



H57 — Salt-Water Energy Storage & Utility Token

Public Whitepaper v1.0 — Cover

- Patent Pending: P00202505237
- Canonical Contract (Polygon): 0xE7cfeD40eeEC17aba85C80C9Ec7D9aA20CC98948
- Token Standard: ERC-20 (fixed supply; no mint; no burn function)
- Reserve Method: Multi-sig Buyback Reserve (3-of-5; Vault 365d / Ops 14d)

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1. Executive Summary & Problem

Reliable, affordable, and safe energy storage is a bottleneck for electrification—from household backup to remote and emerging-market microgrids. Lithium systems are capable but costly, supply-constrained, and sensitive to safety and end-of-life handling.

H57 addresses this gap with a **salt-water energy-storage device** that uses widely available materials and prioritizes safety and recyclability—paired with the **H57 Token**, a chain-based mechanism to coordinate warranties, upgrades, partner incentives, and liquidity programs. The token is not a claim on profits; it underpins transparent operations (e.g., a Buyback Reserve funded by product profits), user utilities, and cross-chain market access.

What's new at launch

- **Product → token flywheel.** A portion of realized product profits funds on-chain buybacks to deepen liquidity; Reserve balances are excluded from circulating supply.
- **Cross-chain design.** Canonical token on Polygon with optional wrapped deployments (e.g., BSC, Arbitrum, Berachain, Solana) under strict parity controls.

Planned (not active at launch)

- **Device identity on-chain** (e.g., a future “device passport” mechanism) and **telemetry-based services** for off-grid/commercial SKUs.

2. H57 Product Overview

What it is. A modular, salt-water-electrolyte energy-storage device emphasizing safety, low BOM cost, and maintainability.

Intellectual property. Patent pending: **P00202505237** (coverage relates to device architecture, materials selection, and servicing approach; final claims may vary upon grant).

Design principles

- **Safe chemistry:** aqueous electrolyte and non-volatile components.
- **Accessible materials:** aluminum/iron/graphite/carbon components, recyclable housings.
- **Serviceable:** field-replaceable parts; documented maintenance paths via authorized centers.
- **Telemetry (future update):** not enabled at launch. A commercial/off-grid SKU may later include an optional module (solar/charge input sensing, low-SOC cut-off events, depth-of-discharge counters, enclosure temperature, service-interval alerts).



Target use cases

- Home/SME backup and peak-shaving.
- Rural clinics, schools, and community hubs.
- Low-power industrial/IoT buffering and UPS.

Detailed electrical specifications and lifecycle data will be published in a separate **Product Datasheet**. This paper focuses on token-product integration.

3. Token Overview

Token name: H57

Type: ERC-20 utility/coordination token (canonical: Polygon)

Decimals: 18

Total supply: 1,000,000,000 H57 — **fixed supply (no minting)**

Ticker: H57

Canonical chain: Polygon

Contract address (Polygon canonical): 0xE7cfeD40eeEC17aba85C80C9Ec7D9aA20CC98948

Allocation (public summary)

Allocations and vesting details will be published after audits. **Percentages, wallet addresses, and exact amounts are intentionally omitted in this public version.**

Vesting & custody. Allocations vest via auditable on-chain schedules (third-party vesting contracts). Treasury assets are held in multi-sig wallets with public addresses and routine attestations (published post-audit).

Circulating supply (definition)

Circulating Supply = Total Supply – (Team & Advisor Locks) – (Ecosystem Locks) – (Strategic Partner Locks) – (Buyback Reserve) – (Locked LP) – (other time-locked allocations, if any).



4. Product ↔ Token Linkage

H57 is designed to be useful in day-to-day device ownership while avoiding financial-instrument claims.

Utilities at launch

- **Warranty & care:** Activate or extend warranty tiers using H57 via the owner account & device serial (off-chain record, on-chain receipt).
- **Priority access:** Pre-orders, limited runs, pilot programs, installer slots.
- **Partner perks:** Discounts with approved installers/distributors; fiat payments may be converted to H57 by operators for alignment.

Planned (not active at launch)

- **Telemetry-based services** (analytics/API subscriptions) when the telemetry SKU is released.
- **On-chain device identity** for warranty/service history, rolled out in phases if adopted.

5. Economic Flywheel — Multi-Sig Buyback Reserve

Policy. Allocate **25%** of realized net operating profit from device sales/services to periodic **market buybacks** of H57.

Execution

- Convert profit → stablecoin → DCA/TWAP buys on venues with depth and security reviews
- Route purchased H57 to publicly disclosed **multi-sig Reserve** addresses.
- Reserve balances are **excluded from circulating supply** and remain unspent unless used within policy.

Reserve governance & safeguards

- **Multi-sig** (e.g., **3-of-5**) with independent signers; hardware wallets.
- **14-day timelock** for outbound transfers (community-notice period), with narrowly scoped emergency procedures for critical LP recovery.
- **Permitted uses:** (i) LP seeding with **locked LP** tokens, (ii) product/ecosystem incentives for device owners/installers/partners, (iii) cross-chain liquidity rebalancing.
- **Prohibited uses:** discretionary market selling unrelated to the permitted uses.
- **Reporting:** monthly Reserve report (balances, inflows, outflows, purposes), **per-chain and global**, including transaction references.

Timelock design. The Buyback Reserve is split into a **Year-Locked Vault (365-day timelock)** and an **Operations Reserve (14-day timelock)**. The Vault holds the majority of funds and may only stream assets to the Operations Reserve at a maximum **≤5% of Reserve per month**. The Operations Reserve executes buybacks, locked-LP provisioning, ecosystem incentives, and cross-chain rebalancing within published **rate limits**. An emergency **Pause** can suspend new operations



(no spending) pending review; resumption requires higher-quorum approval and public disclosure.

Note. The H57 smart contract **does not include a burn function**; supply management relies on the **multi-sig Reserve** method described above.

6. Cross-Chain Design

Canonical token: Polygon. Wrapped deployments on additional networks focus on user acquisition and regional liquidity under strict parity controls.

Framework (current)

- **Hyperlane — ERC-20 Warp Route** (collateral on Polygon; synthetics on connected chains).
- **Supply parity:** global supply tables and per-chain caps; alerts on bridging; LP tokens time-locked.
- **Liquidity plan:** start depth on Polygon (canonical) and BSC; expand in phases based on demand and market depth.

(Additional contract addresses beyond the canonical token will be published post-audit.)

7. Governance-Lite & Community

A **governance-lite** approach prioritizes transparency and product feedback, not treasury distributions.

- **Advisory votes:** non-binding Snapshot proposals for product features, incentive budgets, reporting cadence.
- **Guardrails:** no profit shares, dividends, or claims on proceeds for token holders.
- **Community programs:** installer accreditation, bug bounties, documentation grants, local champions.

8. Data & Telemetry (Privacy & Future Services)

- **Launch scope:** telemetry **is not active at launch**.
- **Future paid tiers:** analytics/API subscriptions payable in H57 (or fiat → market-buy H57) when telemetry SKU is released.
- **Privacy:** minimal data by default; anonymization/aggregation for fleet stats; user control over sharing.
- **Integrity (future):** service events and key metrics may be attested on-chain via signed updates from authorized centers.



9. Roadmap & KPIs (Milestone-based)

To avoid over-promising, H57 uses a milestone roadmap without fixed calendar dates. Public dashboards will reflect progress and next targets.

Milestone A — Foundation

- Finalize token parameters; complete audits; publish Buyback Reserve policy.
- Pilot manufacturing batch; QA.
- Canonical deployment on Polygon; initial liquidity; begin buyback framework (policy enabled).

Milestone B — Market Access

- Expand installer/distributor network; start device sales in priority regions.
- Cross-chain availability (e.g., BSC) with conservative caps.
- Owner dashboards; warranty extensions via token utility.

Milestone C — Scale

- Additional chains added in phases based on demand and depth.
- Telemetry SKU for off-grid/commercial product; enterprise APIs.
- Quarterly transparency updates; KPIs reported on public dashboard.

Core KPIs

- Devices shipped/active; service events per 1,000 units; warranty activations.
- Liquidity depth at 2% price impact; effective float; venue coverage.
- Buyback Reserve inflow/outflow and execution cost.

10. Risk & Compliance Notes

- **Regulatory:** H57 is not equity, not a debt instrument, and does not confer rights to profits or governance over corporate matters. Jurisdictions vary; purchasers should seek local advice.
- **Technology:** chemistry performance, manufacturing scaling, and telemetry reliability may differ from targets; contingency sourcing and QA will be documented.
- **Market:** token prices are volatile; buyback operations follow policy and are not a price guarantee.
- **Bridging & custody:** cross-chain and treasury risks are mitigated via audits, multi-sig, and timelocks.
- **Security:** formal audits prior to public release; ongoing bounty program; least-privilege deployment and treasury ops.



11. Appendix

A. Addresses & Public Disclosures

- **H57 Token (Polygon canonical):** 0xE7cfeD40eeEC17aba85C80C9Ec7D9aA20CC98948
- Additional Reserve and operational addresses will be published post-audit with timelock settings.

B. Buyback & Reserve Policy (abridged)

- **Funding:** 25% of monthly net operating profit.
- **Execution:** DCA/TWAP buys; priority on venues with locked LP and low slippage.
- **Custody:** 3-of-5 multi-sig; 14-day timelock; hardware-secured signers
- **Permitted uses:** locked-LP liquidity, product/ecosystem incentives, cross-chain rebalancing.
- **Prohibited uses:** discretionary market selling; unrelated financing.
- **Reporting:** monthly **per-chain & global** statements with transaction references.
- **Timelock design:** Reserve is split into a **Year-Locked Vault (365-day)** and an **Operations Reserve (14-day)**. The Vault may stream up to **≤5% of Reserve/month** to the Operations Reserve. Operations are subject to published **rate limits**. An emergency **Pause** can halt new operations (no spending) pending review; resumption requires higher-quorum approval and disclosure.

C. Token Technicals

- **Standard:** ERC-20
- **Decimals:** 18
- **Canonical network:** Polygon
- **Bridging:** Hyperlane ERC-20 Warp Route (current)
- **Mint:** **Not enabled** (fixed supply)
- **Burn:** **Not supported** (supply management via multi-sig Reserve)

D. Definitions

- **Circulating Supply:** total supply minus team/advisor locks, ecosystem locks, **strategic partner locks**, Buyback Reserve, **other time-locked allocations (if any)**, and locked LP.
- **Buyback Reserve:** multi-sig wallets that custody buyback tokens; excluded from circulating supply and governed by policy.

End of Public v1.0