



CHINTAI

NEXUS

WHERE DIGITAL ASSETS CONVERGE

TOKENIZATION | DIGITAL ASSET MARKETPLACE | CARBON NEUTRAL

WHITE PAPER

July 2024





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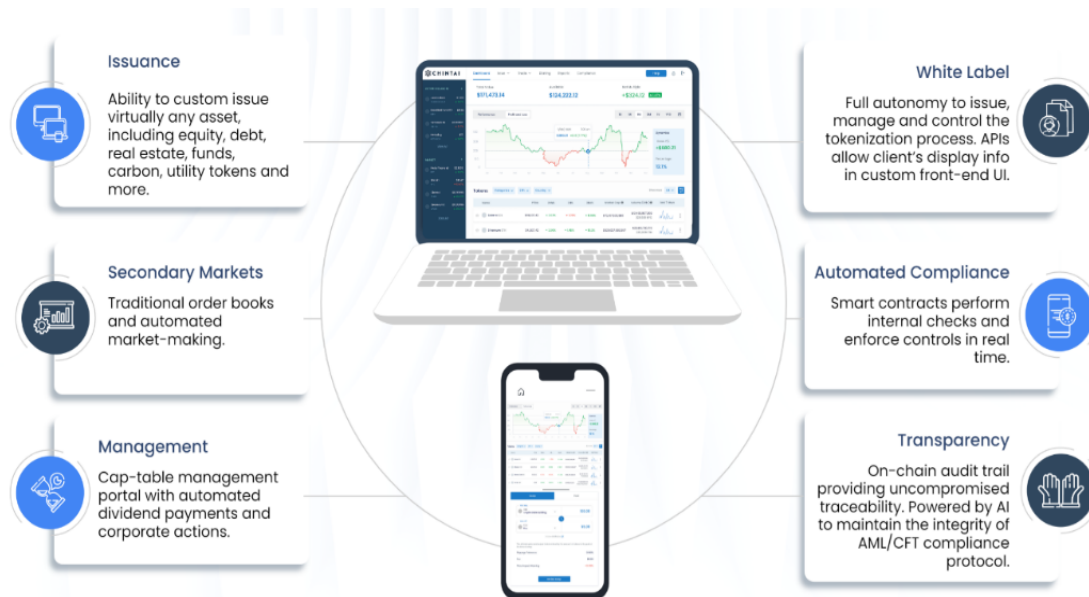
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Islands



The Chintai Ecosystem

Chintai has deployed a high performance, permissioned blockchain network that provides institutional grade digital asset solutions. Chintai offers comprehensive digital asset services for primary issuance, secondary markets, and asset management.

Chintai launched the first ever fully on-chain, decentralized order book exchange in September 2018. The platform has since been developed to provide a comprehensive digital asset solution for enterprise, entailing dynamic forms of issuance, and secondary market deployments, all whilst ensuring regulatory compliance.



*The various components of the Chintai Ecosystem
DIAGRAM ABOVE IS FOR ILLUSTRATION PURPOSES ONLY*

In 2019, Chintai introduced the CHEX token through a required KYC/AML distribution process. This was done to establish CHEX as a long-term pivotal token within the DeFi ecosystem, forming a cornerstone for the future Chintai Network's digital assets.

Chintai has had to pivot several times since 2019, before receiving investment funding of \$7.5 million in 2021. In order to keep the CHEX token relevant throughout these adjustments, we have adapted the tokenomics to fit with the updated real world asset tokenisation business model.

This paper provides further details on the upcoming utility activation of the CHEX token.



Digitizing Real World Assets

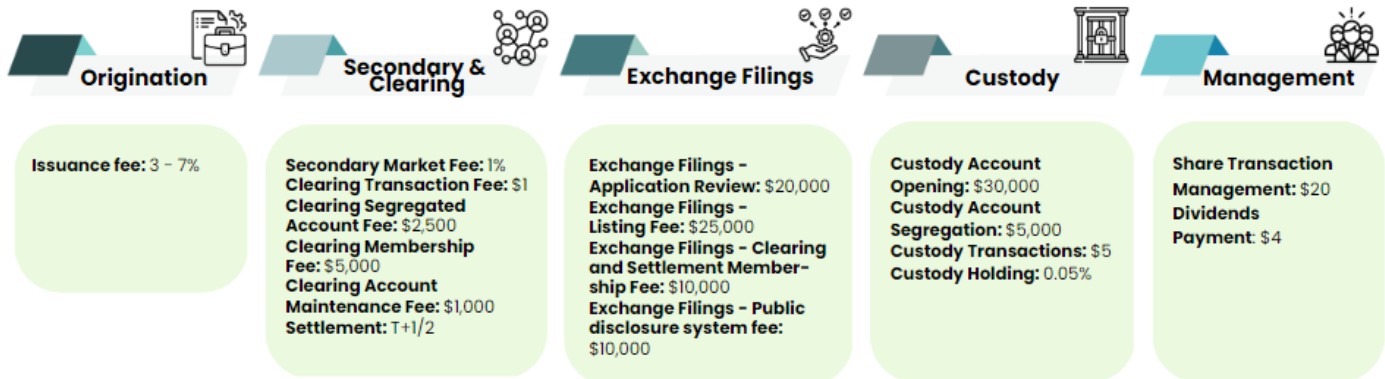


Traditional financial markets are rife with inefficiencies and issues that pose substantial challenges. Capital markets, in particular, are plagued with convoluted processes, from origination to settlement and maintenance. The reliance on a disjointed infrastructure, unnecessary middlemen, and redundant manual processes only exacerbates these inefficiencies.



Financial institutions stand to save an estimated 30–70%, as they continue to operate using outdated back office processes and infrastructure. Furthermore, intermediaries levy high charges for the issuance, trading, and management of assets, including clearing and settlement and corporate actions. This proves prohibitively expensive for small and medium-sized Enterprises (SMEs), hindering their ability to compete and thrive in the financial market landscape.

TRADITIONAL FINANCE SYSTEM



CHINTAI SYSTEM



*An example of the types of fees you have to pay to issue an asset in the traditional finance system in comparison to an example of how the fees might look in Chintai.
 DIAGRAM IS FOR ILLUSTRATION PURPOSES ONLY*

In response to the challenges presented by the traditional financial markets, Chintai emerges as a game-changer. As an all-inclusive, blockchain network, Chintai allows for the creation, issuance, trading, and management of virtually any financial asset.

This approach serves as a cohesive solution to the disjointed and inefficient systems of old. By automating administrative tasks throughout the trading lifecycle, Chintai effectively eliminates the need for unnecessary intermediaries and outdated manual procedures.



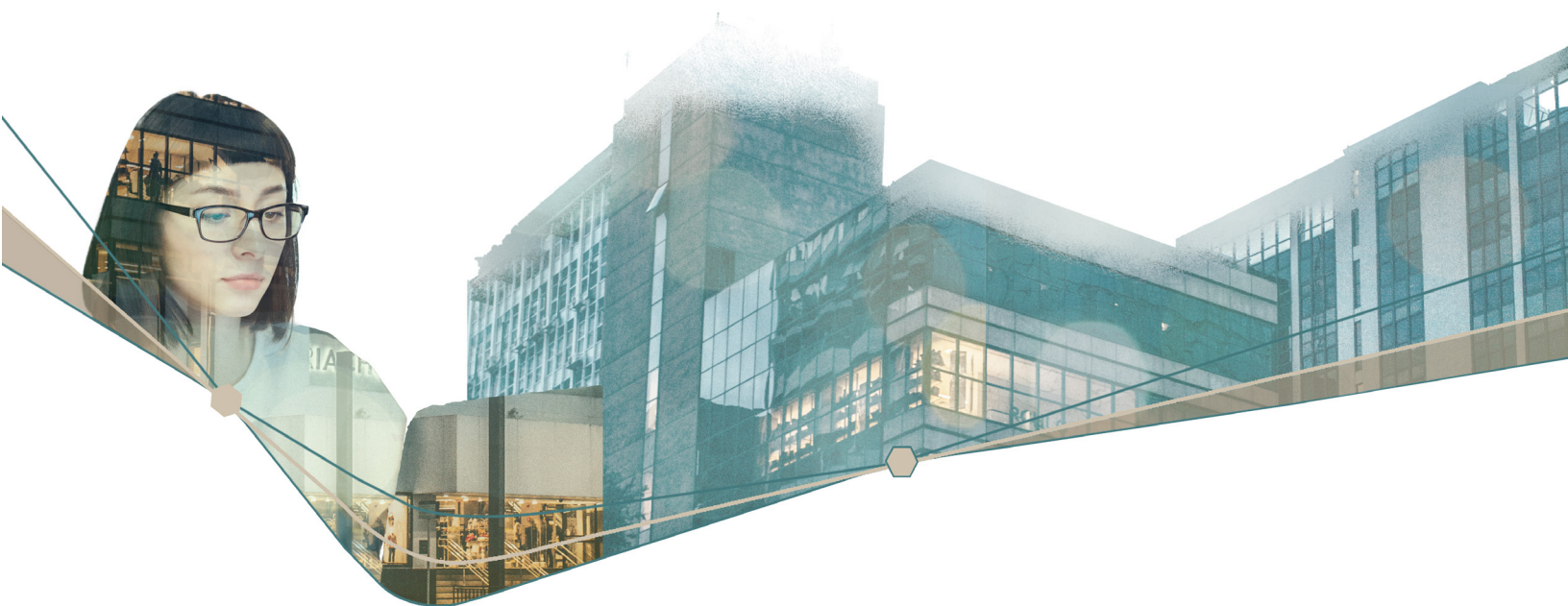
The result is a significant reduction in costs, with a staggering 30–70% savings when compared to traditional financial systems.



But the benefits of Chintai aren't just for large corporations.



Smaller companies and midsize enterprises can leverage our user-friendly technology to raise capital efficiently, thereby democratizing the opportunities within the financial markets.



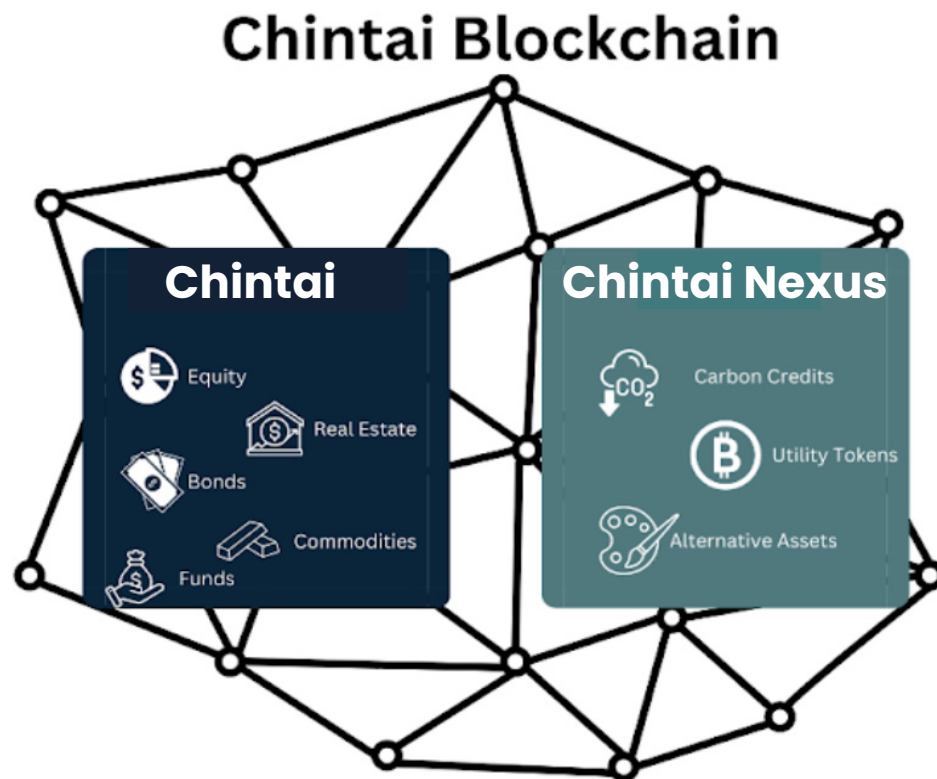
Two Platforms For All Uses



Chintai operates through two distinct platforms, Chintai based in Singapore and Chintai Nexus, each catering to different types of digital assets. Chintai, licensed to act as a Capital Markets Services (CMS) provider and Recognized Market Operator (RMO) by the MAS, allows for primary issuance and secondary market trading in digital securities. These securities can range from equities, real estate, and bonds to collective investment schemes, funds, commodities, and more. Chintai mainly serves mid-size asset managers to large institutions, and investors are primarily accredited or institutional investors.

On the other hand, Chintai Nexus is a standalone business unit of the group, fully ring-fenced from Chintai and based in the British Virgin Islands (BVI). Chintai Nexus caters to the primary issuance of non-security tokens such as utility tokens, carbon credits, and certain alternative asset classes. Chintai Nexus is expected to attract more Small and Medium-sized Enterprises (SMEs) and retail users.

While the two platforms serve different audiences and specialize in different types of assets, they both run on a shared blockchain, utilizing the same resources, though they function as separate legal and operational entities without direct access to each other.



The business model for both platforms is identical, involving fees for primary issuance and secondary trading on the platform, as well as recurring costs for software and server maintenance.

Despite the differences in the regulatory environment between Singapore and BVI, Chintai ensures the same level of stringent compliance and regulations on both platforms.



The Business Model



The fees for issuance are calculated proportionally to the size of the issuance, and are paid by the issuer. These fees can vary based on several factors, including the size of the issuance, the asset class, the added value of having the token on our platform, potential associated risks, and more.

For trades, we typically charge the end user proportional to the volume of the transaction value. We also apply a fixed monthly maintenance fee for issuers. This fee covers vital services such as client onboarding, continuous due diligence, transaction monitoring, market manipulation surveillance, resource management, and more.

To provide a clearer picture, let's look at an example involving an issuance valued at \$100 million.

Example



With an issuance fee of 2.5%, the issuance cost would be \$2.5 million.



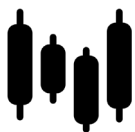
Assuming an **initial daily trading volume of \$200,000**, trading fees would equate to **around \$2,000 daily**. Given that trading occurs every day without closing hours, the trading fees would amount to approximately **\$730,000 over the course of a year**.



The annual fixed cost for issuer usage of our systems would amount to \$60,000.



Therefore, **in the first year** alone, the **total fees would be close to \$3.3 million**, with **\$2.56 million paid by the issuer** and **\$730,000 paid by investors in trading fees**.



Over a five-year period, if we consider the daily trading volume progressively rising to \$1,000,000, the daily trading fee would reach about \$10,000, leading to annual trading fees of \$3.7 million in the fifth year.



The **five-year total** would then amount to **approximately \$14 million**.

Year	Issuance Size	Issuance Fees	Trading Volume (24h)	Trading Fees	Fixed Fees	Yearly Fees	Cumulative Fees
1	\$100,000,000	\$2,500,000	\$200,000	\$730,000	\$60,000	\$3,290,000	\$3,290,000
2	\$0	\$0	\$400,000	\$1,460,000	\$60,000	\$1,520,000	\$4,810,000
3	\$0	\$0	\$600,000	\$2,190,000	\$60,000	\$2,250,000	\$7,060,000
4	\$0	\$0	\$800,000	\$2,920,000	\$60,000	\$2,980,000	\$10,040,000
5	\$0	\$0	\$1,000,000	\$3,650,000	\$60,000	\$3,710,000	\$13,750,000



For comparison, an equivalent issuance **in traditional financial markets** would cost **at least \$7 million** for the issuer, **compared to \$2.8 million with Chintai**.



Additionally, a **fraction of the trading fees collected** on our platform would go to the issuer as an **additional source of revenue**.



FEATURES ON THE PLATFORM

Issuance and Trading



Chintai's platform is adept at issuing a broad range of digital assets, be it real estate, equities, bonds, or more, enabling users to tokenize virtually any type of asset.



Chintai supports a highly efficient order book exchange, facilitating the smooth trading of assets. Buyers and sellers can place orders, which are then matched immediately.



On the Chintai Nexus platform only, we feature an Automated Market Maker to ensure continuous trading even in markets with less liquidity.



The Chintai platform can also interface with public blockchains and DeFi systems.



Chintai also features a simple on/off ramp for USD, allowing users to effortlessly convert between fiat currency and digital assets.



FEATURES ON THE PLATFORM

Regulation and Compliance



Chintai takes care of all aspects of token sales, performing the necessary due diligence to ensure the credibility of the tokens and compliance with regulations.



Our on-chain compliance engine enforces token-level access restrictions via smart contracts, ensuring that only eligible parties can trade specific tokens.



We employ systems to diligently monitor transactions for any signs of money laundering, maintaining a secure and trustworthy platform.



Our platform features market surveillance systems designed to prevent market manipulation behaviors, upholding the integrity of our trading environment.

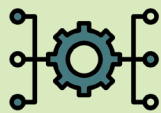


Chintai's fully automated Know Your Customer (KYC) procedures ensure that customer verification is not only seamless and secure but also compliant with legal regulations.



FEATURES ON THE PLATFORM

Management and Administrative



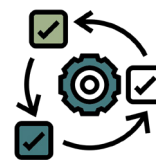
Chintai allows for the white labeling of its platform. Businesses can replicate our systems on their websites using our comprehensive API documentation, with technical support available if needed.



Our sophisticated token management system simplifies the tracking and management of issued tokens.



Chintai has a built-in dividend payment system that streamlines the process of paying out dividends to token holders.

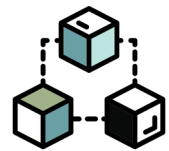


We offer flexible systems to manage debt maturity and token buybacks, accommodating various debt structures.



Infrastructure

Blockchain Scalability



The Chintai ecosystem operates on the cutting-edge Antelope blockchain protocol. As a private blockchain, Chintai stands as the sole block producer, delivering the efficiencies of blockchain technology without the associated complexities. With Antelope, transactions achieve finality in an unmatched 0.5 seconds, ensuring prompt and efficient execution.

Transactions on the network are sufficiently fast for our needs, with up to 8000 transactions per second under test conditions. However as with all blockchain systems, transactions have to be processed in sequence and the system is therefore limited ultimately to the speed of a single CPU core.

This highlights the importance of our proactive measures to prevent denial of service (DOS) attacks, ensuring that our network remains secure and resilient against any attempts to maliciously spam transactions and cause congestion.



Wallet System

Our innovative online wallet system sets us apart. Upon logging into the application, users access their wallet where their private keys, derived from their login password and a unique salt, securely store their assets. Users maintain absolute custody of their assets within this system, the security of which has been verified through comprehensive audits.

In the event of lost private keys, Chintai offers a failsafe system for resetting them. This involves multifactor authentication and, when needed, a short KYC process with our support staff to confirm the identity of the account owner beyond any doubt.



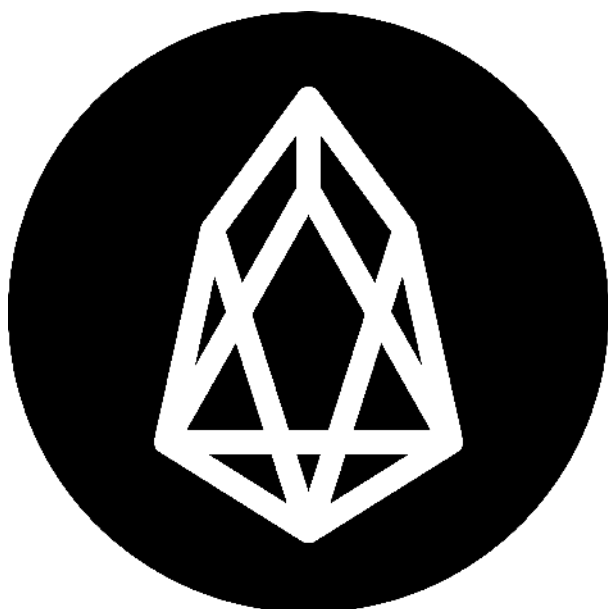
Our Chintai Nexus platform extends Chintai's reach by establishing a bridge connection to other blockchains supported by Fireblocks. Assets held in Fireblocks's custody on respective blockchains can be minted as wrapped 1:1 tokens on our Chintai Nexus platform, and tokens issued on Chintai Nexus can also be ported to another blockchain, showcasing our commitment to blockchain interoperability. Additionally, Fireblocks has insurance of \$100 million per wallet, to give peace of mind to users who trust Chintai with their assets.



Nexus and the Chintai Bridge

Operating within the same blockchain, the Chintai Nexus and Chintai platforms function independently, maintaining a secure, isolated environment. At the heart of our ecosystem is the CHEX token, the resource token for our blockchain, which is accessible on the Nexus platform. The CHEX token underscores the operational effectiveness of the entire Chintai ecosystem.

The EOS Mainnet Testing Grounds



As part of our commitment to constant innovation and improvement, we plan to utilize the EOS mainnet, which shares the same protocol as ours, as a testing ground for future features.

These include the enhancement of our order book exchange to provide an even higher quality and performance experience and the implementation of a unique Automated Market Maker (AMM).

Our objective is to ensure that these upgrades meet our highest standards before being fully incorporated into the Chintai ecosystem. Recognizing the invaluable role of our CHEX token holders, we intend to provide them with incentives wherever possible, encouraging their active participation in these testing phases.

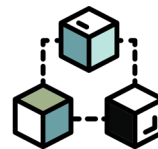
We will do this in partnership with EOS42, a founding block producer on the EOS Mainnet.

By doing so, we strive to create a collaborative environment, one that values and integrates user feedback into our continued development.



The Chintai Exchange (CHEX) Token

Supply and Distribution



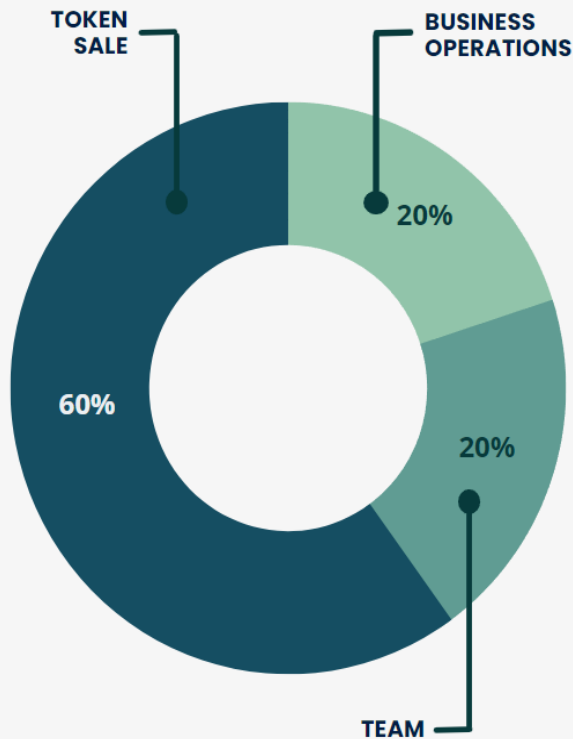
Chintai successfully completed its initial token distribution event from April to December 2019 in the form of a Dutch Auction.

During this process, 60% of the total supply of 1 billion CHEX tokens were distributed to participants. The sale was efficiently executed on the EOS Mainnet, reflecting Chintai's commitment to leveraging cutting-edge blockchain technology.

Following the initial sale, the CHEX token has expanded its accessibility and is now available on multiple blockchain platforms including EOS, Ethereum, and Binance Smart Chain (BSC).

This extension across diverse platforms has broadened its reach and increased its availability to a wider audience.

Initial Distribution

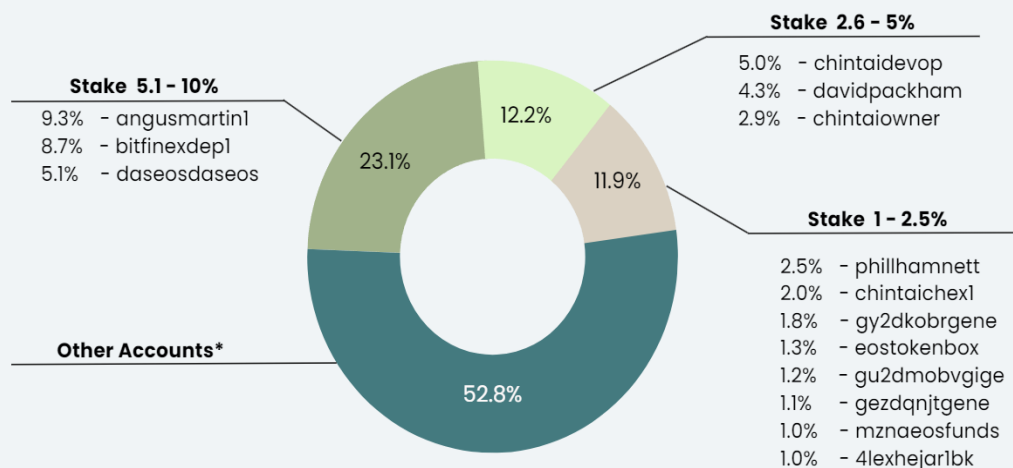


Within the total token supply, a strategic allocation was made to support the ongoing development and expansion of the Chintai ecosystem.

Specifically, 20% of the tokens were assigned to the dedicated team behind Chintai, acknowledging their significant contribution to the project.

An additional 20% of tokens were reserved to facilitate future partnerships, provide liquidity, and cover other strategic requirements that may arise in the future, from this approximately 124m CHEX is still in reserve.

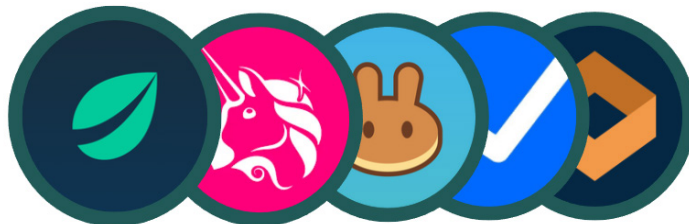
In terms of the current distribution, the founding team retains ownership of approximately 92 million CHEX, reflecting their ongoing commitment to the project. Additionally, Chintai itself holds approximately 100 million CHEX, ensuring a strong internal stake in the token's success.



* other accounts consist of CHEX token holders holding less than 1%

To further enhance the token's liquidity and accessibility, CHEX is listed on several prominent exchanges and DeFi platforms.

These include Aerodrome, Bitfinex, Bitmart, DefiBox, GATE, Newdex, MEXC, Pancakeswap, and Raydium, Uniswap, with more to come... providing token holders with multiple avenues for trading and transacting CHEX. We are actively pursuing listing opportunities on further exchanges.





Network and Storage Use



Usage of our blockchain network is limited by the inherent constraints of any blockchain, specifically that a single CPU core is used to ensure serialization and replayability of transactions. However in addition to this, there are more resource costs that have to be considered for the Chintai systems. For example, every transaction is checked against our compliance engine smart contracts, transaction monitoring and market surveillance systems, and is stored in a database for auditing and reporting purposes. The costs associated with these checks, balances, and storage add up and would eventually become prohibitively expensive for Chintai without some kind of rate limiting system.

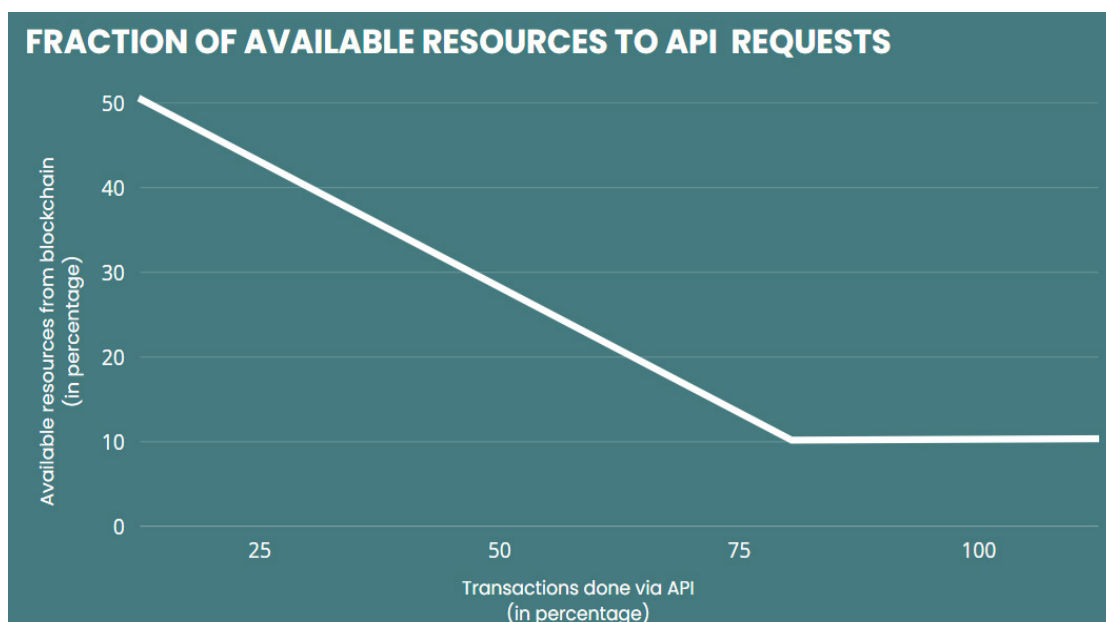
Rate limiting the network is not as trivial as it is for most non-blockchain applications. For example, charging a fixed amount for access to a certain rate limit can not work, as we can not scale beyond a single CPU core.

If enough users were willing to pay for access through rate limiting, then our network would run out of resources for everyone else.

Therefore a gas fee is charged dynamically, depending on current network usage and the value of the transaction being executed. The higher the current network usage, the higher the gas fee will be, following an exponential curve as the network gets dangerously low on resources.

Additionally, the higher the value of a transaction, the higher the gas fee will be, as more importance is placed on higher value transactions.

Chintai's blockchain network is designed to ensure a seamless user experience, with the elimination of visible gas fees and resolution of resourcing issues for the end user. We ensure the allocation of resources for both users who directly interact with the platform and those who indirectly access it through white labeling or API requests.



Central to Chintai's resource management strategy is the CHEX token. All gas fees are taken in the currency of the transaction fee that is applied, but are then converted into CHEX tokens to pay for the resource costs. The end user is unaware that this mechanism is in place, as the gas fees are incorporated into the total fee that the user is paying for a transaction.

For example, if a user makes a trade and the fee is taken in USD, then the gas fee is also taken in USD and then converted to CHEX. Owners staking their CHEX tokens on our network benefit by being entitled to a portion of the platform's gas fees.

This innovative approach helps establish a self-regulating rate limit for API users and white labelers while offsetting potential hidden costs from trading or issuance fees.

Issuers on our network have to actively manage and maintain their tokens. Chintai extends unique offerings to issuers by managing CHEX tokens on their behalf.

This guarantees that token sales, compliance checks, transaction monitoring, market surveillance, and token management systems such as dividend payments for the real world assets issued are fully resourced.

We guarantee issuers a continuous resource availability by maintaining a buffer and levying monthly charges via invoice.

This streamlines operations for issuers and ensures a smooth-running ecosystem.

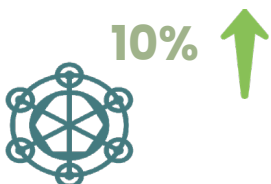


Liquidity Provisioning



Whilst it is important to manage our resources efficiently, the CHEX token can be used to incentivize behavior that should be encouraged in our ecosystem.

The biggest hurdle to a tokenization and exchange platform is always liquidity. To that end, we want to encourage liquidity on our platform by having users stake their CHEX along with USD into our AMM system for added rewards.



Only 10% of the gas fees will go to users who simply stake their CHEX, whereas the remaining 90% of the gas fees will



be rewarded to those who add their CHEX with a corresponding amount of USD into our AMM system.

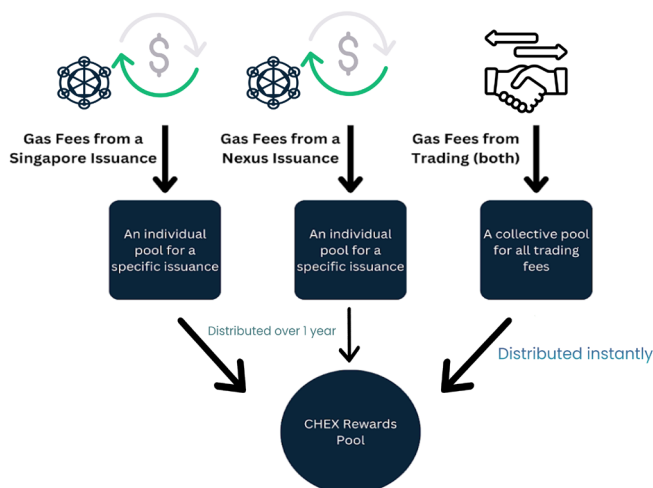
This will encourage significant increases in liquidity in the AMM system and bootstrap the markets available for trading, whilst also encouraging future issuers to launch on our platform when they see its vibrant and healthy markets.



Staking Rewards



Staking rewards in the Chintai ecosystem play a critical role in driving active user participation and platform engagement. The distribution of these rewards is proportional to the fraction of total staked CHEX tokens an individual holds, thereby encouraging more users to stake their tokens.



These rewards originate from collected fees divided into distinct pools.

The issuance gas fee pool, in particular, is methodically distributed over a year for each issuance, maintaining an hourly and linear payment system. This strategic timeline ensures a smooth and steady allocation of rewards throughout the specified period.

On the other hand, trading gas fees are made available immediately to those who have staked their CHEX.

EXAMPLE

The following example is for illustrative purposes only, staking rewards, gas fees, and every other element of the example is subject to change at the discretion of Chintai.

Taking a detailed example of staking rewards can help elucidate the benefits that active stakers, such as Alice and Bob, could potentially reap on the Chintai platform.

Consider again a \$100m real estate issuance, which generates a daily trading volume of \$200k.



Chintai charges an issuance fee of \$2.5M. From this, we consider 10% (\$250k) as the gas fee value of the network associated with the real estate token issuance. This \$250k forms an issuance pool that will be distributed to CHEX holders over the course of the following year, rewarding them for providing resources related to the issued real estate token.



Alice, an active user of the platform, has staked 50k CHEX tokens. With a total of 1M CHEX staked in the system Alice owns a **significant 5% stake (50k/1M)** in the resource allocation ecosystem and is thus **entitled to 5% of the rewards for pure staking.**



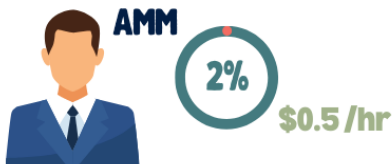
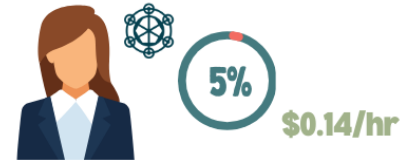
Bob has staked 100k CHEX tokens to provide his CHEX as liquidity in the AMM system, and has therefore also provided the USD equivalent of 100k CHEX as well. In the AMM, the total CHEX staked is 5M, therefore Bob has a **2% stake in the AMM ecosystem.**

The rewards will be **split between the two ecosystems at a ratio of 10% to 90%.**

Every hour, the real estate token's issuance pool pays out resource fees. With \$250k divided by the number of hours in a year (8760), this amounts to about \$28 per hour. Therefore \$2.8 goes to pure resource providers and \$25.2 goes to the liquidity providers.

EXAMPLE

As a stakeholder, Alice receives her 5% share from this, netting her about \$0.14 an hour. In a scenario where no additional CHEX is staked over the year, Alice stands to gain \$1,226 from the issuance alone.

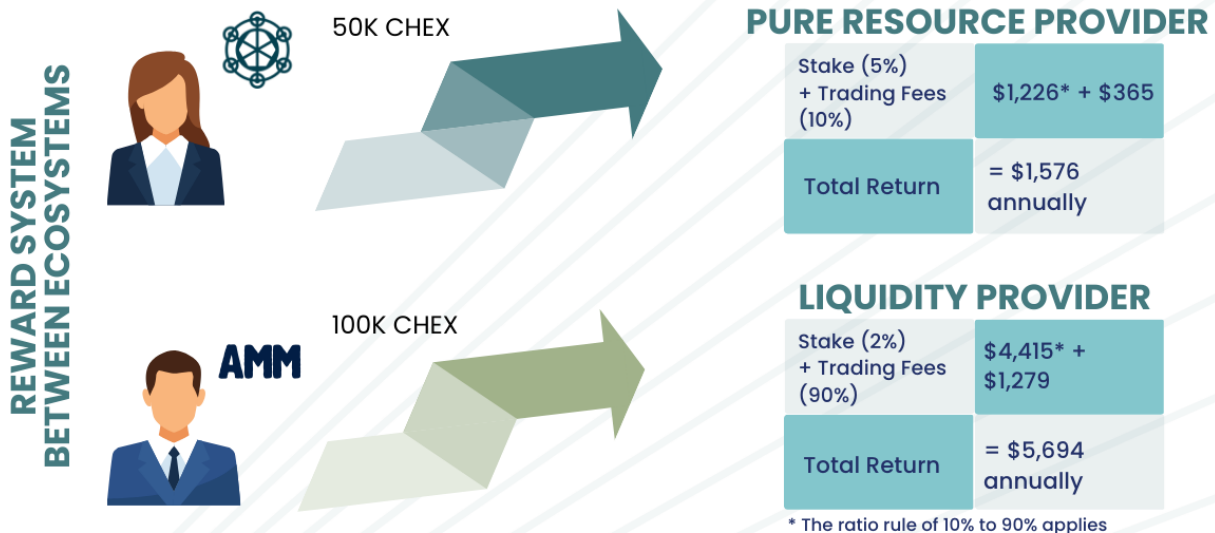


Bob, on the other hand, receives a 2% share of the AMM rewards, which comes to a total of \$0.5 an hour, or \$4,415 in total for the issuance.

But the issuance isn't the only source of rewards. **Trading fees also contribute to the user's returns.** With \$2k in trading fees collected per day, we account 10% of that as the value of gas fees, again split 10:90 between the two reward pools.



So there would be an **additional \$0.04 an hour for Alice** and **\$0.15 an hour for Bob**. Assuming no other issuance occurred and trading remained constant for the whole year, **the total return for Alice would be \$1576** and **the return for Bob would be \$5694**.



These rewards are paid out in CHEX and can be claimed on-chain at Alice and Bob's convenience, which is helpful for tax purposes. Rewards will automatically compound until a claim is made.



Burn Rate

To underscore our commitment to the long-term success of the project, we are instituting a **buyback** and **burn policy**.

In this scheme, 5% of the value generated by our platform will be allocated to purchasing CHEX tokens from the open market and permanently removing them from circulation. This token burn is designed with several goals in mind.



First, it helps create a sustainable demand for the token, thus contributing to its market stability.



Second, it serves as a mechanism to smooth out price fluctuations, creating a more predictable environment for users who need to acquire CHEX tokens for resource management purposes.



By adopting this policy, we are actively working towards a stable and secure future for CHEX and our dedicated users.



IMPORTANT LEGAL NOTICES

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