



**ZENGOLD**

**Whitepaper**

# Table of Contents

<b>ABSTRACT</b> .....	01
<b>ZEN ASSETS ON METaverse</b> .....	02
<b>ZENGOLD INTRODUCTION</b> .....	04
<b>ZENGOLD TOKENS EXPLANATION</b> .....	05
•ZenGold (ZNG).....	05
•ZenGold Coin (ZGC) .....	05
<b>KEY PROCESSES</b> .....	05
•ZenGold Tokenization Procedures and Rules.....	06
•ZenGold Regular Audit Procedures and Rules.....	07
•ZenGold Smart Mint Procedures.....	08
•ZNG Token Burning Procedures and Rules.....	09
•Gold Bullion Withdrawal.....	10
<b>DIGITAL IDENTITY</b> .....	10
<b>USER CASE SCENARIOS</b> .....	12
•ZenGold as a credit system.....	12
•ZenGold as a global payment.....	12
•ZenGold crowdsale.....	12

## **ABSTRACT**

In modern era, trading and exchange of goods and services are carried out by the fiat money. Fiat money is not a scarce resource, thus the quantity of its supply is not limited by scarcity like gold but can be controlled by central banks to serve the monetary system of a given country. Any existing fiat currency relies on the confidence people have in it and in the nation backing it. Not having intrinsic value induce governments to print too much quantities of money which leads to hyperinflation and exposure to devaluation. Through-out history, there have been many instances of hyperinflation literally destroying this full faith and credit of a national currency. When the confidence is lost, the system begins to deteriorate rather quickly causing creation of price bubbles, financial and economic crisis. Thus, fiat currency now can be viewed not as an economic relationship, but as a social custom supported by the government.

Above outlined risks related to fiat currencies in the modern world coupled with the high inefficiency and cost of international transacting creates the demand for the alternative currency that would have a stable value. The investors throughout the history saw gold as a safe-haven asset during turbulent financial periods. At the same time, the possibilities behind Blockchain technology and cryptocurrencies have never been more promising. ZenGold acknowledges both trends and aims at providing the best of both worlds to the investors around the world. By coupling the newest and innovative medium of exchange with the oldest form of value, ZenGold plans to combine history with the technology, re-shape the gold-trading standards and accountability.

While designing transferable crypto assets – ZNG tokens that represent physical gold on Metaverse Blockchain, ZenGold sets its sights on creating a new reality, where the individuals and businesses will use digital gold tokens that are minted into existence only by the

purchase of an actual gold. Thus, 1 ZNG token will always represent the ownership of 1 gram of the physical gold securely stored in Shanghai Gold Exchange.

The creation of crypto assets that are backed by physical gold on Metaverse aims to enable investors to instantly buy and transfer even a very small fraction of gold anywhere in the world while having pertinent asset information securely stored onto an unalterable Metaverse Blockchain. ZNG tokens will enable its holders to use gold as an effective payment mechanism and credit system while benefiting from the transactional functionalities of Blockchain technology.

As Blockchain technology progresses, ZenGold envisions a greater push toward the tokenization of not only gold, but also the wide range of assets such as silver, oil, copper or any other commodity. Thus, ZenGold's initiative to establish ZNG token as an alternative to the traditional form of storing value will make a strong case for reshaping the financial service industry in the future.

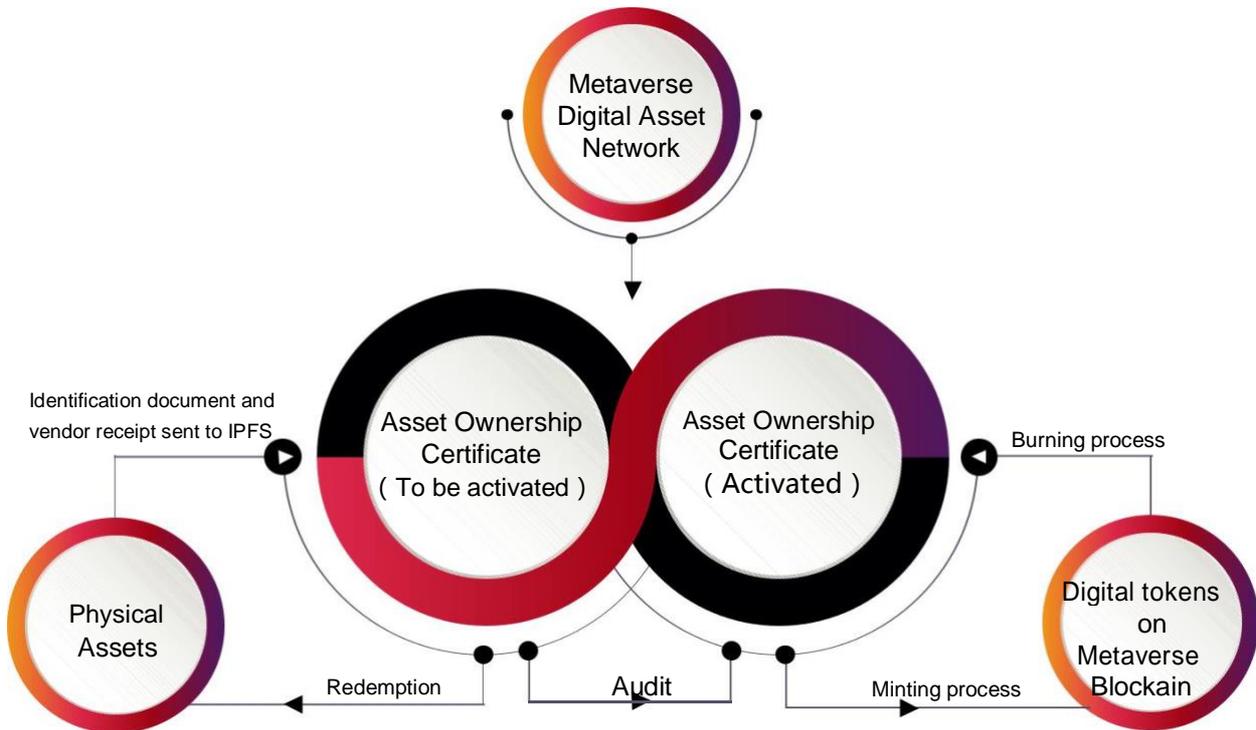
## **ZEN ASSETS ON METAVERSE**

Metaverse is a decentralized project based on blockchain technology, which integrates Digital Identity Verification and Oracle Service Frame concentrating on decentralized services including Digital Asset Registration, Digital Asset Exchange, Digital Identity, Value Intermediary, etc.

ZenAssets represent all the Intelligent Digital Assets on Metaverse backed by real world assets. All ZenAssets have to follow the conditions and rules for the asset registry, transaction and redemption, which are:

- All the identification, custodian and withdrawal records of ZenAssets need to be uploaded onto IPFS (InterPlanetary File System) network for eternal storage, and have the IPFS hash address sealed in issuing and transacting on Blockchain.
- ZenAssets are marked as an “un-activated” after registry and retain this status until it passes the audit procedure.
- ZenAssets will be ready for activation after audit procedure is completed, the mint script will issue ZenAsset on Metaverse Blockchain after the audit results are confirmed by oracle.
- ZenAssets could be burnt in order to obtain the asset ownership certificates that are used to redeem the real assets.

**The following diagram expresses the rules that are applied within the Zen Asset Network.**



## **ZENGOLD INTRODUCTION**

As the first project of ZenAssets, ZenGold users may mint ZenGold tokens by using approved digital currencies, and have the real world gold stored in vault as an endorsement for the digital assets issued. The Oracles assigned by the foundation regularly audit the assets registered on Metaverse blockchain. The users may also freely burn ZenGold-tokens at any time, and have equivalent amount of gold redeemed and delivered from the Shanghai Gold exchange vault (the vault). Each ZenGold coin represents one gram of Gold reserved in the vault. The ZenGold token is minted by smart contracts on Metaverse once a purchase is successful, and will be burnt after the withdrawal procedure is complete.

The users may mint ZenGold by transferring digital currencies that are approved to be acceptable to the smart contract address, and receive ZenGold on Metaverse Blockchain address once the transaction is confirmed by network. The mint rate is determined by index of both Gold price and BTC price constantly and announced to public.

For redemption of gold, users may simply transfer ZenGold to the smart contract address for burning by signing script to prove the authenticity of the transaction with the vendor (the 3rd party from which the gold reserves are purchased), and ZenGold coin burning process is confirmed after the gold redemption offline procedure is complete.

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This foundation will be legally registered under the laws and regulations of Switzerland.

5% of ZGC tokens created will be allocated to the Foundation to motivate and reward developers, founders and the community for their contributions to the ZenGold project.

Founded in September 2014, Shanghai International Gold Exchange ("SGEI") is registered in Shanghai Pilot Free Trade Zone and fully owned by SGE.

SGEI enables foreign institutions and individuals to access to China precious metals market based on FT account system. SGEI is responsible for international market development, international members' management and offshore investor services. For the further information, please visit <http://www.en.sge.com.cn>.

## **ZENGOLD TOKENS EXPLAINED**

### **ZenGold (ZNG)**

ZNG is a digital currency developed with Blockchain technology and is backed by gold reserves in the Shanghai Gold exchange vault. Users may transfer ZNG using Metaverse blockchain wallets without any special network conditions. Like other digital currencies, ZNG is crypto-tech secured token, which generates lower transaction costs and has an ability to be used as a payment at any time. Each ZNG token represents one gram of Gold and is divisible into 0.001 grams. 0.1% of the total value of each transaction is the fee paid by the users of the network and has a cap of 1 ZNG. For instance, User A sends a transaction worth 10 ZNG to user B, A would need to pay extra 0.01 ZNG as the transaction fee.

### **ZenGold Coin (ZGC)**

ZGC represents the right for its holders to receive a portion of the generated profit of the ZenGold network. The profit of the network is generated by the users transacting with ZGC and paying a transaction fee.

Initially 100,000,000 tokens of ZGC will be issued. No inflation rate will be applied. 95% percent of ZGC would be released to the market, and the remaining 5% will be allocated to the ZenGold Foundation in order to ensure sustainable growth and development of the ecosystem.

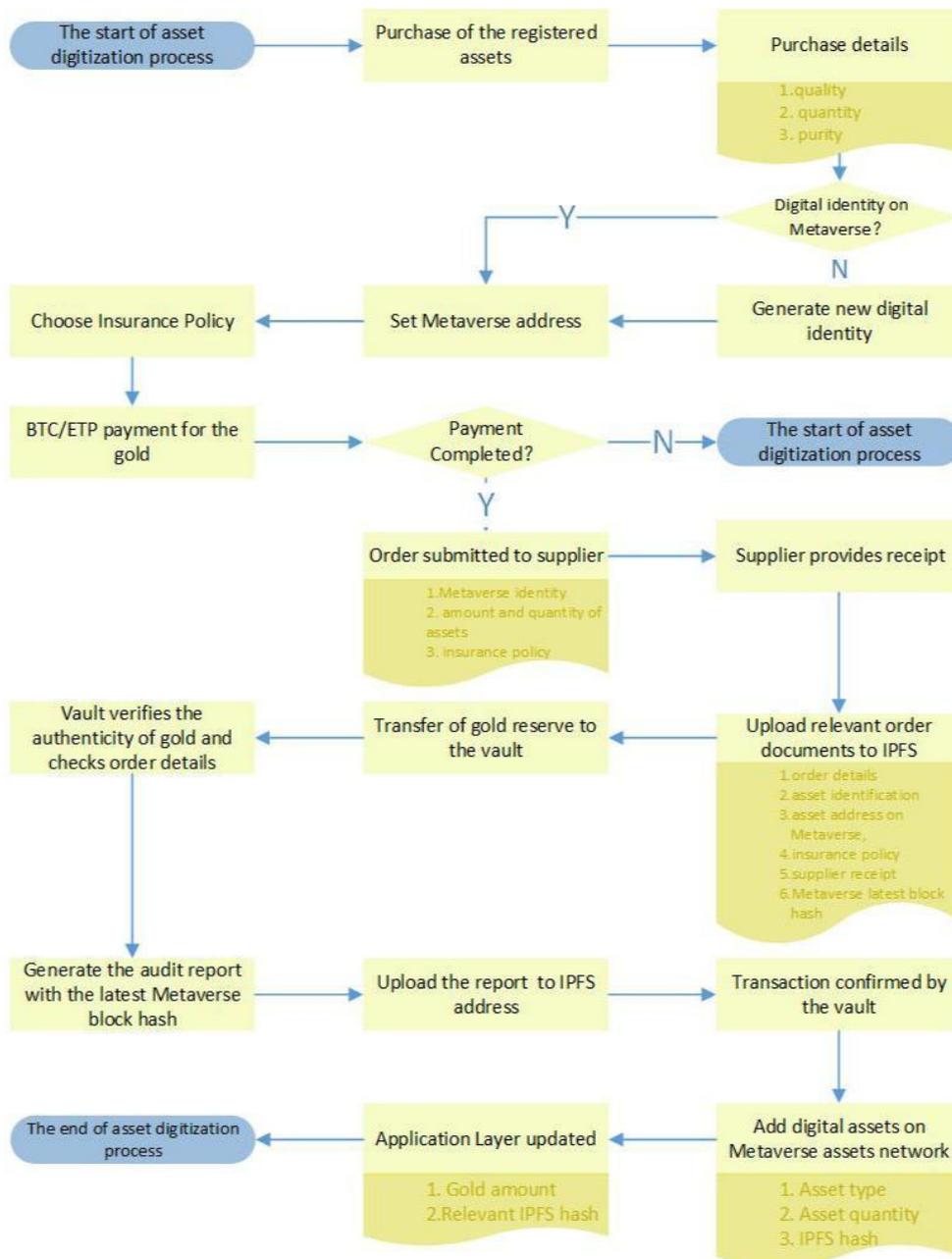
## **KEY PROCESSES**

Within ZenGold network there are five key processes that will be separately explained and illustrated by using diagrams in this whitepaper.

The following are the key processes of ZenGold network

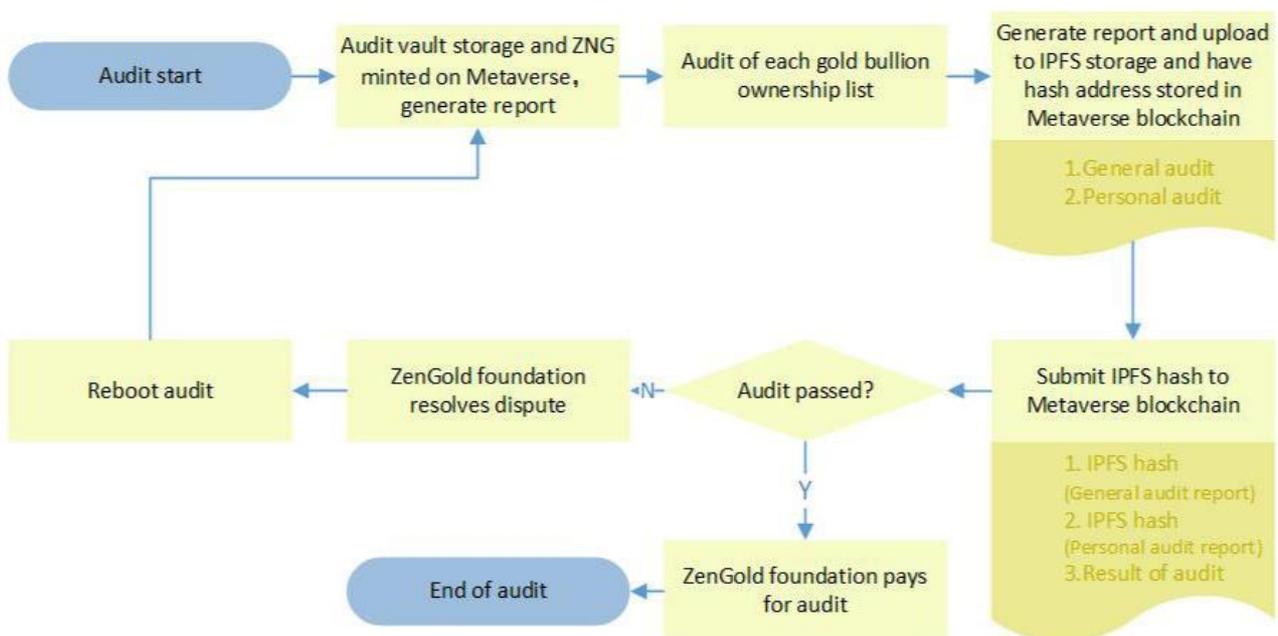
- ZenGold tokenization
- ZenGold regular audit
- ZenGold smart minting
- ZNG token burning

### ZenGold Tokenization



- Users need to confirm their identity with the Metaverse Digital Identity verification system; Reserved bullion in vault will be available to users for purchase. The user may check the related identification and custodian documents related to the specific bullion;
- Audit process will start after the mint process is triggered by user and will be conducted throughout the whole process;
- Gold bullion providers will upload all the gold related documents onto IPFS storage including bullion order, bullion identification information, Metaverse digital Identity information and ZenGold address for receiving minted tokens, insurance order, receipt of digital currency payment and will receive the timestamp sealed by including the newest block hash of Metaverse;
- The vault will create an audit report on IPFS after examination of the documents uploaded by the gold bullion providers;
- The certificate of ownership of gold bullion will be uploaded after the confirmation by vault is done.

### ZenGold Regular Audit Procedures and Rules



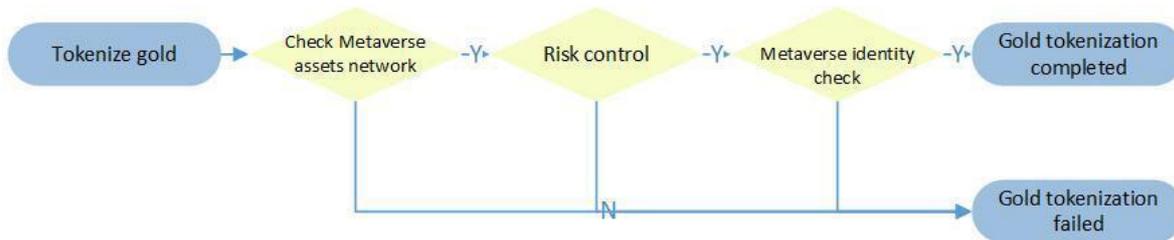
### Oracle Auditing

- Auditing process is executed every 3 months. The auditor is assigned by ZenGold foundation and approved by Metaverse foundation; Users will be informed both by the email and via ZenGold official webpage;
- Audit work has two parts, which is general audit and item audit. General auditor checks the bullion stored in vault and the issued ZenGold to ensure the equivalence (including all reports and certificates). Item audit focuses on ownership list of every bullion of gold and ensures that all minting and burning transactions are equivalent to on-chain data;
- Audit report is uploaded to IPFS storage, and the audit results are stored on Blockchain; Disputes arising during or after audit will be negotiated through the general meeting set by ZenGold foundation. The recording of general meeting as well as the outcome will be publicly available.

### Public Audit System of ZenGold Exchange

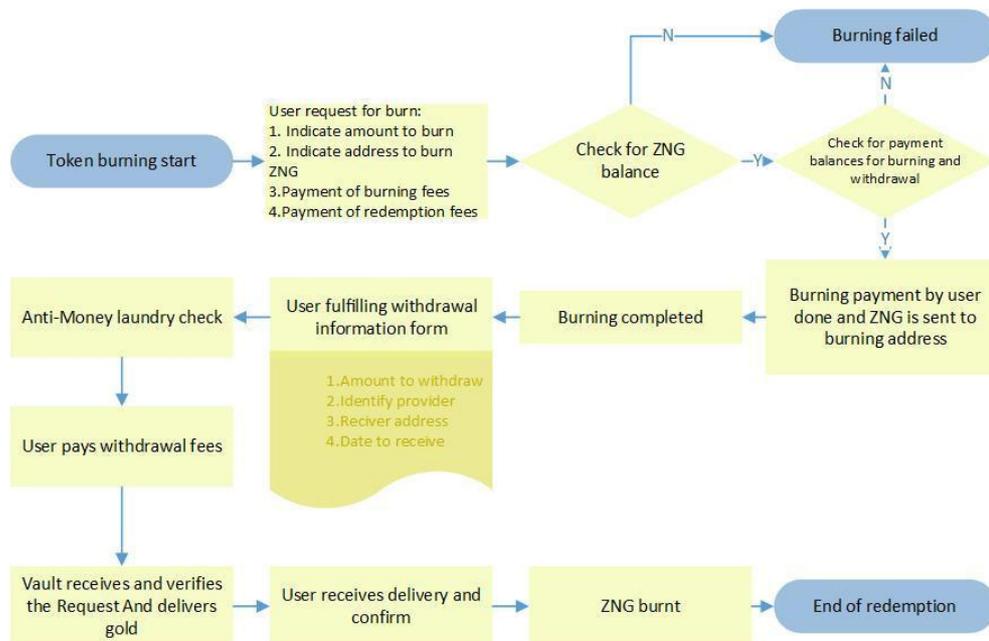
- A real-time, public audit system will be implemented in order to achieve transparency of ZenGold Exchange;
  - Reports on status of all the assets will be announced within the system; □
- Reports on all individual assets statuses will be announced anonymously.

### ZenGold Smart Minting Procedures



- ❑ Minted ZNG which has been audited by oracle is marked “ready for activation” after the confirmation of vault;
- ❑ Before activation, system will check the status of the whole ZenGold network to ensure its functionality;
- ❑ Before activation, system will identify the effectiveness of the Digital Identify of all roles including user, provider, vault and auditor.

### ZNG token Burning Procedures and Rules



- ❑ User needs to own enough ZenGold tokens for the requested burning process;
- ❑ The request of burning token cannot be canceled once it is submitted;
- ❑ User will need to provide delivery information within the application layer for the gold bullion-courier services;
- ❑ ZNG token will be burnt after the confirmation of the courier services;
- ❑ The extra payment will be applied for courier and insurance services.

### **Gold Bullion Withdrawal**

To improve the customer experience, ZenGold will organize physical delivery of the gold that is withdrawn by ZNG token holders. The management of delivery will be reflected in a relevant fee applied according to the specific withdrawal scenario. The fee will cover insured shipping and will be calculated at the time of withdrawal request reflecting the costs set by the independent carrier company (the 3rd party);

Already withdrawn gold shipment information will be available for tracking to the gold withdrawal initiator; The withdrawn amount of gold will be shipped to the token holder's address verified during the withdrawal procedure;

ZenGold was designed in a way that allows ZNG token holders to enjoy the benefits related to stability, divisibility and convenience of the gold backed medium of value. Thus, ZenGold should not be considered as a way to cheaply buy and withdraw the gold reserves;

### **DIGITAL IDENTITY**

Since the dawn of the internet and rising mobile adoption, digital identification has become more prevalent within many industries. Interactions with service or identity providers has dramatically increased with usernames and passwords being the very common way for us to verify to a server we are who we say we are. Yet connecting with these various centralized institutions creates an environment of data silos that are prone to attack. In addition, current systems require repetitive registrations, wasting time and resources, especially in

those legacy systems where documents unnecessarily have to be provided time and time again. With the rapid growth and changes in technology, new business models, processes and ways of finding solutions that never existed before begin to emerge. Out of these new technologies, one of the most ground-breaking is the Blockchain, poised to transform the understanding of digital identities.

Within the current Blockchain ecosystem, there exists an array of different Blockchain protocols and implementations. Whether working with assets, smart contracts, provenance, supply chain and particularly finance, identity will have to enter the equation at one point to prove who owns what and who did what. Although being pseudonymous is seen as somewhat of an advantage in protocols such as Bitcoin, being pseudonymous is not a strong trait when Blockchain technology and its applications become implemented worldwide. We would need to know who we are dealing with and people are identified by names, not a string of numbers. Thus in many protocols, particularly open public Blockchains, identity is left out at the protocol level. It is the missing link that allows the concept of digital assets on Blockchain to flourish and financial applications to play a role in a fairer digital banking system and financial inclusion. Thus the value of having identity embedded at the protocol level is important as it enables building a verifiable function for applications built on top of Metaverse.

In Metaverse, an asset is an online representation and a smart property is how the asset interacts with humans. Essentially, Avatars (unique, deterministic, self-sovereign digital identities that do not rely on central entities or third parties to validate the identity) and smart properties will power all the decentralised applications on Metaverse. As our lives become more digitally intertwined, sovereign self-identities will be able to easily transact assets of any type and allow businesses and communities to empower themselves through many forms of digital payments where these different types of assets will drive us towards the internet of values.

## **USER CASE SCENARIOS**

### **ZenGold as a credit system**

In modern society, in order to be able for the individual to receive the access to the credit, one has to provide the sufficient underlining assets to the lending institution which causes inconvenience in terms of transferability, authenticity of the documents and assets provided. With ZenGold this reality will be transformed to an environment where ZNG token holder by only transferring the token to the smart contract address will have an access to the required credit. While the financial institutions have no more need to take into consideration the control mechanisms for securing the processes related to the transfer, storage and authenticity verification, the clients on the other hand receives credit without facing the risks and costs related to the process.

### **ZenGold as a global payment**

With ZNG token, payments can be done in a stable, fast and unlimited way. Unlike other digital currencies, ZNG is a solid storage of value as it is backed by the gold reserves. Implementation of solutions related to Blockchain technology eliminates the need for the token holders or the payment receivers to use the specialized appliances or network in order to make a transaction.

### **ZenGold crowdsale**

ZNG is designed in a way that will allow its holders to own a stable store of value over the time. This opens up new opportunities for those start-ups or individuals aiming to raise the funds necessary for their project execution. As ZNG token will not suffer from the price volatility that other digital or fiat currencies face, it greatly benefits the investors and fund raisers as they can be sure that the actual value they raise is equivalent to what was initially needed. There is no need to take into consideration the high opportunity cost associated with

the possible earnings that one could have earned from not investing.