# Phoenix Gold Network — for Dummies

## Chapter 1: Introduction and PGN Foundations

Welcome to the world of Phoenix Gold Network, where gold meets the blockchain in a revolutionary way. In simple terms, Phoenix Gold Network (PGN) issues special digital tokens called Cyphers, backed by real gold stored in a worldwide decentralized network. These Cyphers, residing on the Polygon blockchain, can be easily swapped for physical gold at participating shops worldwide, thanks to innovative Web3 smart contracts.

Let's break it down into bite-sized pieces.

### Introduction:

Phoenix Gold Network mingles gold and the digital world by creating special tokens called Cyphers. These tokens are like digital certificates representing real gold, stored in a decentralized network. This process takes place on the Polygon blockchain, but you can exchange these tokens for actual gold at gold shops worldwide.

### PGN Foundations:

PGN consists of three distinct layers that: the first is a network of worldwide gold custodians (Phoenix Nodes) and smart contracts which ensure that no one controls the gold supply. Then, there's a cluster of smart contracts allowing Cypher holders to instantly sell or exchange their Cyphers for the real gold that their Cyphers represent. Lastly, there's a special token called Phoenix Gold Coin (PGC) which acts as a governance tool, utility token, and a measure of the network's value.

## Chapter 2: Decentralized Custody

One of the most essential components of the network is its robust security– how PGN keeps your gold safe and accessible through a network of globally trusted custodians.

### Decentralized Custody:

PGN relies on trusted custodians globally (Phoenix Nodes) and independent gold shops (Phoenix Nodes) to create a massive decentralized gold storage network. These shops play a crucial role in turning your digital Cyphers into real gold through a secure process.

### Phoenix Nodes and Staking:

These Nodes, your gold guardians, stake PGC to show that they are committed to the network. The more the community trusts a Node (thanks to voting and ratings), the more they can do – like selling gold to the network. The Nodes function as a gold-holding army, capable, at a minute's notice, of serving millions of Cypher holders.

### Gold Redemption:

To redeem his gold, a cypher-holder must swap the digital tokens they hold for real gold at any participating shop. Imagine getting your gold shipped to your doorstep after a simple digital transaction – that's the kind of power PGN holds!

## Chapter 3: Phoenix Cyphers

In this chapter we'll unveil the magic behind Phoenix Cyphers, and how they turn digital tokens into your personal gold claim.

### Phoenix Cyphers Unveiled:

Imagine Phoenix Cyphers as digital certificates tied to real gold in the Phoenix Network. Crafted on the Polygon blockchain,

each Cypher represents a specific amount of high-purity gold. These tokens are like a Swiss army knife, combining features of warehouse receipts, title deeds, bearer bonds, and stable coins into one.

**Services for Cypher Holders:**

There are many perks that come with owning a Cypher. You can stake them to earn Phoenix Gold Coins (PGC), giving you a fresh income stream. Redemption also allows you to swap your digital gold for the real thing at participating shops worldwide. You can even spend your Cyphers at merchants, or burn them for PGC.

**Staking, Redemption, and More:**

Staking your Cyphers means locking them up for a while and getting PGC as a reward – it's like earning interest on your gold. Redemption lets you trade your digital gold for the real physical asset at trusted shops. Plus, you can burn your Cyphers and exchange them for PGC, the native token of PGN.

**Smart Trading and Transfers:**

If you feel like trading your Cyphers, PGN's got you covered with NFT marketplaces or direct wallet transfers.

In the next Chapter, we'll explore how Phoenix Nodes, the backbone of this network, earn their keep and contribute to PGN's global reach.

## Chapter 4: Phoenix Node Incentives

Now, let's unravel the mystery behind Phoenix Nodes – the unsung heroes of the Phoenix Gold Network.

**What is a Phoenix Node?**

Think of Phoenix Nodes as individual gold shops worldwide that team up to make PGN's decentralized gold custody dream a

reality. They stake Phoenix Gold Coins (PGC) to prove their commitment to exchanging Cyphers for real gold. These nodes not only facilitate transactions but also have a say in the network through DAO (Decentralized Autonomous Organization) voting.

**Incentives for Gold Shops:**

Gold shops joining the Phoenix Network enjoy some significant benefits, including their ability to sell more gold through the network and get free exposure to potential customers. It's a win-win – more business, more visibility, and a stronger gold community.

**Gold Shops, Sellers, and Custodians:**

These players are crucial for PGN's success. They stake PGC, join the network, and when the DAO gives them the green light, they're obligated to exchange Cyphers for gold. They can even set a fee for this service, creating a fair system where Cypher holders rate their experiences, thus increasing their accountability.

**Chapter 5: Phoenix Cypher to Gold Redemption Process**

Here we will uncover the process that turns your digital Cyphers into the glittering reality of physical gold!

**Finding Gold Shops:**

As an owner of Phoenix Cyphers, you get access to a list of gold shops worldwide ready to swap your digital gold for the real thing. This list includes both global giants and local shops, giving you a variety of options.

**Initiating the Redemption:**

The process kicks off with you, the Cypher holder, signaling your intent to exchange your digital gold for the tangible kind.

Through the Phoenix Web3 App, you initiate the transaction, setting the magic in motion.

## Confirmation and Burning:

The chosen gold shop confirms their acceptance through the Phoenix Web3 application. Before you receive your physical gold, you're prompted to 'burn' your Cypher. The discarded Cypher acts as proof that you've fulfilled your part of the deal.

## Gold Handover and Blockchain Records:

Once the Cypher is burned, the gold shop is legally bound to hand over the corresponding physical gold. Every step, from the offer to acceptance and delivery, is recorded on the unchangeable blockchain. Think of it as a digital receipt that ensures transparency and trust.

## Accountability Measures:

For an extra layer of security, gold shops must get signed receipts upon handing over the physical gold. This way, if there's ever a dispute, there's solid proof of the transaction. In this way, PGN combines the best of both worlds – the security of the blockchain combined with traditional paperwork.

## Standard Gold Shop Practices:

While PGN ensures a secure and transparent process, gold shops follow their standard practices for handing over physical gold. Any fees they set in the Web3 app must be paid separately by the Cypher holder, ensuring a fair exchange.

## Chapter 6: Facilitating Gold Commerce

This chapter explores how the Phoenix Gold Network transforms gold from a valuable asset into a practical form of currency!

## Challenges of Gold Payments:

Gold has always been valuable, but using it for everyday transactions comes with challenges. Measuring, storing, and handling physical gold can be a logistical nightmare, deterring businesses from embracing gold as a form of payment.

**PGN's Ingenious Solution: Gold Cypher Payments:**

PGN provides an ingenious solution to this issue – Gold Cypher Payments. Through "The Phoenix Gold Spending Smart Contract," PGN makes accepting gold payments as smooth as any digital transaction, eliminating the hassle associated with physical gold.

**Merchant Pay System:**

At the core of PGN's ecosystem is the Phoenix Web3 application, featuring a merchant pay system. Cypher holders can use their digital gold to initiate transactions with participating merchants, harmoniously integrating gold-backed Cyphers into everyday commerce.

**Initiating Payments:**

Making a payment using gold-backed Cyphers is as simple as selecting a merchant within the app and initiating a payment request. The process mimics conventional digital payments, making it user- friendly for a broad audience.

**Breaking Down Cyphers for Transactions:**

At this point the smart contract is utilized, breaking down the Cypher into smaller components based on the transaction's value. This ensures a smooth process for both users and merchants. If you have a Cypher worth $100 but only need to make a $5 transaction, the smart contract splits the Cypher into two – one with $95 worth of gold and the other with $5.

**Payment Execution and Merchant's Option:**

The Cypher with the appropriate gold value is sent directly to the merchant, serving as payment for the transaction. Merchants, thanks to the Phoenix Gold Spending Smart Contract, can also choose to exchange the received Cypher for USDT immediately, safeguarding the value from any gold price fluctuations that may affect it.

## Bridging Gold and Digital Commerce:

In essence, PGN's Gold Pay system seamlessly bridges gold and digital commerce. It transforms gold-backed Cyphers into a practical and efficient medium of exchange, eliminating the logistical complexities that have hindered the adoption of physical gold as a payment method.

## Expanding Gold's Utility:

The Phoenix Gold Spending Smart Contract expands the utility of gold by making it accessible for everyday transactions. It empowers users and merchants to transact with confidence, bridging the gap between traditional commerce and the world of digital gold ownership.

## Chapter 7: The Role of Phoenix Gold Coin (PGC)

The Phoenix Gold Coin (PGC) is the powerhouse behind many key functions in the Phoenix Gold Network. In this chapter, we'll look into the specifics of its usage.

## PGC as a Multifaceted Utility Coin:

At the heart of PGN lies the Phoenix Gold Coin (PGC), a versatile coin with a range of applications within the Phoenix Gold Network.

## DAO Governance:

PGC serves as a catalyst for decentralized autonomous organization (DAO) voting. Holders can use it to influence

decisions about gold shop participation, network direction, and process improvements within the Phoenix Network.

**Priority Access to Liquidity Services:**

Owning PGC gives Cypher holders priority access to liquidity services. The more PGC you hold relative to your Cypher ownership, the better your access will be. It's like having a golden ticket to the network's liquidity pool.

**Staking PGC for Participation:**

Gold shops joining the network must stake PGC, creating demand for PGC as a digital asset. This staking requirement ensures that PGC remains valuable, as it represents a stake in the network.

**Buying Cyphers:**

Starting in 2025, PGC will become the sole currency for purchasing Cyphers in PGN. As the network's gold holdings grow, PGC will gain a significant advantage over other market entrants, making it a reserve currency for acquiring Phoenix Gold.

## Chapter 8: PGC Distribution Model

Let's dive into the unique distribution model of Phoenix Gold Coin (PGC), showcasing how it aligns with the growth of the Phoenix Gold Network and the preferences of its participants.

**Pre-mined PGC:**

All 21 million PGC tokens are pre-mined, meaning they are created and available from the network's inception. However, 85% of these tokens are locked in the Distribution Smart Contract, and you can obtain them through various processes like mining, staking, or melting.

**The Melting Process:**

This is where things get interesting: the melting process, facilitated by the Phoenix Gold Melting Smart Contract, plays a crucial role in PGC's tokenomics.

- **Cypher Conversion:** Users who prefer PGC over physical gold can send their Cyphers to the melting smart contract for burning. This action forfeits their claim to the associated physical gold.

- **Initial Reward:** Upon burning their Cyphers, users receive an initial reward of 2 PGC for every ounce of gold represented by the Cypher — an incentive for participating in the melting process.

- **Halving Events:** The PGC distribution undergoes a halving event after every 21,000 ounces of gold are melted through the contract. At each halving event, the reward is reduced by half. For example, after the first 21,000 ounces, the reward becomes 1 PGC per ounce melted.

It is important here to elucidate on the mechanisms that underlie the 'gold extraction' process. Through cryptographic virtual 'mining', participants engage in virtual mining activities that yield rewards. The energetic value of these endeavors is tied to a core liquidity pool through a quadratic bonding curve.

- **Mining Device Economics:** Virtual mining devices generate daily PGC rewards based on their specifications. Half of these rewards can be instantly sold, while the other half are locked for a year, encouraging a mix of immediate liquidation and long-term retention.

- **Liquidity Pool:** A significant portion of the proceeds from mining goes to Uniswap PGC liquidity, fostering a robust and self-perpetuating economic activity that benefits the entire network.

This distribution model ensures a gradual release of PGC into circulation, aligning with the network's growth and providing opportunities for both short-term and long-term participants.

## Chapter 9: Virtual Mining and Economic Dynamics

In the following chapter we'll shed some light on the intricacies of PGN's virtual mining process, and how it contributes to the stability and liquidity of the Phoenix Gold Network.

## Virtual Mining in a Nutshell:

In the realm of Phoenix Gold Network, virtual mining isn't about digging into the earth; it's a cryptographic simulation tied to the core liquidity pool. Users engage in virtual mining activities through devices, contributing to the network's vitality.

## Mining Device Economics:

Let's break down how the economics of these virtual mining devices work:

- **Proceeds Distribution:** Transactional virtual mining devices continuously inject vitality into the liquidity pool. A significant portion of the proceeds (90%) goes to a liquidity pool in a smart contract, transferring the sale of the mining device back to the smart contract from which it was purchased. The remaining 5% goes to Uniswap PGC liquidity.

- **Price Management:** The price is managed on a quadratic bonding curve, stepping up and down in algorithmically controlled increments. This ensures a dynamic and responsive economic environment.

- **Arbitrage Potential:** The self-perpetuating economic activity generates arbitrage potential, making the network more resilient and stable. As more miners join in, liquidity increases, creating opportunities for profitable device sales.

## PGC Rewards for Virtual Miners:

Owners of virtual mining devices receive daily PGC rewards based on the specifications of their devices. This daily mining reward can be split into two categories:

- **Instant Sale:** Half of the PGC daily mining rewards can be instantly sold. This provides immediate liquidity for users, supporting short-term financial needs.

- **Locked Rewards:** The other half of the daily mining rewards are locked away for a period of one year (measured from the date that they were mined). This encourages a blend of immediate liquidation for fiscal utility and long-term retention strategies, adding to the stability of PGC as a digital asset.

- **Uniswap Liquidity Pool Boost:**
  A substantial portion of the mining proceeds contributes to Uniswap PGC liquidity. This continuous injection enhances the liquidity available on Uniswap, benefitting all

participants in the PGC ecosystem.

## Chapter 10: PGN's Vision for the Future

In this final installment, let's unravel the grand plans that Phoenix Gold Network (PGN) holds for its future, as it prepares to establish itself as a revolutionary force in the world of digital gold ownership and transactions.

### The Evolution of Gold Transactions:

Phoenix Gold Network envisions a future where gold transactions break free from traditional constraints. By incorporating blockchain technology, PGN offers a instantaneous, secure, and transparent way for individuals and businesses to interact with gold in its digital form.

### Digital Gold as a Currency:

PGN challenges the conventional view of gold as a mere investment or a store of value. Instead, it propels gold into the realm of everyday transactions. The integration of gold-backed Cyphers into daily commerce transforms gold into a practical and efficient medium of exchange.

### Decentralization for Trust and Security:

Decentralized Autonomous Organization (DAO) governance, decentralized custody systems, and the worldwide network of Phoenix Nodes and Custodians ensure that PGN operates without a central authority. This decentralization not only fosters trust but also enhances the security and integrity of gold transactions within the network.

### Empowering Millions with Gold:

The vision extends beyond just a handful of participants. PGN foresees a future with millions of Phoenix Nodes, each

contributing to the decentralized gold custody network. These nodes, trusted by the community through DAO voting and Cypher holder ratings, play a pivotal role in both holding gold for the network and facilitating gold exchanges for Cypher holders.

**PGC as the Cornerstone:**

Phoenix Gold Coin (PGC) emerges as the cornerstone of this vision. As a utility coin, it serves multiple functions – from influencing DAO decisions to granting priority access to liquidity services. With the requirement for gold shops to stake PGC, a compelling demand for this limited-supply digital asset is created.

**Pricing Gold in PGC:**

Starting in 2025, PGC will become the exclusive currency for purchasing Cyphers in PGN. This strategic move further establishes PGC as a vital component of the network, providing advantages over new market entrants and positioning it as a reserve currency for Phoenix Gold.

**Balancing Tradition with Innovation:**

While PGN introduces cutting-edge blockchain technology, it also respects and integrates traditional gold shop practices. The redemption process ensures that legal and customary procedures associated with gold transactions are followed, combining the benefits of blockchain transparency with the security of established practices.

**A Gold-Backed Revolution:**

In essence, Phoenix Gold Network aims to lead a revolution in the way we perceive, transact, and interact with gold. By combining the timeless value of gold with the innovation of blockchain, PGN envisions a future where gold is not just an asset but an integral part of our daily lives.

As we conclude this journey through the technical intricacies and visionary aspirations of Phoenix Gold Network, remember that the gold revolution is underway, and PGN is at its forefront, shaping the future of digital gold ownership.

**Bonus: Frequently Asked Questions (FAQs)**

Now that you've delved into the technicalities of Phoenix Gold Network (PGN), let's address some common questions that might arise.

**Q1: How does Phoenix Gold Network ensure the security of gold transactions?**

A1: PGN relies on a decentralized custody system, Phoenix Nodes, and Custodians worldwide. Smart contracts and DAO governance enhance security and transparency. Additionally, the redemption process, recorded on the blockchain, ensures a secure and legally binding exchange of Cyphers for physical gold.

**Q2: What is the role of Phoenix Gold Coin (PGC) in the network?**

A2: PGC serves various roles, including as a governance token for DAO voting, a utility token for accessing network services, and a measure of socio-economic value. It is required for gold shops to stake PGC, creating demand for the coin. Starting in 2025, PGC will become the sole currency for purchasing Cyphers in PGN.

**Q3: How are PGC rewards distributed in the melting and mining processes?**

A3: In the melting process, users receive an initial reward of 2 PGC for every ounce of gold represented by the Cypher. In the mining process, owners of virtual mining devices earn daily PGC rewards. Half of these rewards can be instantly sold, and

the other half are locked for a year, promoting a balance between immediate liquidity and long-term retention.

## Q4: How does PGN address the challenges of using gold in everyday transactions?

A4: PGN's Gold Cypher Payments and Phoenix Web3 application enable users to spend gold-backed Cyphers at participating merchants, eliminating the logistical challenges associated with physical gold transactions. The system converts gold into a practical and efficient medium of exchange.

## Q5: What sets PGN apart from other digital gold projects?

A5: PGN's unique features include a three-layered network involving decentralized custody, smart contracts for instantaneous transactions, and the integration of Phoenix Nodes and Custodians. The use of PGC as a governance and utility token, along with its exclusive role in purchasing Cyphers, sets PGN apart in the digital gold landscape.