

# N.O.E.M Whitepaper

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Noem.mov



#### **TABLE OF CONTENTS**

•	Introduction	2		
•	Product/Service	3		
•	Market Opportunity			
•	N.O.E.M Ecosystem Overview	5		
	1. AI-Powered Blockchain Explorer			
	2. NFT Marketplace for tokenized properties	6		
	3. On-Chain Risk Management	7		
4. DeFi Landing & Borrowing				
	5. Property Management Tool	9		
N.O.E.M Token				
A. Token Sale Phrase Road Map (SPRM)				
	B. Token Allocation			
	C. Token Lifecycle summary	15		
	1. Token Generation & Distribution	16		
	2. Token Usage Paths			
	3. Burning Mechanism	19		
	4. Staking Mechanism	20		
	5. Treasury Control & Governance			
•	Technical Architecture			
•	Legal Consideration			
•	Roadmap	24		
-	Conclusion	25		

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# Introduction

The real estate sector has long been characterized by centralization, high entry barriers, low liquidity, and a lack of transparency. Traditional property transactions involve layers of intermediaries, time-consuming paperwork, and jurisdictional complexities that deter both individual and institutional investors. Access to accurate, real-time property data is limited, while cross-border investments are constrained by regulatory and operational hurdles.

Moreover, property ownership and verification systems are fragmented and vulnerable to fraud or misrepresentation. Liquidity remains a major limitation, as real estate assets are not easily divisible or tradable on secondary markets. As a result, both property owners and prospective investors face a rigid and outdated financial infrastructure.

NOEM (New Opportunity Estate Management) is built to transform this reality. It offers a decentralized, trustless, and automated ecosystem where physical properties are tokenized into digital assets on the blockchain. These propertybacked NFTs represent fractional ownership, enabling seamless investment, transfer, and monetization of real estate across borders.

Using cutting-edge AI models, NOEM introduces intelligent property risk analysis, empowering users with actionable insights into property valuation, legal exposure, and environmental risk. These risk scores directly influence smart contract-driven lending, staking, and insurance protocols, creating a truly data-driven and fair financial system.

By integrating blockchain transparency with AI-powered decision-making and decentralized finance tools, NOEM delivers a next-generation real estate infrastructure that is inclusive, secure, and globally accessible — unlocking new opportunities for investors, developers, and homeowners alike.



# Market Opportunity

The global real estate market is one of the largest asset classes in the world, valued at over \$300 trillion. Despite its vast size and importance, the industry remains structurally inefficient and technologically underdeveloped. Barriers such as high capital requirements, lengthy transaction processes, opaque pricing, and limited access to international markets continue to restrict broader participation.

Today, less than 3% of real estate assets are accessible to average investors, and property liquidity remains a critical bottleneck. Cross-border real estate investment is often restricted by legal complexity, inconsistent data, and lack of infrastructure that supports secure and fractional ownership.

NOEM addresses this massive opportunity by unlocking the potential of **property tokenization**. Through blockchain-based digital assets, physical properties can be turn into tradable tokens, enabling **fractional ownership**, **global access**, and **real-time liquidity**. Investors around the world can participate in real estate markets without geographic or regulatory limitations, using their EVM-compatible wallets.

In parallel, NOEM introduces AI-driven risk modeling and transparent on-chain data to build **trust and intelligence into property investment**. The platform empowers users with access to property-backed NFTs, lending and borrowing services, and AI-assisted insights — creating a new economic layer where real estate assets become more fluid, programmable, and inclusive than ever before.



# **NOEM Ecosystem Overview**

#### 1. AI-POWERED BLOCKCHAIN EXPLORER

The NOEM ecosystem introduces an advanced AI-powered blockchain explorer specifically designed for property-related data and digital asset management. Unlike traditional blockchain explorers that require technical knowledge and offer limited context, the NOEM explorer features an intuitive interface enhanced with natural language processing and real-time assistance.

Users can interact with the system by simply asking questions or issuing commands in plain language.

At the heart of this experience is an integrated AI assistant that acts as a personal blockchain analyst. It interprets user intent, fetches relevant on-chain data, provides context-aware responses, and even guides users through complex operations such as staking, wallet interactions, risk analysis requests, or transaction validation.

This tool dramatically lowers the barrier to entry for newcomers while providing powerful insights and functionality for experienced users. It supports seamless interaction with the Bahamut blockchain and offers a frictionless, user-centric experience that makes blockchain navigation simple, transparent, and empowering — especially for property investors, developers, and institutions.



### 2. NFT MARKETPLACE FOR TOKENIZED PROPERTIES

The NOEM ecosystem features a dedicated **NFT marketplace** tailored for property tokenization — enabling users to convert physical property assets into blockchainbased digital tokens. This process allows individuals, businesses, and institutions to represent real-world properties as **verifiable NFTs** (**Non-Fungible Tokens**) on the Bahamut chain.

Through a simple and secure interface, users can tokenize their own properties by submitting relevant documentation, undergoing on-chain KYC/AML verification, and generating a smart contract that binds ownership and property data to a unique NFT. Each NFT becomes a **proof-of-ownership** and a programmable asset, capable of being traded, rented, staked, or used as collateral across the NOEM platform.

The marketplace supports **curated NFT collections** based on asset class, geography, or investment type — such as:

- Residential estates
- Commercial buildings
- Investment properties
- Land parcels
- Co-owned developments or fractional offerings

By organizing listings into intuitive categories, NOEM simplifies navigation and boosts discoverability for investors and property managers alike.

This innovative approach turns traditional real estate into **liquid**, **globally accessible**, **and divisible digital assets**, removing historic barriers like high capital requirements, legal bottlenecks, and jurisdictional fragmentation. NOEM's NFT marketplace creates a new digital economy where property ownership and investment are reimagined for the decentralized era.



### 3. ON-CHAIN RISK MANAGEMENT

NOEM introduces a next-generation **on-chain risk management system** that enhances both security and user experience across the real estate and DeFi ecosystem. At its core is a **user-friendly, blockchain-native KYC/AML verification process** designed to uphold compliance standards while preserving user privacy and control.

Through a seamless, decentralized flow, users can verify their identity directly via their **EVM-compatible wallets**, without relying on centralized intermediaries. The verification process is fully encrypted and secured on-chain, ensuring that sensitive identity data is tamper-proof, transparent, and protected from unauthorized access or misuse.

This architecture eliminates the need for off-chain storage or third-party data custodians, greatly reducing the risks of **data leakage, impersonation, or fraud**. Once verified, a user's identity status can be cryptographically proven across the NOEM ecosystem without exposing underlying personal data — enabling frictionless interaction with DeFi services, property listings, and legal agreements.

Additionally, NOEM uses AI to analyze property-related data (e.g., legal clarity, location, environmental factors, ownership history) and generate **dynamic risk scores** that are embedded into smart contracts. These scores influence decisionmaking in lending, staking, and insurance modules, allowing for **risk-adjusted financial behavior on-chain**.

This robust on-chain risk framework lays the foundation for **trustless**, **secure**, **and intelligent property transactions**, while maintaining compliance with evolving regulatory expectations globally and within the jurisdiction of Armenia.



#### 4. DEFI LENDING & BORROWING

NOEM's **DeFi Lending & Borrowing module** introduces a secure, transparent, and AI-enhanced financial layer for tokenized real estate assets. It allows property owners to unlock liquidity by using their tokenized assets — such as propertybacked NFTs — as collateral, while enabling lenders to earn yield based on transparent, risk-adjusted returns.

Borrowers can seamlessly lock their verified property NFTs in smart contracts to take out loans in stablecoins or other supported tokens. These loans are governed by pre-set terms automatically enforced by blockchain logic, removing the need for traditional financial intermediaries.

A defining feature of NOEM's DeFi framework is its **AI-driven risk scoring engine**. Before issuing loans, the system evaluates the underlying property's risk profile based on factors like:

- Location and market volatility
- Ownership history and legal clarity
- Environmental or structural risk
- Real-time valuation and liquidity metrics

Each property receives a dynamic **risk score**, which directly influences the **interest rate**, **collateral ratio**, **and insurance requirements**. Lenders, in turn, benefit from an intelligent underwriting system that protects their capital and aligns rewards with risk exposure.

This model ensures a **self-regulating, trustless lending ecosystem** where capital flows efficiently, and property value is utilized without forced sales or complex refinancing. Combined with NOEM's on-chain identity verification, the DeFi platform becomes a cornerstone of secure, inclusive, and decentralized real estate finance.



#### 5. PROPERTY MANAGEMENT TOOL

The NOEM ecosystem provides a comprehensive **Property Management Tool** built on blockchain, designed to simplify and automate the ongoing management of real estate assets. This suite of decentralized applications enables property owners, investors, and managers to handle critical operational tasks on-chain with full transparency, auditability, and efficiency.

#### Key features include:

#### • Rent Tracking & Payments

Smart contracts automate rental agreements, due dates, and payments. Tenants can pay directly in crypto, with transactions instantly recorded onchain, and landlords receive verifiable payment histories.

#### • Repair & Maintenance Scheduling

Property owners and tenants can log service requests, assign tasks to vendors, and confirm completion — all tracked securely on the blockchain for future reference and accountability.

#### Tax Documentation

Income and expense data is automatically compiled into tax-ready reports, streamlining end-of-year compliance and financial transparency. This data is cryptographically secured and time-stamped to eliminate fraud.

#### • Insurance Integration

Users can connect with on-chain insurance providers and automate claims, renewals, and premium payments based on the property's verified condition and risk profile.

#### • Compliance Reporting

Smart contracts help enforce regulatory requirements such as lease terms, local compliance checklists, and utility performance — particularly useful in multi-unit or jurisdictional real estate operations.NOEM redefines how real estate is managed — making it borderless, frictionless, and future-ready.



# NOEM Token (Symbol: NOEM)

Total Supply: 500,000,000 NOEM Token Type: BHRC-20

Deployed on the Bahamut blockchain.

#### **Utility**:

- Pay for risk analysis reports
- Investment return rewards
- Transaction and service fees across the platform
- Community incentives and referral rewards
- Property management services payment
- AI driven assistant fee

### Minting:

• All tokens will be minted at deployment (fixed supply)

#### **Burning**:

• A portion of NOEM used for premium services (e.g., advanced risk analysis) will be burned automatically



### NOEM TOKEN SALE PHASES ROADMAP

#### Phase 1: Presale

• **Start Date:** July 1, 2025

• **Duration:** 3 months (July 1 – September 30, 2025)

• **Allocated Supply:** 8% (40,000,000 NOEM)

• Participants: Early supporters, strategic partners, community backers

• Lockup: 270 days

• Vesting: 10% unlocked monthly after lockup

• Notes: Lowest price point for trusted network, KYC required

#### **Phase 2: Private Sale**

• **Start Date:** October 15, 2025

• **Duration:** 1.5 months (October 15 – November 30, 2025)

• **Allocated Supply:** 12% (60,000,000 NOEM)

• Participants: Vetted individual and institutional investors

• **Lockup:** 12 months

• Vesting: 10% unlocked monthly after lockup

• Notes: Mid-tier price, ideal for raising bulk liquidity



#### **Phase 3: Public Sale (Initial Exchange Offering - IEO)**

• Start Date: January 15, 2026

• **Duration:** 3–5 days

• **Allocated Supply:** 15% (75,000,000 NOEM)

• Participants: Global public users on centralized exchange (IEO)

• Unlock: 100% unlocked and tradable at Token Generation Event (TGE)

• **Notes:** Public users receive full tokens immediately for trading, use, and staking. No vesting applied to this phase to support open liquidity and broad adoption.

#### **Token Generation Event (TGE)**

• **Date:** January 15, 2026 (with Public Sale launch)

• Listing: Initial DEX and/or CEX listing for liquidity



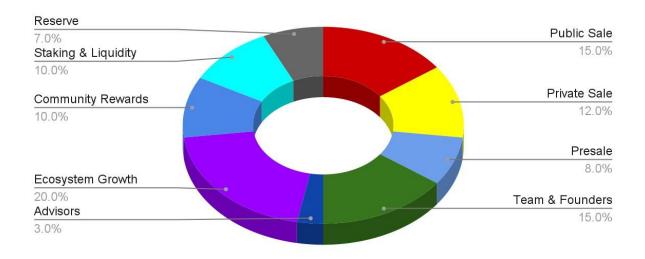


## **Token Allocation**

Category	Allocation (%)	Amount (NOEM)	Vesting Details
Public Sale	15%	75,000,000	100% unlocked at TGE, and tradable at Token generation(TGE)
Private Sale	12%	60,000,000	12-month lockup, 10% monthly vesting thereafter
Presale	8%	40,000,000	270-day lockup, then 10% unlocked monthly
Team & Founders	15%	75,000,000	24-month lockup, 10% monthly vesting thereafter
Advisors	3%	15,000,000	12-month lockup, then 10% monthly vesting
<b>Ecosystem Growth</b>	20%	100,000,000	Released as needed for partnerships, integrations, grants
Community Rewards	10%	50,000,000	Distributed via staking, airdrops, and incentives (vesting varies by campaign)
Staking & Liquidity	10%	50,000,000	Used for DEX/CEX liquidity, farming rewards, partially locked
Reserve	7%	35,000,000	Held by treasury, unlocked after 12 months for future use



# NOEM Token Allocation (Total Supply: 500,000,000 NOEM)





# **Token Lifecycle Summary**

User Buys NOEM  $\rightarrow$  Uses it on Platform:

- $\rightarrow$  Mint NFT  $\rightarrow$  Fee to Treasury / Burn
- $\rightarrow$  Access AI  $\rightarrow$  Fee Burned + Saved
- → Risk Score → Part Burned
- → Stake → Temporarily Locked
- $\rightarrow$  Buy/Sell  $\rightarrow$  Fees  $\rightarrow$  Treasury
- Some Tokens Burned
   Some Tokens B
- ➤ Some Held in Treasury
- Some Rewarded to Stakers
   Stak



### 1. Token Generation & Distribution

At the **Token Generation Event (TGE)**, **500,000,000 NOEM tokens** are minted (fixed supply, no future minting). These tokens are distributed to the following key areas:

Category	Purpose
Public/Private Sale	Raise initial capital & grow community
Ecosystem Growth	Fund development, integrations, liquidity
Treasury Reserve	For grants, rewards, protocol incentives
Community & Advisors	Long-term network development
Staking Pool	Reward users for locking tokens in the ecosystem

16



#### 2. Token Usage Paths

#### A. Tokenization of Real-World Assets (NFT Minting)

- Users tokenize real estate, land, or physical investments by minting NFTs.
- **Fees:** Paid in NOEM token.
- **Destination:** Sent to treasury, partially burned.

#### B. Buy/Sell Property NFTs

- Marketplace allows users to list and buy tokenized assets (NFTs).
- **Fees:** Paid in NOEM by buyers or sellers.
- Destination:
  - $\circ$  Protocol Fee  $\rightarrow$  Treasury
  - $\circ$  Creator Royalty  $\rightarrow$  NFT owner
  - o Gas Fees → Bahamut network

#### C. Al Assistant Services

- AI assistant answers questions, analyzes investment opportunities, manages tokens.
- Fee Types:
  - o Basic queries: Free or minimal NOEM fee
  - o Advanced analysis (e.g. legal risk, rental ROI): 10–50 NOEM per call
- Destination:
  - o Free-tier = no fee
  - o Premium tier = partially **burned**, remainder to treasury



#### D. Property Risk Scoring

- AI evaluates each property NFT using real-world data: location risk, legal history, environmental risk.
- Use Case: Required before using property NFT as lending collateral.
- Fees: Fixed NOEM fee per scoring request.
- **Token Path:** Sent to protocol  $\rightarrow$  partially **burned**  $\rightarrow$  rest to risk module fund

#### **Property Risk Analysis Framework**

AI models assess property value, location volatility, legal disputes, and environmental factors to generate a dynamic risk score. These scores feed into DeFi lending and insurance decisions.

#### E. Property Management Tools

- Includes: rent tracking, taxes, repairs, legal docs, insurance
- Fees: Monthly or annual usage fees in NOEM
- **Destination:** Treasury (used for operating or reward redistribution)



#### 3. Burning Mechanism — How and When It Happens

Burning reduces token supply permanently. This helps maintain long-term token value and balances demand.

#### What gets burned:

Source	Burn Ratio	Notes
AI Risk Scoring	20–50%	Scaled by complexity
Property NFT Minting	10–25%	Higher for commercial real estate
DeFi Protocol Use Fees	10–15%	Certain loan origination or insurance

#### How it's burned:

- The smart contract sends a percentage of the NOEM fee to the zero address (0x00...)
- These tokens cannot be recovered and are permanently removed from circulation

**Burning = deflation + value reinforcement** over time



#### 4. Staking Mechanism

#### Users Stake NOEM in the Ecosystem

- Stake NOEM to gain rewards from protocol fees
- Use-case-specific staking: real estate pools, insurance underwriting, validator support

#### Example: Property Investment Staking

- NOEM holders stake tokens in vetted real estate projects
- Receive passive income from project
- Staking contracts managed by Platform

#### Rewards come from:

- Platform fees (transactions)
- Real-world rental profits (if integrated)
- A portion of treasury funds

#### 5. Treasury Control & Governance

#### Treasury receives:

- Platform usage fees (minting, AI, risk, sales)
- Unused ecosystem funds
- Returns from staking

#### Treasury can:

- Fund grants and growth incentives
- Recycle tokens to liquidity pools
- Burn surplus tokens to reduce supply
- Be governed by staked NOEM holders



# **Technical Architecture**

NOEM is built on a modular and scalable architecture that integrates blockchain technology, AI models, and decentralized storage to provide a seamless, secure, and intelligent ecosystem for real estate tokenization and management. Each component is optimized for trustlessness, efficiency, and user experience.

#### • Smart Contracts

All key operations — including token minting, NFT issuance, staking, lending, identity verification, and marketplace transactions — are executed through **Solidity-based smart contracts**. These contracts are **audited prior to deployment** to ensure security, transparency, and resistance to common exploits. Contract logic is designed to be modular, allowing for upgrades as the protocol evolves.

#### AI Models

NOEM integrates advanced **AI models** trained on global property datasets, risk profiles, and economic indicators. These models process structured and unstructured data — including **satellite imagery**, **legal documentation**, and **market trends** — to deliver risk assessments, property valuations, and investor insights. The AI layer is tightly coupled with smart contracts to feed real-time decision data into lending, staking, and insurance protocols.

#### • Storage Infrastructure

The platform uses **IPFS** (**InterPlanetary File System**) for decentralized, immutable storage of off-chain documents and metadata, such as property deeds,



verification files, images, and inspection reports. All transactional and financial data is recorded on-chain via the Bahamut blockchain, ensuring full auditability and permanence without compromising user privacy.

#### • Frontend & Wallet Integration

The NOEM frontend is developed with a modern and responsive stack that integrates directly with Thirdweb wallet infrastructure. This allows users to access the platform through a wide range of EVM-compatible wallets (e.g., MetaMask, WalletConnect) and perform actions like minting NFTs, submitting verification, or participating in DeFi pools — all through a seamless and intuitive interface.

This architecture ensures that NOEM is not only **technologically robust**, but also user-centric and adaptable — empowering users across all experience levels to participate confidently in the tokenized real estate ecosystem.

22



# **Legal Considerations**

The **NOEM token** (symbol: NOEM) is designed and structured as a **utility token** that powers access to services and functionalities within the NOEM ecosystem. It is **not intended to function as a security**, and based on preliminary legal assessments, it **does not fall under the classification of a security under Armenian law**.

The token is used to pay for services such as AI-based property risk assessments, property management tools, NFT minting fees, and platform-level governance. It is not offered as a financial investment, and ownership of NOEM tokens does not entitle holders to any profit-sharing, dividends, or ownership rights in the NOEM organization or its assets.

All users, contributors, and participants are **expected to comply with the legal and regulatory requirements of their own jurisdictions**, particularly in relation to digital asset usage, KYC/AML compliance, taxation, and cross-border transactions. NOEM provides on-chain identity verification to support legal integrity while preserving user privacy.

The NOEM team is committed to operating with full transparency and ethical standards. The project **welcomes external legal and technical audits**, and continuously monitors international regulatory trends to ensure alignment with evolving legal frameworks. Additionally, the platform maintains **jurisdiction in the Republic of Armenia**, where blockchain innovation is actively supported. This legal foundation reinforces the project's legitimacy and commitment to responsible ecosystem growth.



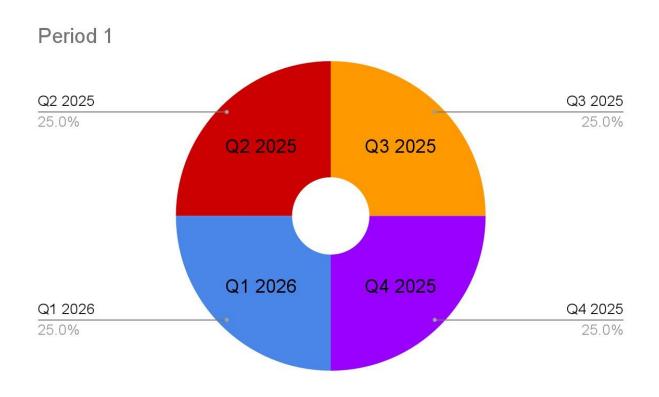
# Roadmap

Q2 2025 - Token launch and explorer beta

Q3 2025 - NFT marketplace live; property tokenization begins, AI blockchain explorer & AI assistant

Q4 2025 - DeFi module; risk model integration

### Q1 2026 - Global partner integrations





# Conclusion

NOEM is redefining the future of estate management by merging **blockchain technology**, **artificial intelligence**, and **decentralized finance** into a unified platform built for transparency, accessibility, and innovation.

Where traditional real estate is centralized, illiquid, and exclusionary, NOEM provides a **decentralized**, **data-driven**, **and user-empowered** alternative. From tokenizing physical properties to generating AI-based risk scores and enabling onchain lending, staking, and insurance, the NOEM ecosystem transforms how property is owned, managed, and invested in.

With the launch of the **NOEM token**, real estate becomes:

- **Programmable** through smart contracts
- Liquid through tokenization and DeFi
- Inclusive by opening up access to global users and investors

NOEM does not just improve real estate finance — it reshapes it, creating new opportunities for property owners, developers, institutions, and everyday users around the world. By making real estate borderless, intelligent, and transparent, NOEM is pioneering the future of digital property.

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