Tokenomics of Digital Mine Token (DiMiTo)

I. Introduction

Bridging Traditional Mining and Decentralized Finance

The convergence of blockchain infrastructure with real-world assets introduces a mechanism for unlocking liquidity, transparency, and broader market access in traditionally capital-intensive industries. One of the most impactful applications of this approach is the tokenization of revenue streams from mining operations, enabling fractional participation in the economic output of physical resources.

This model focuses on the issuance of digital tokens that represent **a defined share of the future net benefit (**not ownership) of one or multiple mining projects. Token holders are entitled to participate in the distribution of financial returns generated from these operations, without exposure to the complexities of direct mine ownership or operation.

Market Problem

Historically, investment in mining has been limited to institutional actors and private stakeholders due to regulatory restrictions, high capital requirements, and geographic barriers. These limitations have restricted access to one of the world's most resource-generative sectors.

By introducing a tokenized framework, it becomes possible to lower the barrier to entry and create a transparent, permissionless vehicle for value participation in mining-based cash flows.

Operational Model

Tokens are issued through structured presale events, with each token backed by **a pre-defined portion of the net benefits** generated by one or more mining sites. The proportion of tokenized benefits is determined on a per-project basis and defined transparently in each offering.

The capital raised through these presales is allocated primarily to downstream infrastructure (such as refining facilities) which significantly enhances the value extracted from raw materials. A significant portion of the funds raised will be allocated to development and operational setup. The duration of this phase will be determined at the time of token launch, based on project requirements and market conditions, and will be published on the transparency platform. Profit distribution will commence once the initial development stage has been successfully completed.

Once production is underway, token holders receive indirect exposure to mine profits through one or both of the following mechanisms:

- **Token Buyback**: A portion of profits is used to repurchase tokens from open markets, creating upward price pressure and reducing circulating supply.
- **Liquidity Addition**: Profits are also used to inject liquidity into decentralized exchanges at higher price points, improving market depth and price support.
- **Market Making in the Secondary Market:** Profits may also be used to place buy positions directly in the on-chain secondary market (order book-style) at strategic price points.

To ensure market functionality and exit flexibility, a defined portion of the presale capital is allocated to an **initial liquidity pool** immediately upon the closure of each presale. This pool enables immediate buy/sell availability on decentralized exchanges, allowing early participants to exit their positions quickly; though typically at a lower price due to early-stage valuation.

In parallel, a **secondary market** is provided where participants can list their tokens at any price of their choosing. Trades in this environment occur only when matching buyers are found, making it suitable for those who prefer to wait for better price discovery rather than exit immediately. This dual structure ensures both **liquidity for rapid exits** and **flexibility for strategic trading**.

Transparency and Reporting

A real-time reporting system ensures full visibility into the allocation of capital, construction milestones, operational expenses, and profit generation. This system is accessible through a public interface and serves to maintain accountability across all phases of the project lifecycle.

Legal Framework and Commitments

While token buyers participate freely without operational obligations, mine owners are required to meet strict legal and contractual commitments to be admitted into the ecosystem. Each mining project must provide verified licenses, feasibility studies, and enforceable collateral to ensure accountability. These measures protect token holders from operational risks and guarantee that only qualified and compliant projects are onboarded, reinforcing the transparency and trust that underpin the DiMiTo model.

II. Token Specifications

A **factory smart contract** is deployed to generate and manage a series of standardized ERC-20 tokens. Each token instance corresponds to a specific offering representing the economic benefits of one or more mining operations. Tokens are created programmatically through the factory, ensuring consistency, traceability, and reduced deployment overhead.

Each token instance has the following attributes:

- **Unique name and symbol:** Tokens are issued under a sequential naming convention, such as:
    - **Name:** Digital Mine Token #1, Digital Mine Token #2, …
    - **Symbol:** DMT1, MT2, …

  This structure allows clear identification of which mine(s) and revenue portion each token represents.
- **Underlying Asset:** Each token is linked to a predefined portion of the net profits generated by one or more mining operations. The associated mining assets, benefit proportions, and allocation logic are transparently defined and published at the time of token creation.
- **Standard**: All tokens conform to the **ERC-20 standard**, ensuring compatibility with existing wallets, decentralized exchanges (DEXs), and other DeFi infrastructure.
- **Blockchain**: Tokens are deployed on the **Binance Smart Chain (BSC)**, selected for its low transaction costs, fast block finality, and wide user adoption within the decentralized finance ecosystem.
- **Supply and Decimals**: Each token contract is initialized with:
    - **Total Supply**: 1,000,000,000 units
    - **Decimals**: 18

III. Token Distribution & Presale Structure

Token generation and distribution are managed by a dedicated **factory smart contract**, which automates the deployment of each mine token and its corresponding presale contract.

Upon creation, the factory performs the following actions:

- Deploys a new ERC-20 token contract with a fixed total supply
- Create a liquidity pool at the price of presale with only 1 token
- Allocates 100% of the token supply to a newly created **presale smart contract**
- Registers the presale parameters, including:
    - Start and end times
    - Presale price

The presale contract is designed to support multiple independent presales. Each time a new mine token is created via the factory, a fresh presale instance is initialized and configured. This architecture enables seamless scaling across multiple asset-backed tokens while ensuring clear separation between offerings.

No tokens are pre-allocated to any external or internal party. The entire supply is distributed via the presale contract, ensuring a transparent and market-driven initial offering.

Funds raised during the presale are allocated as follows:

- **Development Capital**: 90% is directed toward infrastructure development, such as constructing or upgrading refining facilities.
- **Initial Liquidity**: 10% is used to establish a liquidity pool on a decentralized exchange, enabling post-sale trading.

The token price is fixed during the presale and publicly defined before the offering begins. After the presale concludes, participants can claim their tokens, and the token becomes tradeable through decentralized liquidity pools and the secondary market.

IV. Secondary Market

Immediately following the presale, a **dedicated secondary market** becomes available for each mine token. This market is implemented as an **on-chain order book**, where participants can submit buy and sell offers at prices of their choosing. It enables peer-to-peer token exchange independent of liquidity pools and provides flexible trading options from the outset.

Key features of the secondary market include:

- **Custom Pricing**: Users may list tokens for sale or place buy orders at any desired price, enabling organic price discovery based on supply and demand.
- **Non-Custodial Settlement**: All orders and trades are executed directly on-chain via smart contracts.
- **Strategic Exit Option**: This venue is ideal for participants who prefer to wait for favorable pricing rather than sell immediately at the current market rate.
- **Complement to AMM Liquidity**: While a liquidity pool is also created for instant trading, the secondary market offers an alternative path for those seeking more control over trade execution.

In summary, the secondary market caters to **value-driven trading**, whereas the liquidity pool serves those who require **immediate execution**, typically at lower market depth and higher slippage.

V. Profit Distribution & Value Accrual Mechanism

Once the mining and refining operations become profitable, net proceeds are used to directly support token value through on-chain mechanisms rather than traditional dividend payouts. This model ensures continuous alignment between project success and token holder benefits while preserving the decentralized nature of the system.

Profits are allocated in three primary ways:

- **Token Buybacks:** A portion of the profits is allocated to buy back tokens from the open market.
- **Liquidity Injection:** Another portion of profits is used to add liquidity into decentralized exchanges.
- **Market Making in the Secondary Market:** Profits may also be used to place buy or sell positions directly in the on-chain secondary market (order book-style) at strategic price points.

By combining these three methods (**buybacks**, **liquidity injections**, and **secondary market positioning**) the protocol ensures that profits are used not only to reward holders, but also to support sustainable market dynamics and long-term token value growth.

VI. Transparency & Financial Reporting

To maintain full accountability and build long-term trust with the community, a dedicated reporting module is available on the platform's website. This system provides real-time and historical visibility into the financial and operational performance of each mining-backed token offering.

Key features of this reporting system include:

- **Expenditure Breakdown:** A detailed view of how presale funds are allocated and spent across categories such as:
  - Refining infrastructure
  - Equipment acquisition
  - Legal and compliance
  - Operational reserves
  - Liquidity provisioning
- **Profit Tracking:** Once mining and refining operations commence, the system continuously tracks revenue and profit generation, offering:
  - Gross income and net profit reports
  - Profit trends over time
  - Distribution readiness signals
- **Token Economics Dashboard:** For each Mine Token, users can view:
  - Total supply and circulating supply
  - Presale price and current market price
  - Amounts of profits used in buyback or liquidity injections

This transparency ensures that all stakeholders (from retail participants to institutional partners) can confidently assess project performance and validate claims related to development progress, profit generation, and value distribution.

VII. Legal Terms & Commitments

To ensure fairness, transparency, and the protection of all participants, the Digital Mine Token (DiMiTo) framework establishes clear legal boundaries. While token buyers hold no direct obligations beyond their purchase, mine owners entering the ecosystem are required to provide binding documents, collateral, and contractual commitments. This balance ensures that token holders are shielded from operational risks, while mine owners remain fully accountable for delivering on their commitments.

- **Token Buyer Rights and Responsibilities**
  - Token buyers have **no operational or legal commitments** regarding mining activities.
  - Token ownership represents participation in future net benefits, **not equity or ownership** of mines or facilities.
  - Buyers are not liable for regulatory, operational, or financial obligations of mine owners.
  - Risk for buyers is limited solely to the amount of capital invested in tokens.
- **Mine Owner Obligations**
  - Exploration Documentation Requirements:
    - Valid exploration license.
    - Approved technical feasibility study (endorsed by the Ministry of Industry, Mine & Trade or authorized regional representatives).
    - Collateral in the form of checks or promissory notes equal to 2.5x the financing received (principal + interest + penalty).
  - Extraction & Operation Documentation Requirements
    - Valid exploitation/operating license.
    - Approved technical and economic feasibility report.
    - Expert report from a certified court expert appointed by the platform.
    - Collateral equal to 2.5x the financing received.
  - Processing & Refining Documentation Requirements
    - Valid processing and factory establishment license.
    - Approved technical and economic feasibility report.
    - Expert report from a certified court expert appointed by the platform.
    - Collateral equal to 2.5x the financing received.
  - General Commitments (In addition to requirements)
    - Signing of a **formal contract** between mine owner and the platform.
    - Contract must list pledged collateral, licenses, equipment, and project site details.
    - Collateral pledged is legally registered under the platform through a notary.
    - Collateral and documents are stored in a **bank deposit box** under platform custody.

        - If collateral is insufficient, additional **real estate collateral** is required; otherwise, the financing amount will be reduced.
- **Enforcement & Compliance**
    - Non-compliance by the mine owner triggers enforcement of pledged collateral and legal remedies.
    - The platform may suspend or terminate participation of any mine failing to meet legal or operational commitments.

VIII. Conclusion

The Digital Mine Token (DiMiTo) ecosystem represents a transformative model for bridging traditional mining with decentralized finance. By converting mining revenue streams into liquid, tradeable tokens, DiMiTo lowers entry barriers, enhances transparency, and provides global participants with access to one of the world's most profitable industries.

Unlike conventional investment structures, token holders carry no operational burdens or legal obligations, while mine owners are bound by strict contractual commitments, verified documentation, and enforceable collateral. This balance ensures that participation remains simple and low-risk for buyers, yet fully accountable on the side of asset operators.

With its dual-market structure, robust profit distribution mechanisms, and transparent reporting framework, DiMiTo aligns financial innovation with industrial productivity. It delivers both immediate liquidity and long-term value growth, while reinforcing trust through legal safeguards and on-chain accountability.

As the project evolves, each Mine Token will not only reflect the economic output of physical resources but also stand as a symbol of how real-world assets can be democratized, secured, and integrated into the decentralized financial ecosystem.