issuance becomes no more than half of the initial reward (decayWad^105,192 ≈ 0.5). The decrease is tied to the number of successful issuances, not to blocks or calendar time.

The effective reward is calculated as:

```
effectiveReward = min(reward(n), CAP - totalCommitted)
```

Since minting happens at claim rather than at mining, accounting is kept in two quantities: totalCommitted — how much reward has already been committed to pools, and totalSupply — how many tokens have actually been minted. The following invariant holds:

```
totalSupply <= totalCommitted <= CAP
```

At claim, the contract additionally checks:

```
totalSupply + amount <= totalCommitted
```

As the number of issuances grows, the reward gradually decreases, and the total supply asymptotically approaches the maximum cap and cannot exceed it. The reward remains non-zero for 6,289,925 successful minings (n from 0 to 6,289,924); the last non-zero reward is 52,714 wei. At n = 6,289,925 the reward becomes zero due to rounding down: mine() is no longer accepted, and emission ends. At a 10-minute target interval this is approximately 119.6 years from launch (6,289,925 × 600 seconds). The final volume of

committed rewards is 7,999,999,999.999158752 OXN; it is less than CAP by approximately 0.00084 OXN (841,247,723,353,762 wei), which will never be committed due to rounding.

decayWad is a technical coefficient of the smooth reward decrease, written in WAD format, where 1.0 = 1e18. The decrease occurs gradually after each issuance (by approximately 0.00066%), rather than as a single sharp switch once per period.

Target issuance interval

Mining difficulty is recalculated so that, on average, one issuance occurs every 600 seconds (10 minutes). That is about 144 issuances per day and about 52,596 issuances per year. The reward half-life — 105,192 issuances — takes 730.5 days at this rate, i.e. about 2 years. These 2 years are the length of one step over which the reward halves, not the mining term: the steps follow one another (there are about 60 of them over the entire emission), and the entire emission takes about 119.6 years at the target interval. The target interval and the difficulty recalculation window are set in the contract in seconds, so the issuance schedule does not depend on the network's block time.

Emission time scales

Quantity	Value at target interval	What it means
Interval between successful minings	10 minutes	Issuance rate. Maintained by automatic difficulty
Reward halving step (H)	105,192 minings ≈ 2 years	Length of one step of the curve, not the mining term
50% of maximum supply issued	≈ 2 years	First half-life period
~99.6% of maximum supply issued	≈ 16 years	Eight half-life periods
End of emission	6,289,925 minings ≈ 119.6 years	Reward rounds to zero; mine() is no longer accepted

Smooth decrease instead of halving

In the classic halving model (for example, in Bitcoin), the reward stays constant for several years and then halves at a single moment: on halving day, miners' income in tokens drops by 50% at the same costs. OXN has no such date. Each successful mining yields approximately 0.00066% less than the previous one: the reward decreases by less than 0.1% per day and by approximately 2.8% per month. Miners adapt to the decrease gradually, without a one-time shock to mining economics.

Hashpower and reward are linked through difficulty. The more miners and the greater their total hashpower, the higher the difficulty and the fewer successful solutions per unit of hashpower; the overall issuance rate remains about once every 10 minutes. New miners joining does not increase emission or change the reward curve: the same reward is distributed among a larger number of participants.

This is a description of the issuance mechanics, not a price forecast: the smooth curve removes a one-time twofold drop in miners' income but does not guarantee price stability or mining profitability.

Reward curve checkpoints

Year (≈)	H periods elapsed	Issuance number n	Reward per issuance	Protocol emission per day*
0	0	0	~52,714.65 OXN	~7,590,909 OXN
2	1	105,192	~26,357.32 OXN	~3,795,455 OXN
4	2	210,384	~13,178.66 OXN	~1,897,727 OXN

Year (≈)	H periods elapsed	Issuance number n	Reward per issuance	Protocol emission per day*
6	3	315,576	~6,589.33 OXN	~948,864 OXN
8	4	420,768	~3,294.67 OXN	~474,432 OXN
10	5	525,960	~1,647.33 OXN	~237,216 OXN
12	6	631,152	~823.67 OXN	~118,608 OXN
14	7	736,344	~411.83 OXN	~59,304 OXN
16	8	841,536	~205.92 OXN	~29,652 OXN

** At a 10-minute target interval (144 issuances per day).*

The table is limited to the first 16 years (8 half-life periods), but emission does not end there: the reward continues to halve each period until the end of emission — approximately 119.6 years.

These figures describe only the protocol reward and are not a forecast of user returns, token price or available liquidity. Years are a calculated projection at a 10-minute target interval: in the contract, the decrease is tied to the number of issuances, not to time; deviations are described below.

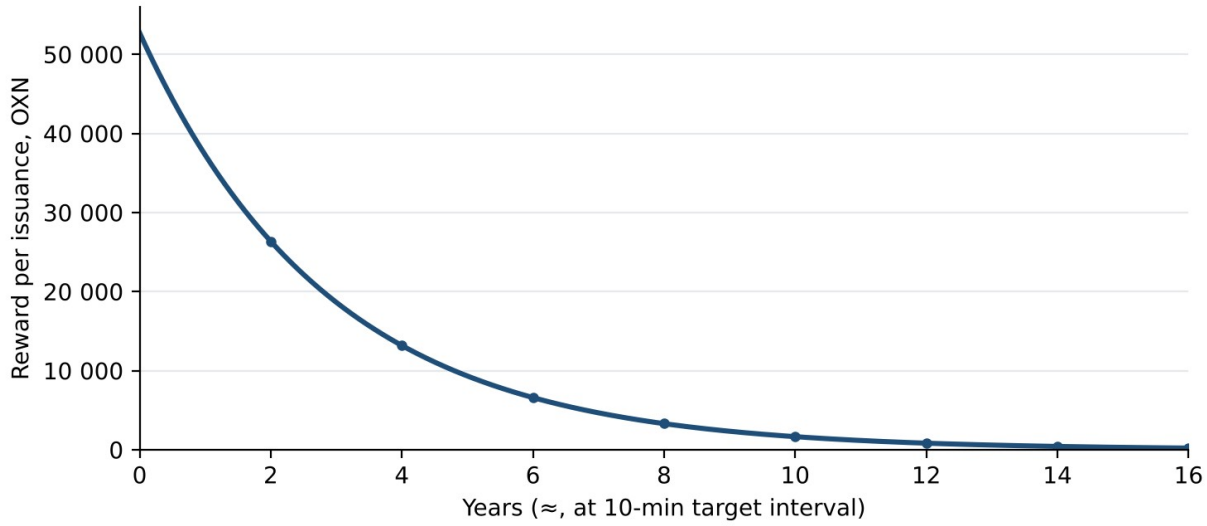


Fig. 1. OXN reward per issuance: smooth decrease; the halving step is about 2 years. The first 16 of ~119.6 years are shown

Cumulative emission checkpoints

Over each half-life period, half of the remaining volume up to CAP is committed to pools. Therefore, the cumulative volume of committed rewards after k periods equals 8B × (1 − 2^−k). The values in the table are calculated and given as reference points.

Year (≈)	Cumulative emission	Share of max supply	Phase
0	0 OXN	0%	Deployment without premine
2	~4.0B OXN	50%	Early mining launch
4	~6.0B OXN	75%	Emission slowdown
6	~7.0B OXN	87.5%	Transition to low emission
8	~7.5B OXN	93.75%	Long emission tail
10	~7.75B OXN	96.875%	Long emission tail
12	~7.875B OXN	98.4375%	Long emission tail

Year (≈)	Cumulative emission	Share of max supply	Phase
14	~7.9375B OXN	99.21875%	Long emission tail
16	~7.969B OXN	~99.61%	Further approach to the cap
~119.6 (end of emission)	~8.0B OXN (less than CAP by ~0.00084 OXN)	→ 100%	Very long tail: emission becomes negligibly small and remains bounded by CAP

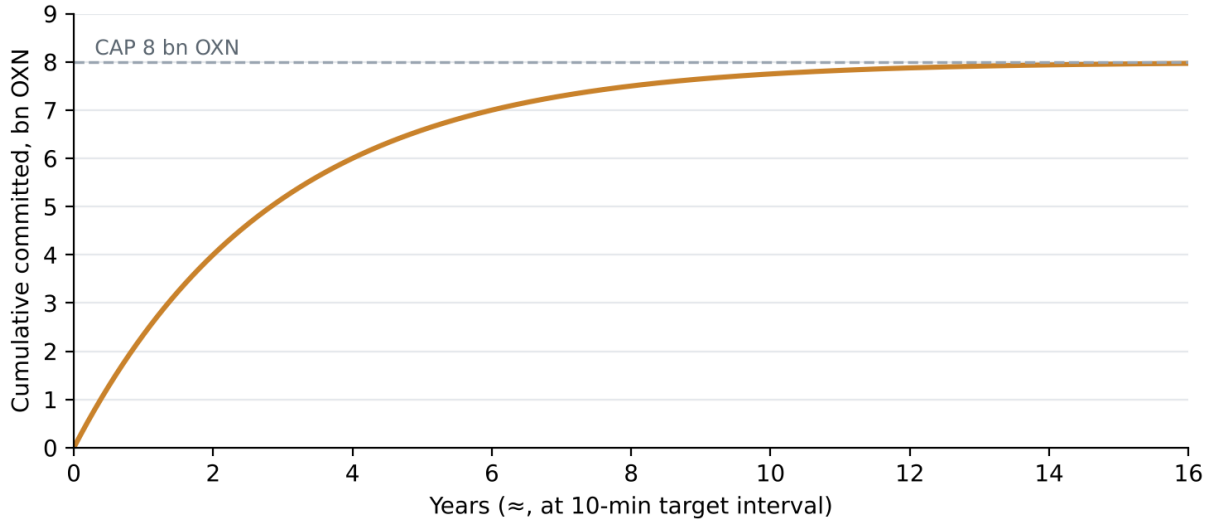


Fig. 2. Cumulative volume of rewards committed to pools compared with the CAP of 8,000,000,000 OXN

Calendar schedule deviations

The reward curve is tied to the number of successful minings, not to calendar time. Years in the tables are a calculated projection at a 10-minute target interval; the actual schedule may differ.

OXN operates as a smart contract on BNB Smart Chain rather than as a separate blockchain, so difficulty is recalculated only when the contract is called — upon successful mining or a readjust() call — and changes by no more than ~5% per recalculation:

- with a sharp increase in hashrate, successful minings temporarily occur much more often than every 10 minutes until difficulty catches up, and emission accelerates over time;
- with a sharp drop in hashrate, difficulty remains high until subsequent recalculations, successful minings temporarily occur much less often, and emission slows down over time; difficulty does not fall below the set minimum.

The reward curve by number of successful minings and the maximum supply do not change as a result.

A readjust() call does not allow difficulty to be set arbitrarily: it only triggers the calculation according to the contract formula. Why recalculation is public and how it protects miners when a large amount of hashpower leaves is explained in Section 10.

How supply is formed

The actual on-chain token volume equals the volume of OXN already received by users through claim. Since tokens are minted only at claim, total supply grows as users withdraw their rewards. Accrued but not yet claimed rewards exist only as a record in the pool's accounting and do not increase on-chain supply until claim.

A participant connects to the Official OXN Pool and performs computational work — iterating over nonces. The pool verifies submitted proofs of work and keeps a record of each participant's contribution.

When a solution is found, the pool operator submits it to the smart contract by calling mine(). The contract verifies the solution, increases the reward volume assigned to the pool, and simultaneously records a new Merkle root — a snapshot of participants' cumulative balances generated by the operator from its own records. The user claims their share by proving that their record is included in this snapshot: tokens are created directly in their wallet, bypassing pool and project addresses.

Key supply definitions

For public materials, monitoring dashboards and analytics, it is important not to confuse the different states of the token:

Term	Definition
Max supply	Maximum emission limit: 8,000,000,000 OXN
Total supply	Sum of all OXN actually created on-chain. Tokens are created at the moment the user withdraws the accrued reward to their wallet (claim)
Accrued by pool	Total reward committed to a pool based on mining results. Tracked on-chain in the vault (poolMinted); tokens have not yet been created
Unclaimed	Committed but not yet received through claim. The pool's balance is tracked on-chain in the vault (poolMinted − poolClaimed), and each wallet's share in the published Merkle tree whose root is recorded on-chain. Tokens have not been created and are not included in total supply.
Claimed supply	OXN received by users through claim; tokens are minted at claim, so claimed = minted on-chain
Circulating supply	Total supply minus OXN on disclosed project addresses: the operating reserve, the Liquidity Bootstrap address and OXN in project-owned liquidity pools.
Operating reserve	OXN received through the standard 2% Official OXN Pool fee, held on a disclosed project address. The project's only OXN reserve; there are no other treasury reserves.
Liquidity Bootstrap	A disclosed project address that receives the entire Official OXN Pool fee during the liquidity formation period.
Managed liquidity	OXN and the quote asset used by the project to create initial liquidity. OXN is taken from the Liquidity Bootstrap address and the operating reserve; the quote asset (USDT) is provided by the project.

The vault is an accounting module (essentially a ledger) of accrued but not yet claimed rewards. The vault keeps records of unclaimed balances and Merkle roots, not the tokens themselves: OXN is created on-chain only at the moment of claim. The vault is not a project treasury.

3. Mining, the Launch Pool and Opening Mining to Independent Pools

3.1. How mining works

OXN is mined through PoW mining: proof-of-work is used as the mechanism for issuance and verification of mining activity; however, the mine() function is not publicly callable by any address.

Issuance requires MINTER_ROLE. This is a technical role for submitting confirmed mining results to the smart contract; it does not grant the right to issue an arbitrary amount of OXN beyond the emission formula and hard cap. However, the MINTER_ROLE holder generates the Merkle root, i.e. determines among which addresses the pool reward is distributed (Sections 4.3 and 8).

At the smart-contract level, each address with MINTER_ROLE is a separate pool with its own accounting. A PoW solution is bound to the address of the pool that found it: the address is part of the hashed data, so a solution cannot be intercepted and submitted on behalf of another pool.

For the user, the process looks as follows:

Pool participation → accounting of mining activity → confirmation of the solution by the operator → confirmation of the solution by the smart contract → recording of the current unclaimed balance and Merkle root in the vault → update of pool accounting → the user receives their share of the reward through claim

Rewards are distributed using a proof-based claim model. The user obtains a proof from the pool's public data or through a function on the pool's web pages, submits it to the smart contract and receives their unclaimed rewards on-chain — tokens are minted to them directly at the moment of claim. The project may help generate the proof, but the user can also perform the claim independently — based on the pool's published data and the published proving key.

3.2. Why a launch pool is needed

The Official OXN Pool is the pool the project launches at the start. Its purpose is not to secure the role of sole operator for the project, but to guide the network through the early stage, ensuring balanced growth and fair distribution of rewards for all mining participants. Total hashpower at launch is small, while the reward per issuance is at its maximum: a single large participant could capture a disproportionately large share of the rewards of the most voluminous emission period or destabilize issuance by abruptly connecting and disconnecting hashpower.

The launch pool addresses three objectives:

- **Balanced growth.** Participants are onboarded in stages, with limits per account, wallet or device (Section 10). Rewards are distributed among many miners rather than concentrated among owners of large hashpower.
- **Fair distribution.** Uniform public rules for accounting contributions apply to all participants, and distribution data is published and available for verification (Section 4.3).
- **Protecting miners from mining centralization.** In PoW networks, mining tends to concentrate over time among a few large pools. Launch-stage restrictions make it possible to build a broad miner base before large players enter the network.

At the launch stage, the model itself is centralized: a single pool operates, and the pool operator is appointed by the project (Section 8). This is a deliberate temporary decision for the launch, not the target state.

3.3. The token is created in the user's wallet

In a classic mining pool, the reward first arrives at the pool's address, accumulates there and only then is paid out to participants: until payout, the funds are under the operator's control. OXN works differently:

- no tokens are created upon successful mining — only the reward volume assigned to the pool and the Merkle root are recorded in the vault;
- tokens are created at the moment of claim and minted directly to the user's wallet, bypassing pool and project addresses;
- the pool has no balance of user tokens that could be withheld, lost or misappropriated: an unclaimed reward is an accounting record, not tokens in anyone's wallet;
- the claim can be performed by the user or by the project on the user's behalf (a batch claim can be called by any address), but the recipient is always the user's wallet.

The project provides the technology — smart contracts, pool software and claim tools — but is not a holder or custodian of users' tokens. OXN received through claim belongs to the user and is under the user's sole control.

The pool operator, however, is responsible for the correctness of accounting: it calculates the distribution of rewards among participants and generates the Merkle root. What the contract guarantees and what the operator ensures is described in the trust model (Section 4.4).

3.4. Opening mining to independent pools

A single pool is the launch configuration, not a permanent one. As the network's total hashpower grows and becomes distributed among a larger number of participants, the project plans to open mining to independent pools. The transition criterion is not a calendar date but the state of the network: total hashpower must be sufficient so that no single large participant or pool can obtain a dominant share of issuance or destabilize it.

Stage	State	What happens
1. Launch	A single project pool — the Official OXN Pool	Staged onboarding of participants, limits and anti-abuse rules, pool fee according to the liquidity formation period schedule and 2% thereafter, publication of data for claim and distribution verification
2. Opening pools	The project pool and independent pools	The pool software is published as open source: any participant can deploy their own pool. Addresses of independent operators receive MINTER_ROLE. Each pool keeps its own accounting and sets its own participation terms and fee
3. DAO governance	Pool admission is decided by the community	Adding and removing pools is decided by an on-chain vote of OXN holders; the administrator role is transferred to the voting contract

The contract architecture is ready for this. Each address with MINTER_ROLE is a separate pool with its own accounting and its own Merkle roots; a PoW solution is bound to the pool address; the reward curve and CAP are shared by all pools and do not depend on their number. New pools do not increase emission: pools compete for the same reward, and difficulty accounts for their combined hashpower.

Calling mine() requires MINTER_ROLE, and this role is granted and revoked by the admin multisig (Section 8). Therefore, at the current stage, admitting a new pool is the project's decision. The same role makes it possible to enforce basic mining rules: if a pool violates them (for example, circumvents hashpower limits) or acts to the detriment of participants, its role can be revoked. Such a pool stops receiving new rewards, but its participants retain the right to claim everything reflected in that pool's already published roots.

Stages 2 and 3 describe the project's intentions, not a commitment with fixed deadlines. Transition criteria, rules and the procedure for pool admission will be published in a separate policy.

Open source and pool admission governance. The project plans to publish the pool software as open source. After that, any participant will be able to deploy their own pool: keep records of miners' contributions, generate Merkle roots and publish data for claim. For a pool to submit mining results to the smart contract, its address must be granted MINTER_ROLE. Decisions on adding and removing pools are planned to be handed over to the community: they will be made by an on-chain vote of OXN holders (DAO), and the administrator role that grants and revokes MINTER_ROLE will be transferred to the voting contract. Until the DAO is launched, pool admission is carried out by the project's admin multisig (Section 8).

3.5. Launch configuration

At launch:

- a single pool operates — the Official OXN Pool;
- independent (community) pools and solo mining are not yet available;
- all distribution goes through the Official OXN Pool.

4. Claim, Data Set and Pool Accounting

After a successful mine() call, the smart contract confirms the PoW solution and records the pool's current unclaimed balance and Merkle root in the vault. No tokens are minted at this step — OXN is created on-chain only at claim.

A root is published only through mine(), in the same transaction as the reward: there is no separate way to record or correct a root. Therefore, the pool's cumulative balances are updated only upon a successful issuance by that pool; accruals made after the last issuance become available for claim after the next one.

4.1. Pools, epochs and root history

The claim system is bound to a specific issuance operator and settlement epoch. In the technical documentation, this pair may be denoted as (minter, epochId), where minter is the address of the operator with MINTER_ROLE, and epochId is the identifier of the pool's settlement epoch (not to be confused with the reward half-life).

The Merkle tree has limited capacity (depth 20, up to 2^20 ≈ 1 million addresses). Therefore, a pool may have several addresses with MINTER_ROLE: in case of a large influx of users, an additional operator with its own epochs is introduced. Each such address is a separate pool with its own accounting: a wallet participating in several pools receives a reward in each separately.

Pool epochs proceed strictly in order: epochId never decreases and may increase by at most 1 per issuance.

History is stored in a 10-slot ring buffer for each pool and epoch. The eleventh root in an epoch displaces the oldest one. Re-publishing the same root within an epoch is rejected.

4.2. How claim works

The model supports:

- single claim: a ZK proof (Groth16) that the wallet's record is included in the published Merkle tree. The contract issues to the wallet the difference between the cumulative balance and the amount already received;
- batch claim of exactly 256 records in a single transaction with a single ZK proof; if there are fewer requests, the batch is padded with empty records; if there are more, it is split into several batches. A batch claim can be called by any address; each batch is executed only once;
- accounting of received amounts per pool as a whole, regardless of epochs: an amount already received is not paid out again;
- binding of the proof to the network and the vault contract address: a proof cannot be used in another deployment;
- protection against receiving rewards in excess of the actually accrued volume.

In both single and batch claims, tokens are minted to the wallet specified in the Merkle tree record, regardless of who sent the transaction.

Proof validity period. A proof is accepted while its root is among the pool's 10 most recent roots for the given epoch; with a single pool and a 10-minute interval, this is on the order of an hour and a half. If the root has been displaced, a proof built on it ceases to be valid, but the unclaimed amount is preserved: it is reflected in a newer root, and the proof must be rebuilt. A proof should be generated against the current root and submitted without delay.

4.3. Data publication

The full data tree is not stored on the blockchain. The pool operator is responsible for publishing and preserving:

- the Merkle root;
- the list of addresses;

- cumulative balances;
- proofs for claim;
- related technical data.

For convenient and verifiable claims, the operator publishes data sets and maintains their availability (backup storage, monitoring). A user's claim does not depend on manual approval by the team but requires the availability of published data to build a proof. At the same time, anti-abuse rules (Section 10) may limit the accrual of rewards in the pool's accounting.

Each participant can independently verify their reward. To do so, it is enough to find one's record (wallet address and cumulative balance) in the pool's published data and confirm that it is included in the Merkle root recorded on the blockchain. The operator cannot change a record unnoticed: any change in the data produces a different root. A successful claim also confirms this: the contract accepts a proof only if the record is included in the published root.

A claim is accepted only against a root active for the selected pool and epoch, so a proof is valid in the pool that published the corresponding root.

4.4. Trust model

Reward distribution in OXN has two layers. The smart contract strictly limits the total volume of payouts and verifies the correctness of claim conditions. The distribution of rewards within a pool is calculated by the pool operator off-chain.

The smart contract guarantees that:

- each PoW solution is valid for the current difficulty and bound to the address of the pool that found it;
- the total volume of committed rewards does not exceed the emission curve and CAP;
- the total tokens issued through claim do not exceed the committed volume;
- each pool cannot pay out more than has been committed to it through mining;
- a wallet cannot receive more than its cumulative balance in the published root, and an amount already received is not paid out again, including across epoch changes;
- a claim is accepted only against a root that is among the pool's 10 most recent roots for the given epoch;
- a claim proof is bound to the network and contract address and cannot be used in another deployment.

However, the contract does not verify the content of the distribution within a root. In particular, it does not check:

- that the distribution among miners corresponds to their actual contribution;
- that a wallet's cumulative balance in a new root has not decreased compared with the previous one. The contract only prevents an already paid amount from being received again;
- that the root does not include addresses that did not participate in mining.

These properties are ensured by the pool operator and can be verified against the published data sets.

5. Official OXN Pool Fee

The standard Official OXN Pool fee is 2% of the reward mined through this pool (an increased rate applies during the first 17,532 issuances — Section 5.1):

```
grossPoolReward      = 100%
projectPoolFee       = 2%
userDistributionPool = 98%
```

The fee is calculated at the pool level simultaneously with reward distribution: 98% of the total reward goes to user distribution, 2% to the operational circuit of the Official OXN Pool.

The fee is a pool term, not a protocol parameter

The fee amount is not written into the smart contract: the contract assigns the entire reward to the pool, and the fee is allocated in the pool's accounting (Section 4.4). The 2% is a public term of the Official OXN Pool, fixed by that pool's rules. After mining is opened, independent pools will be able to set their own fees and participation terms — just as pools do in any PoW network.

There is no fixed project share of emission

The fee is taken only from the reward mined through the Official OXN Pool. Therefore, the final volume of OXN the project will receive is not predetermined: it depends on what portion of mining passes through the project's pool.

- While the Official OXN Pool is the only pool, the fee is 25% / 25% / 12% / 8% of current emission during the liquidity formation period and 2% thereafter.
- As mining is opened to independent pools, the project pool's share of total hashpower decreases — and with it, the project's share of emission.
- The theoretical upper limit is reachable only if the entire emission over its whole duration passes through the Official OXN Pool. The project's goal is the opposite: to distribute tokens in a balanced way at launch and then open mining (Section 3.4).

About half of the maximum supply is issued within the first ~2 years (Section 2), so the project's actual share largely depends on how quickly mining is opened to independent pools.

Why the fee is needed

The Official OXN Pool fee is intended to support the operation of the infrastructure. It covers the costs of pool software, monitoring, publication of claim data and claim tools. In addition, the fee may be used to provide initial liquidity for the token.

The fee is not a source of commercial gain for the project. The project's economic interest is linked not to OXN emission or growth in its price, but to the token's applicability in business: to the development of the partner network, integrations and services through which companies use OXN for settlements and rewards. The project benefits when the token is actually used by partners and their customers.

The project has no premine and no allocations, so the fee is the only way OXN reaches the project. These tokens arise only from the reward mined through the project's pool, on the same curve and under the same rules as miners' rewards.

The fee is a disclosed share of the pool reward in favor of the project. It arrives at the public operating reserve address (during the liquidity formation period, at the Liquidity Bootstrap address) in the same way as user rewards — through claim — and therefore does not accumulate on the pool address. The fee is not a reward for holding the token or a price-support mechanism.

Independent pools set their own fees and participation terms; the procedure for pool admission is described in a separate policy (Section 3.4). The Official OXN Pool fee does not imply an automatic subsidy to all future pools.

This fee:

- is not a transfer tax;
- is not a DEX swap tax;
- is not additional emission (it is included in CAP and the reward curve);
- is not hidden: its amount and recipient address are disclosed;
- is not a premine.

OXN transfers between users remain standard ERC-20 transfers without built-in fees.

5.1. Liquidity formation period

OXN has no premine, so liquidity to support the token's utility — including enabling trading on decentralized exchanges (DEX) and creating liquid trading pairs — is formed from already mined tokens.

For this purpose, a liquidity formation period applies at the start of the network: the Official OXN Pool fee is temporarily increased and decreases according to a pre-published schedule. The steps are tied to the number of successful issuances, not to the calendar, so the volume of OXN directed to liquidity is known in advance and does not depend on hashrate.

Step	Issuance numbers	≈ Duration at target interval	Pool fee	≈ To liquidity pool
1	1 – 4,383	Month 1	25%	56.9 million OXN
2	4,384 – 8,766	Month 2	25%	55.3 million OXN
3	8,767 – 13,149	Month 3	12%	25.8 million OXN
4	13,150 – 17,532	Month 4	8%	16.7 million OXN
Total	1 – 17,532	≈ 4 months	—	≈ 154.8 million OXN (≈ 1.93% of max supply)
Thereafter	from 17,533	—	2%	to the operating reserve

The entire fee for this period, including the base 2%, goes to a separate disclosed Liquidity Bootstrap address and is used only for the OXN/USDT liquidity pool.

Liquidity is added to the pool gradually according to a published schedule; inflows and their use are disclosed regularly.

The schedule is fixed before launch and will not be extended. After the 17,532nd issuance, the standard 2% fee applies.

Total project fee (liquidity and the standard 2% after the period), assuming all mining goes through the Official OXN Pool:

- for year 1: ≈ 184.2 million OXN — 7.86% of the year's emission and 2.30% of the maximum supply;
- for 2 years (the first half-life period): ≈ 217.3 million OXN — 5.43% of emission and 2.72% of the maximum supply.

The total project fee for the first year does not exceed 8% of that year's emission.

6. OXN Utility and Circulation Model

6.1. Model participants

Miners create new OXN supply through PoW mining and receive tokens for confirmed computational work.

Businesses and partners accept the token for settlements, create offers for holders and use it for rewards, including in their own loyalty programs. For a partner, the token can become an additional audience acquisition channel. OXN makes it possible to adopt a portable settlement asset without issuing one's own token or a closed points system.

OXN holders and users pay with the token at partners and receive the terms set by the partner. OXN is not tied to a single brand, does not expire and can be used across different integrations.

Roles may overlap: a miner or a business can also be an OXN holder and user.

6.2. Circulation model

- PoW mining → receiving OXN through claim → tokens enter circulation
- A business acquires OXN → credits rewards to holders
- Holders acquire or receive OXN → use partners' offers and settle with businesses
- Payments and rewards ensure the circulation of OXN among participants

Business offers may be available upon holding OXN or paying in OXN. Specific terms are determined by the partner.

6.3. Use cases

OXN can be used in any technically and legally permissible scenarios that support BNB Smart Chain and BEP-20 / ERC-20. Possible scenarios include, but are not limited to:

- settlements for goods and services;
- terms and offers for OXN holders;
- transfers between participants;
- rewards, cashback and loyalty programs;
- referral and mass payouts;
- access to services and digital features;
- partner and external integrations;
- other scenarios defined by ecosystem participants.

6.4. Economic rationale

Each participant enters circulation in pursuit of their own benefit:

- a miner seeks to receive OXN rewards for the computational work provided and then dispose of the tokens received;
- a business acquires OXN to attract and retain an audience, reward target actions and create special offers for token holders;
- a holder acquires or receives OXN for settlements, transfers and access to partners' special terms.

New OXN appears only through mining. There is no premine and no separate emission for businesses or partner programs: tokens used in the ecosystem must first be mined, after which they can circulate among participants.

6.5. Network effect

Each new partner expands the number of offers and ways to use OXN for holders. A growing holder audience makes joining the ecosystem more useful for new partners, reinforcing the network's mutual value.

This expands OXN's applicability but does not guarantee demand, value or liquidity.

7. DEX and Liquidity

OXN is fully compatible with the exchange infrastructure of BNB Smart Chain.

Initial liquidity can be formed from already mined OXN — on the principle of a reverse liquidity launch:

Users mine OXN → part of the already mined OXN goes to the Liquidity Bootstrap address through the Official OXN Pool fee during the liquidity formation period (Section 5.1) → initial liquidity is created → open trading begins

Unlike classic launch models, liquidity is not formed from pre-created tokens or hidden allocations. Liquidity is formed using tokens that previously came into existence as a result of mining.

The Liquidity Bootstrap address and the operating reserve are not a premine, a foundation allocation or a pre-created token pool. They are formed from already mined OXN arriving through the Official OXN Pool fee and are separate from the user distribution pool.

The planned base trading pair is OXN / USDT.

Information about the specific venue will be disclosed separately once the decision to launch liquidity has been made. Possible future listings on centralized venues are considered separately and are not the subject of this tokenomics.

Providing liquidity does not guarantee:

- demand for the token;
- price stability;
- the ability to exit a position;
- market depth;
- absence of slippage.

8. Roles, Administration and Immutable Parameters

Administrative powers are limited to managing technical roles. They are needed to launch and maintain the mining infrastructure but do not allow the basic emission rules to be changed.

Role / participant	Powers
DEFAULT_ADMIN_ROLE	Granting and revoking roles; assigned to a Safe multisig on the token and vault contracts
MINTER_ROLE	Submitting confirmed mining results to the contract (there may be several addresses); generating the Merkle root, i.e. the distribution of the pool reward. Automated ("hot") key
Vault / claim contracts	Accounting of unclaimed rewards and verification of claim rights
Official OXN Pool operator	Holds MINTER_ROLE; accounting of mining activity and publication of claim data
Deployer key	Holds no roles after deployment

DEFAULT_ADMIN_ROLE is assigned to a multisignature wallet with a 4-of-7 scheme: the wallet has seven independent key holders, and any administrative action requires signatures from at least four of them. This scheme protects against the compromise of individual keys: an unauthorized action would require control over four keys simultaneously.

The admin multisig can grant and revoke MINTER_ROLE and the administrator role. These actions do not make it possible to change the max supply or the reward curve, or to issue OXN outside the protocol rules.

Granting MINTER_ROLE is the pool admission mechanism. At launch, the role is granted only to the Official OXN Pool operator; when mining is opened (Section 3.4), it is granted to the addresses of independent operators. Since the admin multisig can also transfer the administrator role, pool admission governance may in the future be transferred to a community governance contract (DAO), see Section 3.4. This is the project's intention, not an active mechanism.

Multisig composition and procedures

- Administrative actions are executed immediately once the required signatures are collected;
- Revoking MINTER_ROLE stops further issuances by that key; already published roots are preserved, and pool participants retain the right to claim.

After contract deployment, the administrator cannot:

- increase the maximum supply;

- change the reward curve;
- increase the reward amount;
- replace the vault;
- create emission beyond the reward curve and CAP;
- change the contract code (the contracts are not upgradeable).

Key architectural constraints:

- calling mine() requires MINTER_ROLE;
- there is no unrestricted public mine();
- tokens are minted only at the moment of claim; unclaimed rewards are accounted for in the vault;
- pool accounting is updated after each successful issuance;
- emission parameters are immutable;
- a claim cannot give a wallet more than its cumulative balance in the published root, a pool more than the volume committed to it, or all pools together more than totalCommitted;
- the vault is set at deployment and cannot be replaced.

These constraints separate the emission rules from the operational management of pools, liquidity and partner programs. In other words, the project can manage the launch infrastructure, pools, data publication and liquidity, but cannot arbitrarily change the max supply or the reward formula, or issue tokens outside the protocol rules.

Disclosure plan

As the relevant components become ready, the project discloses key on-chain information via the OXN website, BscScan or by other means:

- the token contract with source code verified on BscScan;
- the vault contract;
- confirmation that the deployed code matches the audited version (SHA-256 4eb982ad…b346);
- the admin multisig — the multisignature wallet holding DEFAULT_ADMIN_ROLE;
- significant operational project addresses related to the pool fee, the operating reserve and liquidity, including the Liquidity Bootstrap address;
- addresses of operators with MINTER_ROLE or a publicly permissible description of them;
- published Merkle roots, data sets and manifests for claim.

The final composition and structure of operational wallets will be specified during launch preparation.

Baseline reporting regime: public on-chain addresses and periodic updates on material movements of the operating reserve, the Liquidity Bootstrap address and managed liquidity. The format and frequency of reporting may be refined as the product launches and market liquidity emerges.

9. Security Audit

The OXN smart contracts and the ZK implementation of claim have undergone a security audit by Hexens.

Parameter	Value
Auditor	Hexens
Period	August 10 – September 10, 2026 (final report dated 10.09.2026)
Scope	Smart contracts: mining difficulty recalculation, emission, reward accounting; ZK implementation of single and batch claim
Result	0 Critical, 0 High, 2 Medium, 2 Low; all findings fixed

Parameter	Value
Hash of the audited version (SHA-256)	4eb982ad210009bb4c97980e44b2fe4c752d913029389e80e7cfab2a6e57b346

ID	Severity	Summary	Status
OXN1-1	Medium	The estimate of work performed overstated difficulty and slowed emission relative to the target interval	Fixed
OXN1-2	Medium	Outdated BSC and Polygon block times in the configuration accelerated emission (approximately 6.7× on BSC)	Fixed
OXN1-3	Low	A pool could keep difficulty near the minimum by alternating bursts of mining and idle periods	Fixed
OXN1-4	Low	The ZK proof format for batch claim was incompatible with the contract, and batch claims failed	Fixed

The configuration reviewed in the audit included BNB Smart Chain and Polygon; deployment is on BNB Smart Chain only.

10. Risks and Limitations

The OXN model reduces the risks of hidden allocations, premine and arbitrary emission, but does not eliminate market, technical, operational and regulatory risks.

Key limitations:

- price and liquidity are determined by the market;
- OXN's base utility includes holding, transferring and use in available on-chain scenarios; settlement, reward and loyalty scenarios expand through partner integrations;
- the terms of specific loyalty programs are determined by partners;
- reward distribution relies on the publication of claim data;
- claim data requires publication and storage off-chain;
- the calendar emission schedule depends on hashrate (Section 2);
- high concentration of mining activity and Sybil attacks require anti-abuse monitoring;
- tax consequences depend on the user's jurisdiction;
- the PoW model requires computing resources and energy consumption.

Industrial mining, difficulty and anti-abuse

The OXN model does not promise equal results for all participants: rewards depend on mining activity, pool rules, difficulty and actual competition within the Official OXN Pool.

To protect the launch from concentration of rewards and abuse, the following may be applied:

- monitoring of anomalous activity;
- limits per account, wallet or device in the early phase;
- staged onboarding of participants;
- enhanced verification for higher limits;
- anti-Sybil rules;
- difficulty recalculation.

Difficulty recalculation. Difficulty is recalculated automatically according to an algorithm set in the contract:

- the target interval is 600 seconds between issuances;
- difficulty changes by no more than ±5% per recalculation;
- difficulty does not fall below the set minimum;
- recalculation is performed automatically upon successful mining; in addition, once the recalculation interval has elapsed, any address can trigger it through the public readjust() function. The caller chooses neither the value nor the direction: the new difficulty is calculated by the contract based on the work actually performed over the elapsed time.

Why recalculation is public. While mining is ongoing, difficulty is recalculated on its own — upon successful minings. A separate readjust() call is needed for the opposite situation: a large participant connected significant hashpower, difficulty rose accordingly, and then the participant left. The remaining miners find solutions too rarely, and if difficulty were recalculated only upon successful mining, issuance could stall for a long time.

In OXN, recalculation is tied to time rather than to found solutions. Any participant can trigger it, and difficulty steps down to a level corresponding to the remaining hashpower (but not below the set minimum) — until mining becomes accessible to ordinary participants again. Therefore, a separate readjust() call generally works toward lowering difficulty; when hashpower grows, difficulty is raised by the recalculation performed upon successful minings.

For comparison: in networks where difficulty is recalculated once per set number of blocks (in Bitcoin, once every 2,016 blocks), a sharp drop in hashpower causes blocks to be found less often, and the recalculation itself is pushed back in time.

Limitation: the recalculation step does not exceed 5%, and a recalculation interval must elapse between recalculations, so adaptation takes time. For example, halving the difficulty requires at least 14 consecutive recalculations.

Following the audit (OXN1-1, OXN1-3), the estimate of work performed was corrected and the possibility of keeping difficulty near the minimum by alternating bursts of mining and idle periods was eliminated. The minimum difficulty and the recalculation interval are given in the mining technical documentation.

This document describes the rules for the issuance, distribution and use of OXN and does not constitute financial, investment, tax or legal advice.

11. Conclusion

OXN combines a fixed maximum supply, emission exclusively through Proof-of-Work, the absence of a premine and hidden allocations, a disclosed pool fee, a launch through the project's launch pool followed by opening mining to independent pools, a partner-based token utility model and a reverse liquidity launch mechanism.

The token is created only through mining and claim in accordance with immutable emission parameters: the reward is accrued in the pool's accounting, and minting occurs at the moment of claim — directly to the user's wallet. The reward decreases smoothly, without halvings: by half approximately every 2 years, and the entire emission is designed for approximately 119.6 years. The smart contracts have undergone an independent security audit; reward distribution within the pool is verifiable against published data.

OXN tokenomics defines the rules for the issuance and circulation of the token without promising yield, price growth, guaranteed demand, market support or mandatory liquidity.