WHITE PAPER · VERSION 1.0 · CHAIN ID 4663

BHE

Buy Hold Earn

Whitepaper

An immutable, owner-less token that pays real ETH to eligible holders on Robinhood Chain.

Design A stealth, fair-launch experiment in on-chain mechanism design

Governance Anonymous · No team · No presale · No admin keys

Reward 3% of the ETH leg of every main-pool trade → 100% to holders

NOT FINANCIAL ADVICE · EXPERIMENTAL SOFTWARE

> **Disclaimer:** BHE is experimental. There is nobody to ask for help. Not financial advice. Ordinary smart-contract wallets, Safes, vaults, exchange contracts, and LP positions earn **nothing**. Plain wallets and EIP-7702 delegated wallets can earn if they hold enough BHE (Section 3). Renounced, trustless, and immutable does not remove the possibility of substantial or total loss.

Contents

Two short glosses used throughout:

Network fee. The small charge the chain itself takes to process a transaction. This project does not charge it, receive it, or refund it.

Reward engine. The companion contract permanently wired to BHE that charges the fee on every trade and pays out rewards. On a block explorer it may be labeled a hook — same thing.

1. Overview

Buy Hold Earn (BHE) is a fixed-supply token on **Robinhood Chain** (an Arbitrum Orbit layer-2 network; mainnet chain ID **4663**). Gas is paid in ETH. The token is paired only with **native ETH**. Every trade on its main pool takes a **3% fee on the ETH side** of the trade. **All of that fee** goes into a **reward pot** that is later shared among eligible holders as **real ETH**.

There is:

- no team wallet and no team allocation
- no presale
- no mint button after launch
- no owner, admin key, pause switch, or upgrade path

At launch, **100% of the 1,000,000,000 BHE supply** sits in the trading pool as nine fixed liquidity bands. The starting market cap is about **0.5 ETH**. Trading opens behind an **anti-snipe** buy-size ramp (Section 5) for the first 13.6 hours. After launch the contracts simply run; nobody can rewrite the rules.

BHE is a **mechanism**, not a company. The same immutability that removes rug risk also means there is no support desk, no emergency patch, and no recovery if you send tokens to the wrong place.

Official artifacts (placeholders until mainnet deployment — always confirm against the verified on-chain source before you trust an address):

ITEM	VALUE
Token	BHE
Chain	Robinhood Chain mainnet (4663)
Quote / reward asset	Native ETH
Token contract	`0xA115ca84e181dC49adB91918b5FE95F7c8029718`
Reward engine	`0xe00A5cA7B828e2Ef9238725422f2Dc6192dF20cc`
Explorer	`https://robinhoodchain.blockscout.com`

There are **no official social channels** written into the contracts. Treat any account, group, or site claiming to speak for BHE as unverified unless you can independently match it to the deployer or the verified source. The verified contract source is the sole authority; where this paper and the code differ, **the code governs**.

> **Notice.** This document is informational only. It is not financial, investment, legal, or tax advice. BHE is experimental and speculative. You can lose most or all of what you commit. Nothing here is an offer or solicitation. Do your own research and comply with the laws of your jurisdiction.

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2. How trading fees become rewards

2.1 The only fee this project takes

On every buy **and** every sell through the main BHE/ETH pool:

- the system measures the **ETH side** of that trade
- it takes **3%** of that ETH amount
- **100%** of that fee goes into the **reward pot** for holders

The fee rate is a fixed constant in the code and cannot be changed. That 3% path applies on the main hooked pool; other venues do not collect it for holders.

2.2 When rewards are paid

Rewards are not paid on every single trade. Fee ETH accumulates in the pot. When the pot is large enough (about **0.025 ETH**), enough time has passed since the last completed payout round (about **15 minutes**), and there is at least one eligible holder, a **reward cycle** starts:

1. The pot is locked as that cycle's chunk.
2. Eligible holders are paid their share, a few at a time, as later trades keep the system moving.
3. When everyone in the current pass has been processed, the cycle completes and a short cooldown begins before the next one can start.

Rough rule of thumb at a full 3% fee: about **0.83 ETH** of ETH-side trading volume fills a 0.025 ETH pot once. Actual timing depends on real volume and on how long cooldowns and payouts take.

2.3 How your share is calculated

Within a cycle, each eligible holder's share is proportional to:

balance × hold multiplier

divided by the same product summed across all eligible holders.

A larger stack and a higher multiplier mean a larger slice of **whatever pot exists**. The pot itself is only as large as trading volume makes it. No volume means no new rewards.

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3. Who earns / who does not

3.1 The balance floor

You must hold at least **10,000 BHE** at an eligible address to earn new rewards. Below that line:

- you are not counted in reward math
- you do not build hold-time weight for new payouts
- you earn nothing new

If you were above the line, earned a share, and then sold down below 10,000, **already-earned** amounts that were banked for you can still be claimed (Section 6). Future earning stops until you are back above the line at an eligible address.

3.2 Which addresses earn

An address **earns** only if **both** of the following are true:

1. It is treated as a **wallet**, not an ordinary contract: - a **plain wallet** with no code at the address, **or** - an **EIP-7702 delegated wallet** (the address carries exactly the standard 23-byte “I am a delegated wallet” marker, not ordinary contract code)
2. Its BHE balance is **at least 10,000**

EARNS (IF ≥ 10,000 BHE)	DOES NOT EARN
A plain personal wallet (no code)	Safe / multisig wallets that use ordinary contract code
An EIP-7702 delegated wallet	“Smart wallets” / account-abstraction wallets with ordinary contract code
	Exchange deposit contracts, vaults, routers used as holding addresses
	Uniswap LP positions and the pool itself
	The reward engine, the dead address, the zero address
	Any other address whose code is **not** the exact EIP-7702 wallet marker

Ineligible addresses are **not counted** in reward math and get **no** share banked for later. Tokens can still sit there; they simply do not participate in Earn.

How rewards are delivered (once an address is eligible):

WALLET TYPE	DELIVERY
Plain wallet (no code)	Best-effort **automatic native ETH push**; if a push fails, the amount is banked for **claim**
EIP-7702 delegated wallet	**Claim only** — no automatic push

Practical warning. Many “smart wallets,” Safes, and account-abstraction setups use **ordinary contract code**. Those earn **zero**, even if the UI calls them a wallet. EIP-7702 is a **narrow exception**: only addresses with the exact standard delegated-wallet marker earn, and they must **claim** themselves. If you want the simplest path (auto-push plus claim as backup), hold BHE in a plain personal wallet that has not been upgraded to carry code.

3.3 Automatic push is best-effort (plain wallets)

When a cycle pays out, the system tries to send **native ETH** to **plain** wallets only. EIP-7702 wallets are skipped for automatic push even though they can earn. If a plain-wallet push fails (rare for a normal wallet; more relevant for odd edge addresses), the amount is **credited** on the reward engine and can be collected with **claim** (Section 6).

4. Hold multiplier & big-sell rule

4.1 The hold multiplier (1× → 12×)

Each eligible position starts at **1×** the moment tokens arrive at that address. The longer they sit there without a reset, the higher the weight climbs toward a **12×** ceiling along a fixed **non-linear** curve (faster early, then flattening). At **15 days** the multiplier is about **3.5×**; at **180 days** about **11.5×**. It approaches 12× without a special “paid for reaching 12×” event. See Appendix A.1 for more milestones.

This multiplies **your share of the pot**, not a promised yield. A high multiplier with no trading volume still earns nothing new.

The clock belongs to the address, not to “you” as a person. Move tokens to another wallet and the tokens that arrive there start again at **1×**. A holder at 11.5× who moves to a fresh address lands at 1× on the moved stack. Partial moves re-stamp only the portion that arrives.

Receiving more tokens into an already-aged wallet can **blend** the multiplier downward (new tokens enter at 1× and mix with what was there). Selling under the big-sell line does not by itself reset you; see below.

4.2 The big-sell reset

If your **cumulative sells into the main pool** during the current window reach **0.5% or more** of the pool’s **token balance at the moment that window opened**, your **entire remaining balance** on that address resets to the cliff: multiplier back to **1×** and hold age restarted.

Important details:

- The 0.5% line is measured against the **pool’s** BHE balance at window open — **not** against total supply and **not** against your personal stack. As buyers empty the pool, the absolute token amount that triggers a reset **falls**.
- A new window opens when a **new reward cycle arms**, not merely when the previous cycle finishes paying everyone.
- Sales in the same window **add up**. Sales under the line do not reset you; crossing the line does.
- Buys never count toward this rule. Wallet-to-wallet transfers never count as “sells into the pool.”
- **Staged exits across different windows** can keep you under the line if each window’s cumulative sells stay below 0.5% of that window’s opening pool balance.

Honest limitation. The reset is designed around sells **straight from a plain wallet into the main pool**. Routes that first send tokens into another contract (many routers and aggregators) can fail to attribute the sell to your wallet for reset purposes. That is a permanent property of the design, not a temporary bug. Treat the hold incentive as binding when you sell from your own plain wallet into the pool; do not assume every app path is identical.

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5. Anti-snipe ramp

5.1 What it is

For roughly the first **13.6 hours** after trading starts (exactly **49,000 seconds**), each **individual buy** is limited in how many BHE it may take from the pool:

WHEN	MAX BHE OUT OF THE POOL PER BUY
At open	**0.02%** of the pool's **live** BHE balance
Ramps every second	Up toward **~0.069%** of live balance
After ~13.6 hours	Cap **removed** entirely

The cap is always a percentage of what the pool holds **right then**, so as the pool sells down, the absolute token amount allowed per buy shrinks.

Worked example at the first moment of launch (pool still holds the full 1,000,000,000 supply):
0.02% = **200,000 BHE** maximum output on that single buy.

5.2 How to buy during the ramp

- Prefer buys that specify **how much ETH you spend** (exact-in). Oversized exact-in buys can **partially fill**: you get what the cap allows; unused ETH is meant to return in the same transaction.
- Buys that demand an **exact BHE amount** over the cap typically **fail entirely** (you lose only the network fee).
- Default wallet "slippage" protection often **cancels** a partial fill before any refund path runs. To accept a partial fill you must deliberately allow a much lower received amount — which also means **little or no price protection** on that trade. Many people instead keep normal slippage and **size under the cap**, or wait until the ramp ends.

5.3 Who receives a same-transaction refund

Refunds of unused ETH from a capped buy go to the address that **submitted the transaction** on-chain — not always to the person who intended the buy. If you buy from your own plain wallet, that is usually you. If a relayer, “gasless” service, or bundler submits for you, the refund can go to **them**.

If the instant refund cannot complete, the amount is recorded as a **claimable refund** for that submitter (Section 6). It is not kept by the project.

5.4 What the ramp does not do

- It does not stop multiple buys in one transaction; each buy can take up to one cap’s worth.
- It does not replace good trade sizing or market risk.
- It is not a fee: unused ETH is not meant to stay in the pot as a penalty.

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6. Claiming rewards & refunds

6.1 Automatic delivery

Plain eligible wallets are meant to receive **native ETH** automatically when cycles run. That path is **best-effort**. Congestion, failed receives, and edge cases can leave money **credited** instead of pushed.

EIP-7702 delegated wallets that earn are not auto-pushed. Their share is banked for them to **claim**. There is no alternate wrapped-ETH auto-pay path in BHE-v2.

6.2 Claim — the reliable path

The reward engine exposes a **claim** action that pays **you** (the caller) any:

- banked reward ETH from failed or deferred pushes
- shares owed to EIP-7702 wallets (claim-only delivery)
- settled amounts owed to your address

in **plain native ETH**. There is no separate staking app required for the core mechanism. A public **claim page** (hosted on IPFS) is intended as a convenience front-end for ramp status, multiplier, big-sell threshold, and claim/refund actions; tools may list as **coming** until that page is published. You can always interact with the verified contract on a block explorer.

Claim is not a way around eligibility. Ordinary contracts, Safes, vaults, exchange contracts, LP positions, the pool, and other ineligible addresses earn **nothing** and have nothing to claim from the reward system. Claim only pays **reward** amounts the system already owes that address under the rules (banked rewards for eligible holders, including EIP-7702 claim-only delivery). Failed anti-snipe buy refunds are a **separate** refund claim (Section 6.3), owed to the transaction submitter.

6.3 Anti-snipe refund claims

If a launch-window ETH refund could not be paid in the same transaction, the **transaction submitter** can claim that refund later. Same caution: if someone else submitted your buy, **they** are the claimant of record for that refund.

6.4 Network fees

Claiming and refunding cost a normal network fee paid by the person who sends the claim transaction. The project cannot waive it.

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7. Liquidity seed shape

7.1 Full supply in the pool

At launch, **all 1,000,000,000 BHE** is placed as **nine one-sided liquidity bands** owned by the reward engine. Those seed positions are not a team-owned LP that can be yanked; the design does not provide a path to remove that seeded liquidity as ordinary withdrawable LP.

Starting price is set so the labeled starting market cap is about **0.5 ETH** (technical tick top **214,140** on the pool’s spacing — see Appendix).

7.2 Wavy by design

Bands alternate **thin** and **fat** depth across successive price ranges (same overall shape as the earlier BHE design, shifted for the 0.5 ETH start). Price tends to move quickly through thin bands and more slowly through fat ones. That produces **early volatility on purpose**. Buying into a fast move can leave you down sharply minutes later through nothing but the shape of the book. That is a cost as well as a feature.

7.3 Secondary liquidity providers

Anyone may add their own liquidity on venues and terms the market supports. Important distinction:

- The **3% ETH hook fee** goes **entirely to the holder reward pot**, not to LPs as a Uniswap-style LP fee on that engine path.
- Secondary LPs are not “earning the 3%.” They compete on **spread, inventory, and other pool settings**, and on whatever fee tier a different market uses.
- The economic loop the design aims at is: more eligible holders → more organic volume → more ETH into the pot → more reason to hold → deeper organic demand. That loop is not guaranteed; it only runs if real people trade and hold.

7.4 One main v4 pool

The token is built around **one** Uniswap v4 BHE/ETH pool with this reward engine. Ordinary wallet-to-wallet transfers work like a normal token. Other markets may still appear in the wider ecosystem; treat them as separate venues with their own risks. Rewards described in this paper are driven by the fee path of the main hooked pool.

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8. Risks

Read this before buying. This list is not exhaustive.

8.1 Ordinary contracts earn zero; EIP-7702 is claim-only

If you hold BHE on a Safe, an ordinary smart wallet, an exchange contract, a vault, an LP position, the pool, or any other address with **non-designator** contract code, **you earn no rewards** and are not counted in distribution. This is intentional and permanent. UI labels that say “wallet” do not override the on-chain code check.

EIP-7702 delegated wallets can earn when they hold ≥ 10,000 BHE, but they are **claim-only** — no automatic ETH push. If you never claim, the ETH stays banked until you do.

8.2 Tokens sent to sinks and unowned addresses

- Sending BHE to the **dead address** removes those tokens from useful circulation for you; that address does not earn.

- Sending BHE to a **mistyped or unowned plain address** can register that address as a holder if it has no code and holds ≥ 10,000 BHE. Rewards pushed there may be **permanently lost** (for example certain precompile-like addresses that look like empty wallets but cannot be claimed by you). Nobody can recover them. There is **no admin recovery**.
- Burning to dead and parking on an unowned codeless address are **not** the same for everyone else's share; unowned codeless holders can keep drawing a slice of cycles that is then destroyed on delivery. Do not send tokens anywhere except an address you control and have verified.

8.3 No admin recovery, immutable code

Bugs cannot be patched after deployment. Stolen or misplaced funds cannot be clawed back by a team key — there is none. If the mechanism is wrong, it stays wrong.

8.4 Market risk

Price can go to near zero. The starting market cap is tiny (~0.5 ETH). Thin early bands mean large percentage moves. Secondary markets can diverge. You can lose your entire purchase.

8.5 Reward risk

Rewards require **trading volume**. Volume can dry up permanently. Your multiplier only scales a share of a pot that may be empty. Past volume does not imply future volume.

8.6 Claim and refund operational risk

Auto-push can miss you. Refunds can go to the transaction submitter. Explorer UX mistakes can send a claim from the wrong account. Always verify the contract address and the account you are using.

8.7 Sequencer and chain risk

Robinhood Chain is a layer-2 network operated with a sequencer model common to Orbit chains. The chain can halt, reorg under its own rules, change fee markets, or fail in ways this project does not control. Precompile maps and protocol upgrades on the chain can interact with edge cases (including how empty-looking addresses behave). BHE cannot pause itself to wait out a chain incident.

8.8 MEV, sniping, and routing

The anti-snipe ramp raises the cost of launch grabs; it does not make them impossible. Batching, private order flow, and sophisticated routers can still extract value. Multiplier reset attribution depends on how your sell is routed (Section 4.2).

8.9 No audit guarantee in this paper

Treat the project as unaudited unless you independently verify a published third-party audit that matches the exact bytecode you are using. Test deployments and simulations are not production proof.

8.10 Regulatory and personal risk

Tokens may be restricted or treated differently by law in your location. This paper does not give legal advice.

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9. No promises about returns

BHE does **not** promise:

- any APY, yield, or return of principal
- continuous volume or continuous reward cycles
- that the market cap will rise
- that the hold multiplier will make you profitable
- support, marketing, listings, or a team roadmap

What it does is mechanical and limited:

If people trade the main pool, 3% of the ETH side of those trades is shared as ETH among eligible holders (plain wallets and EIP-7702 delegated wallets with enough balance), weighted by balance and hold age, subject to the rules above.

If people do not trade, the pot does not fill. If you hold on an ordinary contract or other ineligible address, you earn nothing even when others are paid. If you buy at the wrong price, no reward stream is obliged to make you whole.

There is no investment contract with a promoter in this design — only code that runs until the chain stops running it.

APPENDIX A

Appendix A — Fixed parameters (for verification)

These values are fixed in the deployed bytecode. Use them to check explorers and source — not as investment metrics.

PARAMETER	VALUE
Token name / symbol	Buy Hold Earn / BHE (as deployed)
Total supply	1,000,000,000 BHE (1e27 base units, 18 decimals)
Chain	Robinhood Chain mainnet **4663** (testnet **46630** for testing only)
Fee	**3%** of ETH leg on each buy and sell
Fee destination	**100%** reward pot
Reward asset	Native ETH
Minimum eligible balance	**10,000** BHE
Hold multiplier	**1× → 12×** non-linear (≈3.5× at 15 days; ≈11.5× at 180 days)
Big-sell reset	Cumulative sells into main pool ≥ **0.5%** of pool token balance at window open
Eligibility	Plain wallet (no code) **or** EIP-7702 delegated wallet (exact 23-byte designator), **and** ≥ 10,000 BHE; ordinary contracts / LPs / pool / dead / zero → zero
Auto-push	Native ETH to **plain** wallets only; credit on failure
Claim	Required path for EIP-7702 earners; self-serve native ETH for banked rewards; refund claim for failed anti-snipe ETH returns
Cycle pot threshold	**0.025** ETH
Cycle cooldown	**900** seconds (~15 minutes)
Anti-snipe start	**0.02%** of live pool BHE balance per buy
Anti-snipe end	**~0.069%** of live pool BHE balance per buy
Anti-snipe duration	**49,000** seconds (~13.6 hours), then uncapped
Seed	9 wavy bands; **100%** supply; starting MC ≈ **0.5 ETH**
Seed tick top (technical)	**214,140** (spacing 60)
Owner / admin / upgrade	**None**

A.1 Approximate hold-multiplier milestones

For a stack bought once and left untouched (same curve as the shared time-weighted design; non-linear; asymptote ~12×):

TIME HELD	MULTIPLIER (APPROX.)
Purchase	1.00×
1 day	~1.19×
1 week	~2.25×
15 days	~3.50×
30 days	~5.43×
45 days	~6.92×
90 days	~9.65×
180 days	~11.50×
1 year	~11.98×

A.2 Seed band supply split (shape)

Launch fully-diluted valuation ≈ **0.5 ETH** at the top of the seed. The entire **1,000,000,000 BHE** supply is seeded as nine fixed one-sided bands (readable on-chain via `seedBand`). Decade split **55% / 25% / 12% / 4%** plus **4%** tail; within each decade **15% thin / 85% fat**. Thin spans cover the discovery leg of each decade (~3× price multiple); fat spans provide consolidation depth.

BAND	TICK RANGE	%	PRICE / MC	FDV (ETH)	ETH CROSS*
D1 thin (start)	203,160–214,140	8.25%	1× → ~3×	~0.5 → ~1.5	≈0.072
D1 fat	191,100–203,160	46.75%	~3× → ~10×	~1.5 → ~5	≈1.29
D2 thin	180,120–191,100	3.75%	~10× → ~30×	~5 → ~15	≈0.33
D2 fat	168,060–180,120	21.25%	~30× → ~100×	~15 → ~50	≈5.85
D3 thin	157,080–168,060	1.8%	~100× → ~300×	~50 → ~150	≈1.57
D3 fat	145,020–157,080	10.2%	~300× → ~1000×	~150 → ~500	≈28.1
D4 thin	134,100–145,020	0.6%	~1000× → ~3000×	~500 → ~1,500	≈5.22
D4 fat	121,980–134,100	3.4%	~3000× → ~10000×	~1,500 → ~5,000	≈93.6
Tail	−887,220–121,980	4.0%	above D4 fat	open-ended	open-ended

End of whitepaper. Verify every address and parameter against the on-chain verified source before you risk funds.