

Community Whitepaper: Backchain (BKC) - The Participation Ecosystem

Status: The Backchain Ecosystem is **fully functional and currently in the testing phase (Testnet/Development Network)**. All smart contracts are deployed and interconnected, ready for final audit and mainnet launch.

1. The pStake Revolution: Proof of Participation

The heart of the Backchain Ecosystem is **pStake**, a **Proof of Participation** metric that is unique and fundamental to the network's stability and security.

pStake is not a token, but a **power of access** that you build by staking our native token, BKC. It acts as a mechanism of **quality over quantity**, ensuring that only engaged users with long-term commitment have access to the most important services.

pStake Advantages for Stability:

Feature	User Advantage	Ecosystem Advantage (Stability)
Authorized Access	Ensures that services are used by serious participants, not by <i>bots</i> or short-term speculators.	Qualified Entry Barrier: Reduces <i>spam</i> and volatility, as access requires an investment of time and trust in the network.
Generation by Staking	Rewards long-term commitment: the more BKC you <i>stake</i> and the longer the duration, the higher your pStake.	Liquidity Lockup: Incentivizes the locking of tokens (staking), reducing the circulating supply and promoting BKC price stability.
Centralized Verification	Access is fast and transparent, automatically verified by the "Hub" (EcosystemManager).	Security and Transparency: Access rules are immutable and auditable, ensuring everyone plays by the same rules.

pStake Formula: $\text{pStake} = (\text{Amount of BKC Staked} / 10^{18}) * (\text{Lockup Duration in Days})$

2. "Hub and Spoke" Architecture: Transparency and Flexibility

BKC adopts a "Hub and Spoke" model (Central and Applications) to separate business rules from application execution, ensuring **transparency** and **flexibility** for future expansion.

2.1. The Hub: EcosystemManager (The Network's Brain)

The `EcosystemManager.sol` is the central contract that centralizes all business rules, acting as a single, transparent control point:

- * **Master Authorization:** Verifies the user's pStake to authorize the use of any service.
- * **Rule Management:** Transparently defines service fees, minimum pStake requirements, and discount logic.
- * **Advantage:** Allows ecosystem rules to be adjusted (via future governance) in a single location, without the need to redeploy all applications.

2.2. The Spokes: Value Applications (The Community Tools)

The Spokes are the applications that deliver direct value to the community, all integrated with the Hub for authorization and fee management.

Spoke	Contract	Main Function	System Advantage
Delegation Manager	<code>DelegationManager.sol</code>	Manages BKC staking, pStake generation, and the distribution of service fee rewards.	Economic Stability: Centralizes the staking mechanism, ensuring pStake is the single access key.
RewardBoosterNFT	<code>RewardBoosterNFT.sol</code>	Utility NFT that functions as a universal "discount coupon" on service fees.	Incentive to Use: Reduces transaction costs for committed users, encouraging continuous network usage.
Decentralized Notary	<code>DecentralizedNotary.sol</code>	Allows permanent and immutable registration of documents on the blockchain, issuing a certificate NFT (BKCN).	Transparency and Trust: Offers a real utility service, increasing confidence in the network's capability.
Reward Manager	<code>RewardManager.sol</code>	Manages the controlled issuance of new tokens (Mining by Purchase) and the distribution of mining rewards.	Financial Sustainability: Ensures project longevity through predictable token issuance based on dynamic scarcity.

3. Economic Engine: The Positive Feedback Loop

The ecosystem is designed to create a virtuous cycle where usage funds participation, and participation unlocks usage.

3.1. Transparency and Reward: Network Usage Directly Funds Delegators

The principle is simple and transparent: **Every fee paid for a service** (such as Notarizing a document) **is immediately split and reinvested**, ensuring that the community is the main beneficiary of network growth. As soon as the fee is paid, it is distributed: * **50% to the Treasury**: Funds the ecosystem's development, marketing, and operations. * **50% to the Delegator Pool (Stakers)**: This half is sent directly to the `DelegationManager` to be distributed as a reward to pStake holders. **This is your direct advantage for delegating: you receive a share of every service transaction on the network.**

Advantage for the Delegator: Continuous network usage by any Spoke (Notary, Sale, etc.) generates a passive and transparent income stream for you. **By delegating, you become a partner who receives a slice of all service fees.** This encourages participation and token retention, ensuring the stability of our user base.

3.2. Mining by Purchase: Reinforcing the Delegator Reward Pool

The `RewardManager` implements a smart token issuance mechanism: * **Trigger**: When a user creates a Vesting Certificate (locking BKC for 5 years), new tokens are *minted*. * **Dynamic Scarcity**: The amount of tokens issued is governed by the **scarcity rate**, which progressively decreases as the total supply approaches the maximum limit of 200 million BKC. This ensures that issuance is controlled and predictable. * **Mining Distribution**: The largest portion (65%) of the mined tokens is sent directly to the `DelegationManager` reward pool. **This means that the issuance of new tokens is primarily channeled to reward you, the Delegator, further increasing your earnings.**

Advantage for the Delegator: Ensures the sustainability of the reward system over time. You benefit from a reward stream that depends not only on service fees but also on the controlled issuance of new tokens, **maximizing your returns transparently and predictably.**

4. Assets and Incentives: The Power of BKC and the Booster NFT

4.1. BKCToken (BKC)

- **Function:** Utility token, staking, and fee payment.
- **Transparency:** The fee on P2P transfers has been removed. This ensures that BKC is a **DeFi-friendly** token, with maximum compatibility with exchanges and liquidity pools.

4.2. RewardBoosterNFT (BKCB)

- **Function:** Your personal "discount coupon."
- **Incentive:** By acquiring a Booster NFT, you get an automatic percentage discount on service fees across the entire network. The Hub (EcosystemManager) verifies your ownership and applies the discount instantly.
- **Advantage:** Rewards initial investment in the ecosystem with savings on all future transactions.

5. Conclusion: An Ecosystem Built for You

The Backchain Ecosystem (BKC) is a project built on the **transparency** of the "Hub and Spoke" architecture and the **stability** of our unique **pStake** mechanism.

With a reward system that is self-sustaining through network usage and token issuance controlled by dynamic scarcity, BKC offers a robust, secure, and fair platform for all participants.

Join us in this testing phase and help build the future of decentralized participation!