



REITS  
CHAIN



|WHITE PAPER|

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# Introduction to the development of REITs and the problems faced

## 1.1 Introduction to the development of REITs

REITs are the English abbreviations for real estate trust investment funds, which are an important means of real estate securitization. It directly transforms the low-liquidity, non-securities form of real estate investment into the financial transaction process of securities assets in the capital market. Real estate securitization includes two basic forms: securitization of real estate project financing and securitization of real estate mortgage loans.

REITs are a kind of trust fund that collects the funds of a specific majority of investors by issuing income certificates, is managed by a special investment institution for real estate investment, and distributes the comprehensive income of the investment to investors in proportion. REITs in the international sense are equivalent to funds in nature, a few are private placements, and the vast majority are public placements. REITs can be operated in a closed manner or listed and traded, similar to open-end funds and closed-end funds in the United States.

**The charm of REITs is:**through the "collection" of funds, it provides small and medium investors with opportunities to invest in the lucrative real estate industry; professional managers use the raised funds in the real estate investment portfolio to diversify the risk of real estate investment; The equity owned by a person can be transferred and has good liquidity.

### **The characteristics of REITs are:**

1. The income mainly comes from rental income and real estate appreciation;
2. Most of the income will be used to issue dividends;
3. REITs have a relatively high long-term return rate.

REITs were first produced in the United States in the early 1960s and were created by the US Congress to enable small and medium investors to participate in real estate market investment with a lower threshold, and to obtain income from real estate market transactions, rents and appreciation. In 1960, the world's first REITs were born in the United States. With the US government officially allowing REITs that meet certain conditions to be exempt from income tax and capital gains tax, REITs have begun to become the most important financial method in the United States. Under normal circumstances, REITs pay more than 90% of dividends. There are approximately 300 REITs in operation in the United States, with a total asset value of more than 300 billion U.S. dollars, and nearly two-thirds of them are listed and traded on national stock exchanges. The country where REITs first appeared in Asia was Japan. Due to the large number of real estate companies in Japan, the market is very large in Japan. According to the 2019 "Research Report on Asian Real Estate Investment Trusts (REITs)" released by DTZ on March 31, 2020 and the Financial Branch of the China Real Estate Association, as of the end of 2019, there were a total of 178 REITs active in the Asian market, with a total market value of 2924. The market value of REITs in Japan accounted for more than half, and the total market value of REITs in Japan, Singapore and Hong Kong accounted for 93%.

At present, 37 countries and regions around the world have launched REITs. There are 477 REITs included in the NAREITSGlobal index. The total market value of the FTSE EPRA/Nareit Developed Real Estate Index has reached 1.5 trillion US dollars, of which 54% are from countries outside the United States. REITs. This shows the huge scale of the global REITs market.



## 1.2 Problems faced by REITs

Although the development of REITs has made considerable progress and considerable scale, it also faces some thorny problems. These problems mainly include the following aspects:

**Time-bound:** Many REITs funds are time-bound. When the fund expires (for example, ten years), the REITs fund operation team must sell the real estate held and return the proceeds to investors. Many REITs funds have the same expiration time, so it is very likely that a large number of REITs fund teams will sell properties in the market at a certain point in time, resulting in huge selling pressure on property prices.

**High fees:** Most REITs operate like mutual funds, so these funds also charge investors with varying amounts of management fees. As a result, investors in REITs funds will actually receive lower returns than expected.

**There are thresholds for participation in trading, and liquidity has certain restrictions:** most REITs fund transactions are publicly traded in the secondary market, but this is only for users with trading accounts in the secondary market in certain countries, while a large number of transactions in the world are not. Users who have an account or fail to meet the transaction threshold cannot participate in the transaction. This limits the liquidity of REITs funds.

# The hope that blockchain technology brings to REITs

In response to these problems currently faced by REITs funds, the birth of blockchain technology has just given a perfect solution.

## 2.1 Introduction to Blockchain Technology

Since the birth of the Bitcoin white paper in 2008, blockchain technology has begun to receive more and more attention from all walks of life with its unique deposit incentive mechanism, no threshold for transactions, anti-data tampering, and traceability of transactions. Apply to all walks of life.

Blockchain is a decentralized network system and an open distributed ledger system that uses unique digital signatures to provide proof of ownership. At the same time, there are complex algorithms that promote consensus among nodes in the network to ensure transactions. The data will not be tampered with after verification, which reduces the risk of fraud. These networks can facilitate peer-to-peer data transactions, asset transactions, and currency transactions, and rule-based smart contracts can be more efficient, more transparent, and cost less. Once the transaction is created, and once the pre-determined conditions are fulfilled, the smart contract will be automatically triggered without human intervention.

It is precisely because the blockchain technology provides a solution to build trust in a network where there is no central organization, many business models that are different from the traditional Internet are derived from this. Especially in the financial field, the application of blockchain in the business of asset securitization, equity transaction delivery, asset custody, commodity trading, cross-border payment and settlement, etc., blockchain can empower and enhance the original model.

## 2.2 Blockchainization of financial assets

At present, global investors' demand for digital assets is becoming stronger and stronger, and the connection and circulation of financial assets and blockchain assets has become a general trend. The blockchainization of financial assets is a new direction that has been booming in recent years.

The so-called blockchainization of financial assets refers to the COIN of financial assets, that is, corresponding to basic assets, such as equity, debt, options, futures, physical assets, etc., one-to-one issuance of specific deposit certificates with digital currency Or the stable currency anchored to the legal currency is priced for it, and accounting, trading, and settlement are carried out through the blockchain. The large-scale popularization of blockchain technology has rapidly expanded the COIN Economy on a global scale.

Financial assets, especially equity and securities assets, are measured in trillions of dollars in the world, and the imagination of equity/securities "+blockchain" is huge. In fact, the world's mainstream exchanges, including NASDAQ, New York Stock Exchange (NYSE), Hong Kong Stock Exchange (HKEX), and London Stock Exchange (LSE), are actively exploring the application of blockchain technology Stock trading realizes the blockchainization of equity assets.

There is a natural match between COIN and equity/securities. Therefore, the deep integration of blockchain and equity/securities market is generally favored by the financial community. For the equity/securities market, blockchain can strengthen trust, reduce costs, diversify risks, reduce processes, integrate information, standardize supervision, promote the integration of world capital markets, and solve many pain points in the current market.



## 2.3 How does the blockchainization of REITs solve the problems faced by REITs?

The application of equity/securities "+blockchain" must find an entry point. The project team focuses on the market segment of REITs, and will use blockchain technology to propose a new set of solutions to subvert the existing REITs trading and operation methods.

Regarding the time limit problem of REITs funds, after we block-chain REITs funds, there will be no longer a certain time limit, and investors can permanently hold the digital assets (COIN) corresponding to the REITs assets.

Regarding the problem of high fees for REITs funds, because the operation and transactions of the blockchain system are completely online, without the intervention and operation of traditional market centralized institutions, the holding cost of blockchain-based REITs digital assets will be greatly Decrease, and transaction efficiency will be greatly improved at the same time.

For REITs funds, there are high transaction thresholds and liquidity restrictions. Because blockchain technology provides an opportunity to participate in transactions without thresholds, any user can download and run a digital currency wallet and can access the Internet to participate in any place in the world. trade. Moreover, the trading of digital assets is open 24 hours a day, unlike the traditional secondary trading market which has strict trading time restrictions. Therefore, the threshold and liquidity issues can be well resolved.

# REITs CHAIN system

## 3.1 Introduction to REITs CHAIN system

We will build a REITs CHAIN based on blockchain technology. In order to achieve this goal, we will build in two phases.

In the first phase, we will issue the deposit certificate RCH-COIN for this project based on the RRC-20 standard.

In the second stage, we will develop our own REITs CHAIN blockchain system, referred to as REITs CHAIN, to create a blockchain-based global asset digital ecological public chain system.

REITs CHAIN is a global asset digital ecological public chain, in which individuals, enterprises, and physical assets can participate in depth. REITs CHAIN will become a super low-level service public chain supporting a large number of commercial-level applications. REITs CHAIN protects users' privacy to the greatest extent, guarantees users' ownership of assets and the tracking and tracing of all transactions. This makes the information in the system unable to be forged or tampered. On the one hand, it avoids the risk of a large amount of personal information being stolen in the centralized system; on the other hand, it protects the security of user transactions and the security of assets. REITs CHAIN supports smart contract functions. Smart contracts can run automatically without the intervention of third-party institutions, and cannot be tampered with or blocked. This ensures that the execution of all transactions in the system is fair, just, and open.

## 3.2 REITs CHAIN architecture system

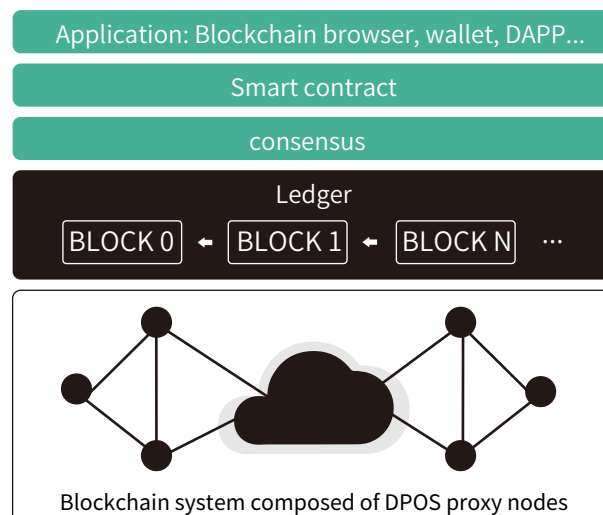


Figure 3-1 System architecture diagram of REITs Chain

REITs Chain has a five-layer structure from the bottom to the upper layer, which are blockchain node, blockchain ledger, consensus layer, smart contract layer, and application layer.

**(1) Blockchain node:** This is the physical architecture layer of the system. A peer-to-peer network composed of blockchain nodes supports the operation of the entire blockchain system. The node is responsible for the packaging of the block. In each packaging cycle, a node will package all the transactions that occurred in the system into a block, and then send the block to all other nodes in the entire network for verification. The verified blocks will be added to the system's blockchain structure. This peer-to-peer network composed of blockchain nodes directly constitutes the foundation of the decentralization of the REITs Chain system.

**(2) Blockchain ledger:** This is the distributed ledger layer of the system. It is essentially a blockchain structure that starts to extend indefinitely from the creation block (block 0). In this structure, the block and the block (except the genesis block) are connected indefinitely by the hash value of the parent block. The blockchain ledger records all transactions since the system went online independently. Every node in the system stores an identical and complete blockchain ledger locally. This is the basis for the blockchain system to track transactions and prevent data tampering.

The structure diagram of the blockchain is as follows:

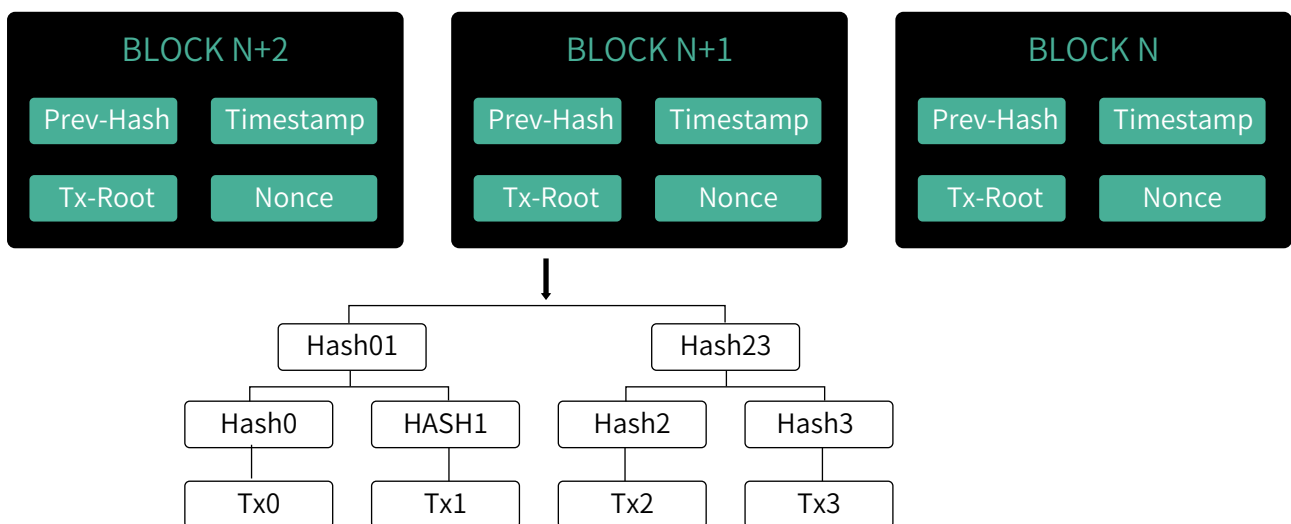


Figure 3-2 Schematic diagram of the block chain structure

Tx0, Tx1, Tx2, and Tx3 at the bottom of the figure are the transaction data packaged when the block is packaged. Blockn, Block n+1, and Block n+2 are all blocks. The data structure of each block is the same, and its key fields have the following meanings:

**Prev\_Hash:** The hash value of the parent block. Blocks and blocks (except for the genesis block Block 0) are connected back and forth through the "hash value of the parent block".

**Timestamp:** Timestamp. The "stamp" used to record the generation time of the block, and to identify the sequence of the block and transaction packaging.

**Tx\_Root:** The hash value of the root of the Merkel tree of the transaction. In any block, all transactions packaged in the block are used to construct a Merkel tree. The hash value of the root of the Merkel tree is Tx\_Root.

The mathematical formula is as follows:

Suppose the hash function is  $H()$  and the input value is Tx, then the hash value is  $H(Tx)$ .

Take Hash0, Hash1, and Hash01 in the figure as examples:

$Hash0 = H(Tx0),$

$Hash1 = H(Tx1),$

$Hash01 = H(Hash0, Hash1),$

$Tx\_Root = H(Hash01, Hash23)$

**Nonce:** The random number that generates the hash value of the block

There are two key concepts here: Merkel tree and hash operation.

**Merkle Tree:** Merkle Tree (MerkleTree) is a very widely used data structure in computer science. The common structure of the Merkel tree is a hash binary tree, which is composed of a set of leaf nodes, a set of intermediate nodes and a root node. It has all the characteristics of a tree structure. The Merkel tree is calculated layer by layer from bottom to top. Each intermediate node in the tree is obtained by hashing based on two adjacent leaf nodes, and finally the root node is obtained by hashing based on two intermediate nodes. In the Merkel tree, if the hash value of any leaf node is modified, the hash value of the root node will also change. In blockchain technology, the Merkel tree is often used to summarize all transactions in a block, generate the hash value of the entire transaction set, and provide an efficient way to verify whether a transaction exists in the block. Generating a complete Merkel tree requires hashing the nodes recursively, and inserting the newly generated node into the tree until the operation reaches the last node, which is the root of the Merkel tree.

**Hash operation (Hash):** The general translation is hash, hash, or transliteration into hash. It transforms an input of any length (also called a pre-mapped pre-image) into a fixed-length output through a hashing algorithm, and the output is a hash value or hash value. This conversion is a compression mapping, that is, the hash value space is usually much smaller than the input space, and different inputs may be

hashed into the same output, so it is impossible to determine the unique input value from the hash value. Simply put, it is a function that compresses a message of any length into a message digest of a fixed length. Hash functions are widely used in the operations of blockchain technology.

**(3) Consensus layer:** This is the core of the blockchain system. The blockchain system is a distributed system. How to ensure the consistency of each node in a distributed system is the key and core of the system. The consensus layer is the consensus mechanism of the system. It encourages blockchain nodes to participate in system transaction verification, blockchain packaging and verification activities. The consensus mechanism is the foundation to ensure the security of the blockchain system. We will introduce the consensus mechanism of REITsChain in detail in the following chapters.

**(4) Smart contract:** This is the driving engine and carrier of all applications and ecology of the REITsChain system. "Smart Contract" (Smart Contract) is a concept first proposed by Nick Szabo in the 1990s. He defined this as "a set of promises defined in digital form and an agreement on which contract participants can execute these promises."

The realization of smart contracts means that the contract must be written as code readable by the computing system. The rights and obligations stipulated in the contract will be executed by the computing system, and the execution process is strict and precise.

When the smart contract is written, it will be submitted to the computing system. The computing system regularly checks the status of the smart contract and calls and executes the smart contract that meets the conditions.

The real change from concept to reality of smart contract is realized on Ethereum.

In the REITs Chain system, to give full play to the anti-interference of the blockchain system, the openness and fairness of transaction execution cannot be separated from smart contracts. In the REITsChain system, the system that runs smart contracts is called the smart contract virtual machine (REITs Virtual Machine), or RVM for short.

RVM is a "stack machine" based on a stack structure. When an operation is performed on a virtual machine based on a stack structure, the operand is "popped" from the stack, arithmetic processing is performed, and then "pushed" back to the stack according to the principle of last in, first out (LIFO).

The typical Push operation is as follows:

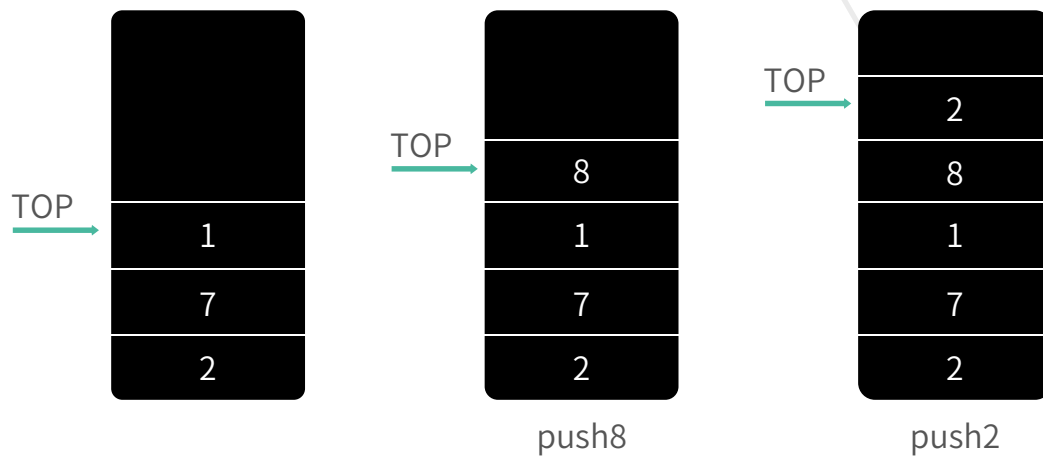


Figure 3-3 Push operation

As shown in the figure above, suppose the original operand in the stack (from the bottom of the stack to the top of the stack) is 2, 7, 1. When Push(8) is executed, the operands in the stack are 2, 7, 1, 8, and the number 8 is added to the top of the stack. When Push(2) is executed, the operands in the stack are 2, 7, 1, 8, 2.

The typical Pop operation is as follows:



Figure 3-4 Pop operation

As shown in the figure above, suppose the original operands in the stack (from the bottom of the stack to the top of the stack) are 2, 7, 1, 8. When Pop() is executed, the operands in the stack are 2, 7, 1, and the number 8 is popped from the top of the stack. After Pop() is executed again, the operands in the stack are 2, 7, and the number 1 is popped from the top of the stack.

(5) Application layer: This is the performance situation of various specific businesses in the REITs Chain ecosystem. It includes blockchain wallets, blockchain browsers, and various decentralized applications DAPP in the future.

If we compare the entire blockchain system to an operating system, then each DAPP in the application layer is each application on the interface of this operating system. In REITs Chain, future projects will develop all kinds of DAPP related to real estate mortgage, lending, leasing, transaction, etc., to enrich and develop the ecology of REITs Chain.

### 3.3 REITs CHAIN consensus mechanism

REITs Chain uses a pow+DPoS hybrid mechanism. The full name of DPoS is Delegated Proof of Stake, which is based on the proof of agency equity, and the full name of Pow is Proof of Work, which is based on the proof of workload.



Bitshare is an earlier digital currency that adopted the DPoS mechanism. It expects to reduce the negative impact of centralization by introducing a technological democratic layer. The DPoS mechanism of BitShares allows everyone who holds BitShares digital currency to vote, resulting in 101 representatives. These 101 representatives can be called super nodes or mining pools. The rights of these 101 super nodes are equal to each other. If these 101 super nodes cannot perform their duties (for example, when it is a super node's turn to generate a block, but fails to generate a block), they will be delisted and the network will select a new super node to replace them. This super node is called a witness in BitShares, and the witness can generate blocks. Everyone who holds BitShares can vote to elect a witness. The first N of the total approved votes are usually defined as 101) Candidates can be elected as witnesses, and the number of elected witnesses (N) must satisfy that at least half of the voters believe that N is fully decentralized. The candidate list of witnesses is updated every maintenance cycle. The system randomly sorts the witnesses, and each witness has a 2-second permission time to generate blocks in sequence. If the witness cannot generate a block in a given time slice, the block generation permission is given to the next time slice. Witnesses. This design of DPoS makes the generation of blocks much faster.

In the REITs CHAIN system, we will select a number of agent nodes as the nodes for system block packaging. As a node participating in block packaging, a certain deposit certificate will be pledged to the system as a guarantee for providing stable, reliable and safe services to the system. When the node cannot pack the block according to the system requirements or even commits evil, the deposit certificate of the node mortgage will be punished by the system, and the node will be revoked the block packaging right.

Nodes with block packaging qualifications will take turns to obtain block packaging rights during each maintenance cycle. Their packaging order is randomly generated by the Fisher-Yates shuffle algorithm, and then 100 nodes will take turns to obtain block packaging rights in this order.

**The pseudo-code implementation of the Fisher-Yates shuffle algorithm randomly generated sequence is as follows:**

```
for i from n - 1 downto 1 do  
  j ← random integer such that 0 ≤ j ≤ i  
  exchange a[j] and a[i]
```

Each node obtains the block packaging right once in a round of sorting and is responsible for packaging a block, and then the block  
The right to pack is the next node's turn.

Assuming that there are a total of  $n$  nodes in the system, when the system wants to generate the  $m$ -th block, the block generation process is as follows:

**The first step:** according to the order determined by the Fisher-Yates shuffle algorithm, the block packaging rights are handed over to node  $j$ .

**Step 2:** Node  $j$  packages block  $m$  and broadcasts block  $m$  to the entire network. The remaining  $n-1$  nodes will receive block  $m$  and verify block  $m$ .

**Step 3:** After block  $m$  is voted and approved by  $(r + 1)$  nodes, it is finalized (that is, irreversible) and added to the blockchain, and the length of the blockchain becomes  $m$ . In this process  $r \geq 50\% * n$ .

After the agent node packs the blocks in each maintenance cycle, the system will randomly sort and generate the node order for the next round of block packaging in the next maintenance cycle. These agent nodes will be the maintainers of the entire REITs CHAIN system, will play a core supporting role for the entire ecosystem, and will also be important participants and benefit-sharers of the entire ecosystem.



### 3.4 Technical characteristics of REITs CHAIN

REITs CHAIN draws on the advantages of Bitcoin, Ethereum, Hyperledger and other systems, and incorporates a number of innovative technologies to form a new blockchain network architecture, which can realize information interconnection and value interoperability with other chains, and it has both decentralization. It can also take into account the requirements of performance and privacy.

REITs CHAIN inherits the excellent design ideas and mature technologies of each blockchain, and has made corresponding innovations and implementation practices in consensus algorithms, data transmission, and block management.

#### **The features of REITs CHAIN are as follows:**

(1) Support smart contract blockchain-located on the blockchain application ecological platform, on this platform, various smart contracts can be issued, and data can be interacted and processed with other external IT systems to realize various industries application.

(2) Transaction speed suitable for most application scenarios - By adopting the consensus algorithm of POW+DPOS, the transaction speed of Blockchain 2.0 has been greatly improved, and the peak speed has exceeded 3000TPS (the number of transactions per second). 5TPS, which is much higher than Bitcoin, has been able to meet the needs of most application scenarios.

(3) Support for information encryption block chain-support complete program operation, can customize the encryption and decryption of sent and received information through smart contracts, so as to achieve the purpose of protecting transaction data and user privacy.

(4) Blockchain with no additional resource consumption-adopting a new consensus algorithm, it is no longer necessary to reach a consensus by consuming additional computing power, which facilitates the participation of nodes and can be deployed in a general commercial environment in a green and safe manner.

(5) Efficient input and output of mining machines-adopting the POW+DPOS hybrid consensus mechanism, the block height is 666666 to start DPOS mining, the whole network is mined every day 4.8 million pieces, one block every 14 seconds, rapid development of RCH COIN An important cornerstone of mining ecology.

# RCH COIN of REITs CHAIN

## 4.1 Introduction to RCH COIN

In order to steadily advance our REITs CHAIN plan, we will issue our deposit certificates in two steps.

**In the first step,** we will issue RCH RRC20 COIN (COIN) based on the RRC20 standard.

**In the second step,** we will issue the original survival certificate RCH NATIVE COIN on the REITs CHAIN we have established, and exchange the RCH RRC20 COIN with the original RCH NATIVE COIN (Coin Swap). The ratio of the two swaps is 1:1 equal swap.

### (1) rch rrc-20 coin

In order to support the design, development, promotion and ecological construction of decentralized REITs CHAIN, we will issue RCH COIN based on RRC20. The subscription of REITs CHAIN COIN will be carried out on a completely voluntary basis, and the corresponding risks will be borne by itself.

The RRC20 token standard based on REITs CHAIN is technically fully mature and widely used. We use the RRC20 token standard to issue the deposit certificate for this project, so that in terms of technical support, it can be applied to most digital currency wallets that support blockchain, which is convenient for transfer and storage; in terms of transactions, it can seamlessly connect to most digital Currency exchange, convenient for trading. This will lay a solid foundation for the large-scale popularization and application of REITs CHAIN in the future.

### (2) RCH NATIVE COIN

As a public chain system, it must have its own native coin. Native coin is the only carrier of value circulation and realization in the ecosystem, and it encourages the community and the benefit-sharers involved in the ecology to participate in the devel-

opment of the community, the construction of the business ecology, and the excavation of business value. Ethereum is typical in this regard. The original proof of survival ETH in the Ethereum system not only serves as an ecological fuel, but also becomes the core collateral for its increasingly rich decentralized financial ecology, deriving financial attributes. This project will draw on the successful experience of Ethereum's ecological construction to play the role of reward in the REITs CHAIN ecological construction and derivative fields, and use the deposit to maximize the value of the REITs CHAIN ecological construction system.

RCH RRC20 COIN will not only be used for the handling fees of all transactions in REITs CHAIN, but will also become the only voucher and value carrier of equity in REITs CHAIN. In the future, when the REITs CHAIN ecosystem develops to a certain scale, in the field of decentralized finance, then RCH RRC20 COIN will become the core asset and collateral of the financial ecosystem in the REITs CHAIN system.

## 4.2 Distribution and use of RCH COIN

### 4.2.1 Coin distribution ratio and lock-up mechanism

The issuance share of RCH COIN is 31 billion, and the specific distribution ratio is as follows:

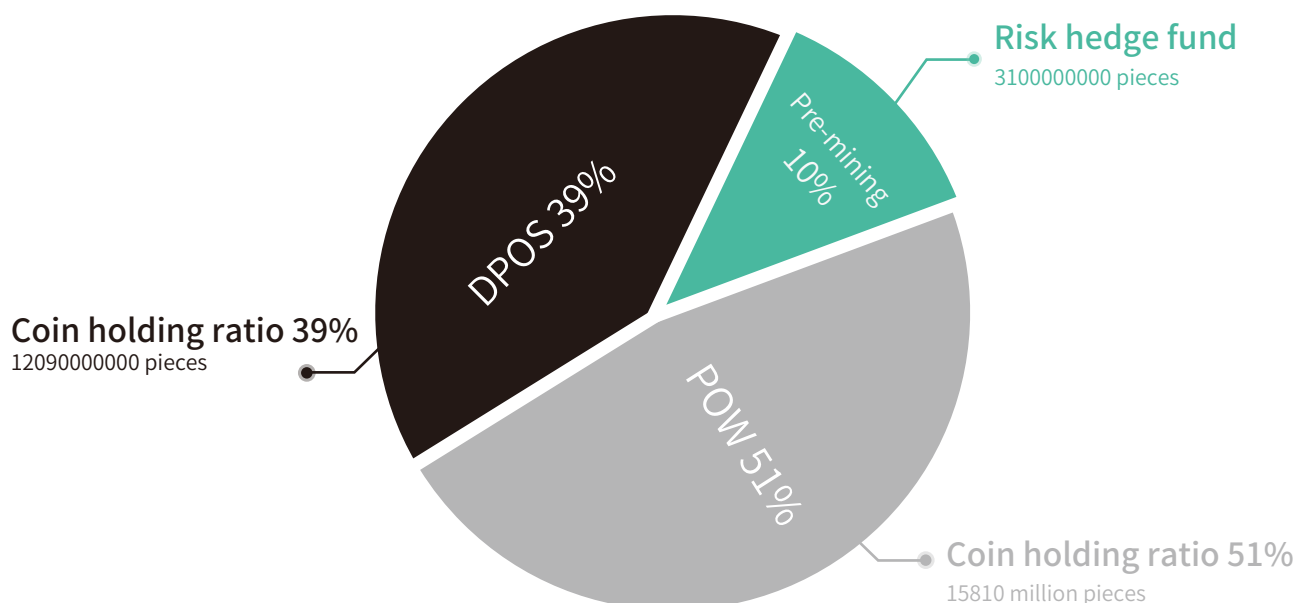


Figure 4-1 RCH COIN allocation

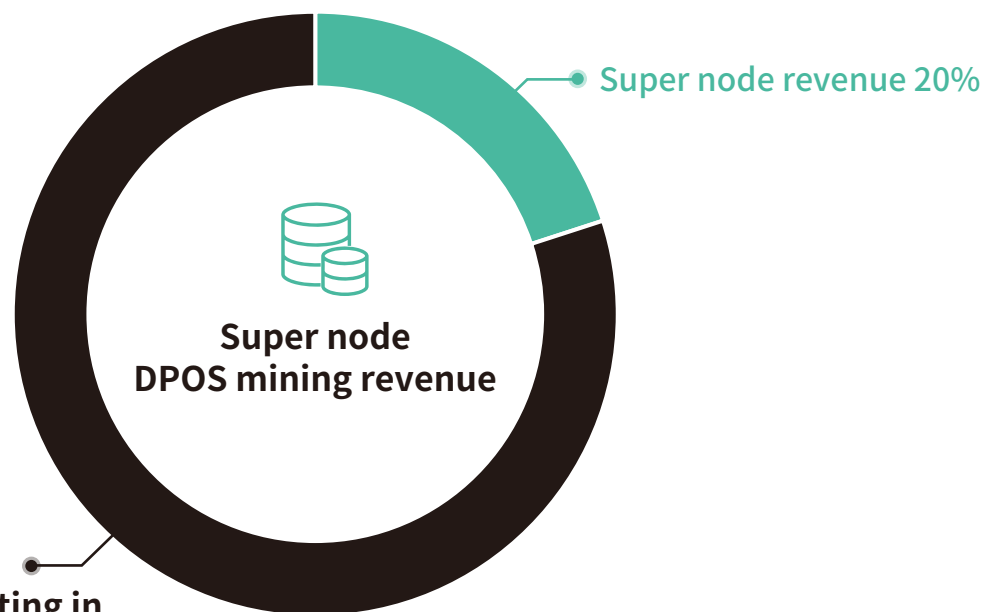
## 4.2.2 Coin exchange price

1 RCH COIN=0.1 USDT

## 4.2.3 Super Node Reward Plan

All users participating in this project can participate in the election of project super nodes. A user who wants to become a super node must meet the conditions: one million RCH pledged on the chain can become a super node.

Super nodes can distribute the income of DPOS mining, of which 20% is the income of super nodes, and the remaining 80% is distributed by the miners participating in the mining.



**When the REITS CHAIN block height is at 666666, DPOS mining is officially started!  
To become a DPOS super node and users must follow the following rules:**

1. To apply for a super node, you need to pledge 1 million RCH, and you can get rewards when you become a super node;
2. Becoming a super node can obtain up to 20% of the 39% mining output. The higher the number of super nodes pledged, the higher the reward;
3. Staking to super nodes can get up to 80% of the 39% mining output. The higher the total amount of pledge, the higher the reward;
4. The Dpos reward for every 10,000 additional addresses in the current pledge will increase by 10%, and the reward will be capped at 100%;
5. There are 20 super nodes open by default, and 10 super nodes will be added for every 10,000 addresses added in the current pledge, and a maximum of 120 super nodes will be capped;
6. Redeemable after pledged to the super node for 30 days, redeemable when the super node is pledged for 30 days and there is no pledge under the super node, and the redemption D+3 will be received;
7. Mining output may fail probabilistically. If you find an abnormality in the mining output of the day, please feedback to the community in time.

## 4.3 What is the POW+DPOS hybrid consensus mechanism

### 4.3.1 What are the advantages of POW+ DPOS?

REITs CHAIN adopts a POW+DPOS hybrid consensus mechanism. The two ledgers run at the same time, with the characteristics of decentralization, high throughput, security, encryption, privacy, etc., and the mining method is more flexible, and the block generation is more stable. It will provide unlimited new opportunities for various asset digital services. Become a super low-level service public chain supporting a large number of commercial-level applications.

### 4.3.2 Why is DPOS open on the basis of POW? What are the advantages of combining the two?

The consensus mechanism of POW is prone to forks due to different community consensus, resulting in different blockchains and communities, and the main forces that dominate the forks are miners and developers, which will cause great anxiety to investors. The introduction of the DPOS consensus mechanism will well avoid the division of the community caused by the fork.

The DPOS consensus mechanism is highly efficient. It is responsible for selecting legal transactions from the transaction storage pool, packaging them into blocks, and then broadcasting them to the network through the p2p protocol, while the implicit POW requires miners to complete a certain amount of work to prevent the main chain Fork and establish an elimination mechanism at the same time. If a node makes false accounts or biased records within 14 seconds, it will be eliminated. As a result, speed, security, and the nature of decentralization have been balanced. This will make the community and ecological development more stable, orderly and effective.

# The economic model of REITs CHAIN's coin in the real estate field

## 5.1 Introduction to the Deposit Economy

The COIN issued in the blockchain system has a more professional term called "token". There are three characteristics of blockchain-based deposit certificates:

The first is the digital equity certificate, which represents the rights and inherent intrinsic value of the deposit certificate holder.

The second is encryption. Since the issuance of blockchain tokens is based on cryptography, it has the characteristics of authenticity, tamper-proof modification, and privacy protection. Every deposit is a right and value protected by cryptography. This protection is stronger and more reliable than any protection provided by laws, authorities and guns.

The third is tradable. The blockchain-based token is the transaction carrier of the blockchain. It is inherently liquid, can flow in the blockchain system, and can be verified anytime and anywhere. Due to these characteristics of deposit certificates, its circulation and transactions can generate value, realize the transfer of value, and develop a specific economic model. All economic phenomena and activities that are generated by deposit certificates, based on deposit certificates and derived from tokens are collectively referred to as "token economy".

The token economy will bring a new round of digital economic revolution, which is mainly manifested in the following four aspects:

**First:** The supply of tokens on the supply side is fully market-oriented. Any person, organization, or institution can issue proof of rights and interests based on their own resources and service capabilities, and these proofs of rights and interests can be verified, traceable, and traceable at any time on the blockchain. It can be exchanged, and its security, credibility, and reliability are unattainable in any way before. Therefore, every organization and individual can "certify" promises, which is a capability that human society has never had before.

Second: In terms of circulation speed, blockchain-based deposit certificates can be transferred hundreds of times and thousands of times faster than previous cards, coupons, points, and tickets, and due to the protection of cryptography, this kind of circulation and transactions are extremely reliable, Disputes and frictions are greatly reduced.

Third: In terms of price discovery, due to the high-speed circulation and transaction of tokens, every token will be quickly priced in the market. This is the invisible hand of the token economy. It will bring market effectiveness to every microscopic system of the system. In the field.

Fourth: Once the application of token is based on smart contracts, it will stimulate innovations in various forms. It will create new opportunities and set off new waves, far exceeding the economic system of the Internet era.

Therefore, the design of the token economic model is very important to a blockchain system.

## 5.2 The economic model of REITS CHAIN token in the real estate field

Based on the token derived from the REITS CHAIN underlying protocol standard, the economic model in the real estate field is mainly divided into five items.

### 5.2.1 On-chain tokenization of off-chain physical real estate

The business model of REITS CHAIN is extremely disruptive, and the ecosystem is rich in diversity. In this ecology, real estate owners can link their offline physical real estate to the token in REITS CHAIN, and price the real estate in tokens, which is the tokenization of physical real estate. The real estate is mapped to the blockchain by tokenization. The purchase of tokens in REITS CHAIN is equivalent to buying the real estate represented by the token.

Through the tokenization of real estate on the chain, the miniaturization and segmentation of real estate can be realized. Every time a user purchases a token on the chain, it is equivalent to holding a partial share of a certain property represented by the token. This enables high-threshold real estate (especially luxury residential) prices in the traditional real estate transaction market to be averaged to each token through segmentation and miniaturization, allowing more users to buy and hold a



portion of the real estate at an affordable price. Instead of buying the entire property at once. This way of off-chain mapping to on-chain makes real estate transactions more convenient and transfers more efficient.

In addition, since the block chain realizes the asset right at the same time as the value exchange is realized, the user holding the token representing the real estate share is equivalent to holding the ownership of the real estate share corresponding to the token. This allows users to not only carry out purchase and sale transactions but also realize the transfer of real estate ownership while conducting real estate transactions, eliminating the need for a series of complicated procedures such as payment, transaction transfer, and changing real estate certificates in traditional real estate transactions, which greatly improves real estate transactions. The efficiency has shortened the time of real estate transactions. When a user purchases a complete share of a real estate, he can use all relevant transaction data as credentials to achieve the delivery of the physical real estate off-chain.

### 5.2.2 Real estate leasing business realizes on-chain automation

Users can not only conduct real estate transactions in REITs CHAIN, but also conduct real estate lease transactions. The blockchain confirms the right to transactions, traceability and guarantees that data cannot be tampered with, so that all off-chain contracts and processes can be realized on the chain through digitization. Both parties can automatically realize the execution of transactions through the formulation and execution of smart contracts. The penalty clause is defined in the contract. On the one hand, this guarantees the effectiveness of the transaction, on the other hand, it automatically implements the punishment of the breaching party. In this process, both the tenant and the landlord use the token in REITs CHAIN as the pricing method and transaction medium. In this respect, paper contracts in traditional leasing transactions are eliminated, and a series of processes such as certificates are seen to make leasing faster and more convenient. At the same time, smart contracts act as intermediaries to automatically eliminate the need for intermediary intervention in traditional transactions when disputes arise between the two parties. The additional costs incurred have greatly reduced transaction costs.

### 5.2.3 Tokenization of real estate mortgage

After realizing the tokenization of real estate, REITs CHAIN will gradually expand the digitalization of assets to other asset classes according to a mature model, and expand the ecology to other business fields, and finally strive to make REITs CHAIN a super low-level service company that supports a large number of commercial-level applications. chain.

### 5.2.4 Issuance of STO token

REITs CHAIN will also gradually derive real estate as the core to map other off-chain assets to the on-chain ecology, and expand its business to the issuance of STO tokens.

The so-called STO is Security Token Offering, the issuance of security tokens. Different from ICO, STO is a token issuance realized under strict supervision, through the endorsement of a certain financial asset or equity in reality, such as stock bonds, gold and silver, real estate, equity, etc., as collateral to issue deposit certificates. Investing in STO token means owning the assets represented behind it. STO token has inherent value at the beginning of its issuance, and it also strives to comply with the regulatory framework and is recognized by the U.S. Securities and Exchange Commission (SEC).

After real estate tokenization, REITs CHAIN will gradually expand the certified varieties to other asset classes according to a mature model, expand the team's business to other business areas, and finally strive to build REITs CHAIN's real estate ecology into a comprehensive A sexual asset trading platform.

### 5.2.5 Tokenization of real estate income

The income of REITs CHAIN real estate ecology comes from the various application scenarios described above, including the income of real estate physical asset tokenization business, the handling fee charged to buyers and sellers in the real estate transaction process, the income generated by real estate leasing business, and the generation of real estate mortgage business. The income from the real estate agency and management business, the income from the issuance of STO token, etc.

All of these benefits will be converted into tokens in REITs CHAIN, and then this part of the revenue denominated in tokens will be distributed according to the share of each token holder, so that token holders can fully enjoy the entire REITs CHAIN ecosystem. Benefit.

This approach not only accelerates the circulation of tokens in REITs CHAIN, but also gives tokens a rich value system, which makes token holders feel reluctant to sell tokens and accelerates the appreciation of tokens.

# RISK WARNING

## 6.1 Regulatory risk

The regulatory policies of various governments on blockchain projects and financial financing methods based on them are not clear enough. There are certain government control factors. Cases of participant losses caused by government control are not uncommon. If the overall value of the digital asset market is overestimated, then the investment risk will increase, and the expectations of the participants may gradually increase with the progress of the project. These expectations may not be realized. I hope that the relevant participants will be aware of the risks.

Digital asset transactions including RCH COIN have extremely high uncertainties. Due to the current lack of effective supervision in the field of digital asset transactions, it is a real possibility that RCH COIN digital assets will rise and fall due to the manipulation of dealers. Individual participants If you lack experience after entering the market, you may not be able to resist the asset shock and psychological pressure caused by market instability. With the development of the blockchain field, relevant government policies and regulations will be improved accordingly. However, in this development process, the risks of supervision are obvious. If the supervision body such as the government conducts rectification and rectification of the field, early purchase The RCH COIN may be affected, including but not limited to fluctuations and restrictions in price and ease of sale.

## 6.2 Operational risk

Currently, there are not many decentralized public chains based on REITs CHAIN, and the market has a lot of room for growth. Whether this public chain can be recognized by the public and favored by customers is not only linked to the vision, planning, operation, and execution of the project, but also affected by many factors in the market, and there are certain risks. In the future development, the public chain will do its best to avoid such operational risks, but it does not rule out the possibility that the project will be negatively affected.

The public chain project will spare no effort to achieve the development goals set

out in the white paper and extend the project's potential for growth. At present, this public chain has relatively mature commercial accumulation. However, in view of the unforeseen factors in the overall development trend of the industry, the existing business model and overall planning may not be in good agreement with market demand, which makes it difficult to achieve profitability as expected. At the same time, since this white paper may be adjusted as the details of the project are updated, if the updated details of the public chain are not obtained in time by participants, it may cause the public to not understand the latest progress of the project, resulting in insufficient awareness of the project due to information asymmetry, thus affecting the follow-up development of the public chain.

## 6.3 Technical risks

First of all, the public chain is based on RRC20, and the business model is based on the sharing economy. The rapid development of RRC20 also brings potential systemic risks. The public chain will promptly upgrade and maintain the system based on the latest developments in RRC20, but there is no guarantee that the system will not be affected by RRC20 itself before the upgrade and maintenance; secondly, blockchain distributed ledger, decentralization, anti-tampering and other technologies support the development of core business, the public chain will do its best to avoid the occurrence of technical risks, but it still cannot fully guarantee the implementation of the technology; again, in the process of public chain update and adjustment, loopholes may be found, which can be compensated by issuing patches, but the extent of the impact caused by the loopholes cannot be guaranteed.

In terms of security, although the amount of a single supporter is small, the total number of people is large, which also puts forward higher requirements for the security of the public chain. RCH COIN has the characteristics of anonymity, and is easy to be used by criminals, or attacked by hackers, or may involve criminal acts such as illegal asset transfer. The current safer method is manual transfer in the background. This public chain will allow it at operating costs. Under the circumstances, consider the safest model, while retaining the internal traceability mechanism. Other risks currently unknown: With the continuous development of blockchain technology and the overall situation of the industry, REITS CHAIN may face some unexpected risks. Participants are requested to fully understand the background of the public chain, understand the overall framework and ideas of the project, adjust their expectations reasonably, and participate in RCH COIN transactions rationally before making participation decisions.

# DISCLAIMER

This public chain aims to conduct large-scale commercial experiments in the blockchain community. Intended participants must clearly understand the risks of the public chain and comply with local laws.

This document only introduces the public chain and does not constitute any participation opinions and suggestions. At the same time, this document does not constitute any form of contract or commitment.

This document does not constitute any investment advice, investment intention or instigation of investment in the form of securities; nor does it constitute any act of offering or inviting to buy or sell securities in any form.

The public chain clearly states that it will not bear any direct or indirect losses caused by participating in this project, including but not limited to: any misunderstanding or inaccurate information due to personal understanding; losses caused by personal transactions of various blockchain assets and Any resulting behavior.

Participants of the public chain shall not participate in this public chain in violation of local laws and regulations, otherwise the public chain will reserve the right to hold accountable participants who violate the regulations.

Participants of the public chain must listen to all necessary professional advice, including taxation and accounting processing related matters. We are very confident that this public chain can be very successful. But we cannot guarantee success, and both digital assets and platforms involve risks. You must assess the risks and your tolerance.

GLOBAL ASSET DIGITAL ECOLOGICAL PUBLIC CHAIN

WHITE PAPER

REITS  
CHAIN



REITS CHAIN WHITE PAPER

RCH WHITE PAPER VERSION 1.1