



EMRLD.D Whitepaper

I. Introduction

The EMRL.D initiative introduces a tokenized liquidity model for the gemstone trade, with emeralds as its primary underlying asset. Designed to address systemic illiquidity and valuation inefficiencies, the EMRL.D token is backed by Real-World Assets (RWAs) and governed by a transparent framework that combines graded and institutionally certified emerald gemstone stockpile valuation, structured buyback programs, and stakeholder-aligned distribution.

The model provides universal investor access, improves liquidity across the gemstone value chain, and sets the foundation for long-term market standardization, similar to the evolution of diamonds in the 1970s and 1980s.

Gemstones, particularly emeralds, have historically served as portable stores of value but suffer from opacity, price volatility, and illiquidity. Auctions and informal financing have often depressed valuations and constrained liquidity.

EMRL.D addresses these inefficiencies by:

1. Tokenizing graded and institutionally certified gemstone stockpiles.
2. Establishing revolving liquidity through buyback clauses and secondary markets.
3. Creating transparent valuation models as Net Asset Value (NAV) determinant.
4. Offering access to the gemstone trade as alternative placements.



KEY TERMS:

Real-World Asset (RWA) Backing - EMRL.D is anchored by graded and institutionally certified emerald gemstone stockpiles, forming a tangible collateral base behind the token. This provides real-asset security, auditability, and downside protection—core expectations of institutional allocators.

Net Asset Value (NAV) Framework - NAV is calculated from the total value of cash plus gemstone stockpile divided by total token supply. This ensures valuation transparency and governance discipline, aligning EMRL.D with conventional asset-backed instruments.

Structured Buyback Program - A liquidity assurance mechanism where EMRL.D commits to buying back assets under predefined terms, supported by valuation multiples and minimum bid thresholds. This minimizes downside volatility and provides clearer exit pathways, similar to private credit structures.

Discounted Commercial Value (DCV) - A valuation method applying a 25% discount to the stockpile valuation to derive a market-realistic pricing basis for transactions and buybacks. This conservative adjustment is attractive to risk-managed institutional capital.

RWA Swap Syndication - A structured mechanism through which gemstone providers exchange high-value physical emerald stockpiles for specific token allocations. This process creates immediate intrinsic value and increases NAV as RWA backing scales.

II. Token Design and Economics

a. Structure and Allocation

- **Tokenomics** – Total Token Supply is 100M (minted in Lumia chain)
 - **57% RWA Swap Syndication**
 - 17% portion will go to an RWA provider
 - 7% to be allocated in secondary market platforms
 - 10% will be treasury reserve for future liquidity transactions
 - 40% portion will go another RWA provider
 - 10% to be allocated in secondary market platforms
 - 30% will be treasury reserve for future liquidity transactions

**NOTE: 17% will be the total allocation for the secondary market*

- **12% Community Development** (Emerald Industry Players from Artisanal Miners, Traders, Liquidity Funders, and Jewelers)
 - 3% portion will be made available for pioneer investors
 - 9% reserves for further development of the Community
- **10% Incentives for Limited Partners / Provision for DEX platforms**
- **3% Marketing**
 - 2% portion will be made available for pioneer investors
 - 1% reserves
- **3% Community Rewards**
- **15% Team and Advisors**

**NOTE: Pioneer Investors / Seed Investors (by invitation only), can avail at \$0.20 per token on a syndicated deal via AIX platform.*

**NOTE: The 57% RWA Swap Syndication's total value is \$50M graded and institutionally certified emerald gemstone stockpile.*

- **Rewards (3% Community Rewards):** Token holders earn through staking distributions linked to realized cash flows.

b. Stockpile Valuation Framework

- **Multi-Party Valuation:** Stockpile valuation derived by averaging internal, counterparty, and independent third-party assessments. This averaged figure is referred to as the **Stockpile Valuation**. While not an immediate commercial value, it serves as the foundation for tokenomics and stakeholder engagement.
- **Discounted Commercial Value:** A **25% discount** is applied to the stockpile valuation to derive the **Discounted Commercial Value**, which represents a more market-realistic figure for transactions and buybacks.
 - *Example:*
 - If valuation = \$33M
 - Commercial bid = minimum of \$100M (3x)
 - Discounted Commercial Value = \$75M (based on buyback clause)



c. Buyback Mechanism

- Structured buybacks guarantee liquidity and reduce downside risk.
- Example: \$2M injection against \$8M appraised stockpile, with a 120-day buyback at \$4M.
- Minimum bid thresholds tied to NAV ensure governance discipline.

d. NAV Computation

- Formula:

$$\text{NAV} = \frac{\text{Total Assets (Cash + Stockpile)}}{\text{Number of Tokens}}$$

- Example:
\$37.5M cash + \$50M physical = \$87.5M NAV → \$0.875/token.

e. Expected Returns

- Base case: 2X returns within 120 days per cycle.
- With multiple contracts in parallel, returns compound to **6X annually**.

III. Token Value Drivers

a. Intrinsic Value: The intrinsic value arises from the potential return based on commercial value realization:

- Warrant demandable = **\$33M of valuation (based on \$10M Placement)**
- Target commercial value = **3X → a minimum bid of \$100M**
- Historical Potential based on the standardization of Diamonds based on the 70's and early 80's. It achieved between **3X to 6X on a per carat pricing**.

b. Organic Cash Flow: Token appreciation and Cash Distribution (Rewards) are driven by **actual business cash flow**

IV. Use Cases of the EMRL.D Token

a. Universal Investor Access

- Enables diversification into alternative assets.
- Provides a regulated entry point into gemstone-backed instruments.

b. Liquidity for the Trade

- Tokens act as a digital legal tender among traders, miners, and jewelers.
- Traders in hubs like Dubai, Hong Kong, and Miami expressed willingness to accept tokens as payment.

c. Market Efficiency & Pricing

- Reduces arbitrage between different players across the value chain.
- Promotes equitable distribution of profits.



V. Stockpile Compositions & Dynamics

a. Initial State Upon Warrant Demand

- \$33M worth of stockpile.

b. Sales & Conversion (a minimum of 3X on commercial bid)

- The minimum buyback agreement should be at 3x valuation of the stockpile value.

Stockpile Value = \$100M

- If only 50% is sold:
- \$50M discounted stockpile → \$37.5M revenue (less 25%)
- Balance of physical asset is still valued at \$50M commercially

VI. Governance, Risk Management, and Compliance

a. Warrant Agreements: Depth venture warrants ensure enrolled stockpiles are demandable under specified conditions.

b. Distribution Mechanics (Subscriber's Cash Distribution)

\$37.5M Cash Utilization Formula

- $\frac{1}{3}$ (\$12.5M) → Retained in fund as buffer/reserve
- $\frac{1}{3}$ (\$12.5M) → Advance Payment for future stockpile to graded and institutionally certified emerald gemstone providers
- $\frac{1}{3}$ (\$12.5M) → Distributed to token holders as staking rewards

This creates a sustainable loop supporting staking without overleveraging.

c. Governance Principles:

- Token treated as legal tender within the gemstone ecosystem, compliant with investment governance norms.
- Token holder dividends linked directly to realized cash from gemstone sales
- NAV used to determine true value backing each token
- Bids must meet or exceed NAV-derived thresholds to be accepted

d. Optionality & Flexibility

- If demand falls short of 3X target, **EMRL.D** retains right **not to sell**
- Balance of physical asset increases scarcity and potential future value
- **EMRL.D** can dictate selling schedule and price thresholds



VII. Market Standardization and Long-Term Vision

- a. Inspired by the **diamond standardization model**, EMRL.D seeks to establish an **Emerald Index** tracking gemstone valuations across major traders.
- b. Transparent monitoring builds trust with luxury brands and institutional buyers.
- c. **Long-term outcome:** Emeralds recognized as sustainable alternative asset class, comparable to gold in portfolio diversification.

VIII. Strategic Partnerships and Market Access

- a. **Miami Group:** Active offers demonstrate liquidity demand, e.g., \$8M stockpile backed by \$2M liquidity injection with structured buyback.
- b. **Madrid Group:** A swap agreement for a \$40M in RWA (graded and institutionally certified emerald gemstones) as against 40% of the total token issue. However, as a prerequisite to the swap agreement, the token must be integrated into major secondary market portals.
- c. **Hong Kong Group:** A swap agreement for a \$10M in RWA (graded and institutionally certified emerald gemstones) as against 17% of the total token issue.
- d. **Dubai Trade Networks:** Large players managing emerald distribution in the Middle East open to token integration.
- e. **Top Global Traders:** Four of the top seven traders (holding \$500M in stockpiles) engaged in discussions.

IX. Comparative Insight and Historical Basis

- a. Diamonds rose significantly in value once industrial standards and indices were established in the 70s and 80s.
- b. EMRL.D applies a similar model for emeralds, creating graded and institutionally certified emerald gemstone valuation and transparent governance to unlock latent market potential.

X. Net Asset Value (NAV) Determination

RWA Backing Strategy & Intrinsic Value Enhancement

Deal 1- Hong Kong Group: \$10M (Graded and Institutionally Certified Emerald Gemstone Stockpile)

A swap agreement for a \$10M in RWA (graded and institutionally certified emerald gemstones) as against 17% of the total token issue.

- 7% will be allocated to the secondary market while
- 10% will remain as reserve tokens for future transactions.
- The swap agreement will elevate the token value to around \$0.60.
- The swap agreement will execute in parallel with the TGE rollout.
- The total token cap will be \$60M.



Deal 2 – Madrid Group: \$40M (Graded and Institutionally Certified Emerald Gemstone Stockpile)

A swap agreement for a \$40M in RWA (graded and institutionally certified emerald gemstones) as against 40% of the total token issue. However, as a prerequisite to the swap agreement, the token must be integrated into major secondary market portals.

- 10% will be allocated to the secondary market while
- 30% will remain as reserve tokens for future transactions.
- The swap agreement will elevate the token value to around \$1.00.
- The total token cap will be \$100M.

Total RWA acquired \$50M projected to be \$250M in 3 years (commercial valuation)

- *After the 2 deals, we achieved an RWA backing of \$50M as against a disposal of 57% of the total token supply.*

Fund Raising Strategy

Run a capital raise of \$1M for Capital Placement (at \$0.20 par, equivalent to 5M Tokens or 5% of total token supply).

5M Tokens for the Capital Raise (at par of \$0.20 per token)

- 5% of total token supply will be made available (by invitation only) at a syndicated deal of \$0.20 per token for High-Net-Worth Investors, Registered Investment Advisory Firms, Family Offices, and Institutions.
- The Seed fund raise of \$1M will be exclusively used for marketing and promotions, establishments of institutional channels.