



Greenbook

Version 1.0

Next-gen MetaFi platform that empowers users to create, deploy & unlock liquidity in interactive NFT assets, enabling limitless possibilities in the web3 open metaverse.

Preface

Dear readers of the *reitio Greenbook*, we are sincerely grateful for this opportunity to show you what *reitio* could offer to the open metaverse ecosystem, and it would not be possible without your support, as well as the trust that we have received from our valued partners along this journey to make the open metaverse truly interoperable and accessible for everyone. Nothing fulfils us more than creating value for people and sharing the solution as widely as possible.

Since Facebook announced that it was going to change its name to ‘Meta’, the term metaverse has become a huge buzzword, and it has even spilled over to the decentralised, tokenized space. And yet, the nuanced technology behind it is not really new. Blockchain, Virtual reality (VR), Augmented Reality (AR) and Mixed Reality (MR) which we will be accessing the open metaverse have been around for a decade and more. Synthetic media and computer games that make these virtual worlds look so realistic have been in development long before you even acquire your first Xbox. Simply put, the demand of consumers and maturity of the technology behind it has now made it possible to move the world into the web3.0 era.

For the first time ever, our team at *reitio* will be embarking on an exciting and necessary quest to link the currently disconnected virtual worlds, gameFi and NFT marketplaces together, in a seamless fashion with the help of emerging technologies which we will be deploying throughout our project.

I hope you will enjoy reading through this Greenbook in the same way that we enjoyed putting it together for you. So let’s get started.

Interact Beyond Worlds.

Cheers,
Nickeliser
Co-founder & Project lead
reitio protocol

About the Greenbook

"Green is the fresh emblem of well-founded hopes." - Mary Webb

Traditionally speaking, blockchain projects issued an informational document known as a Greenbook to promote or highlight the features of a solution, product, or service that it offers or plans to offer. At reitio protocol, we have decided to give it a little zest — by displaying the above information in the form of a "Greenbook".

Inspired by our corporate identity, this Greenbook provides an overview of how reitio protocol is delivering novel game-changing solutions around the open metaverse. By incorporating our products and technical specification, to a strategic blueprint, we are creating solutions that meet both investors in the NFT and cryptocurrency market, as well as the wider ecosystem needs.

This Greenbook will be regularly updated on [Gitbook](#), and it is also readily available for download in the form of PDF document, which you could obtain via our [Github](#) account. Further, unlike conventional blockchain Greenbooks which narrates the information in a third-person perspective, we will be writing this document in a format that is easy to read for everyone, regardless of your level of understanding in the underlying technologies used in reitio protocol.

As we continue to contribute and monitor the market demands, we will adjust protocols wherever necessary and keep you informed of any updates through this Greenbook. Our goal is to make the governance transition back to reitio users as seamless as possible, providing you with the information, answers, and guidance to navigate the latest development at reitio through this Greenbook.

Table of Contents

1. Abstract	4
2. Identifying the Gap	6
2.1 Lack of Interoperability Across Metaverse	7
2.2 Deployment Incompatibility of Virtual Assets across the Metaverse	8
2.3 Absence of Virtual Asset Data Aggregation	8
2.4 Inaccessibility to straightforward Virtual Asset Creation process	9
3. The Objective	9
3.1 Virtual Assets Deployable Across Metaverse (Cross-chain Bridge)	10
3.2 Data Analytics Unlocks Valuable Insights Through Curated Datasets	10
4. The <i>reitio</i> Protocol	10
4.1 Virtual Asset Creator	11
4.2 Virtual Asset Swap	11
4.3 Open Metaverse Interoperability	11
4.4 Data Aggregation & Monetization	12
5. Technical Overview	12
5.1 Protocol Layer	13
5.2 Application Layer	13
6. Tokenomics	13
6.1 Definition of <i>reitio</i> tokens	13
6.2 Dual-token mechanism	14
6.3 <i>reitioGOV</i> (REG) token	15
6.4 <i>Regal</i> (REGAL) — Secondary Tokens for Rewards	18
6.5 Transaction fees, buyback-and-burn, and governance mechanism	19
6.6 <i>reitio</i> 's Token Distribution	19
7. Roadmap	20
8. Friends of <i>reitio</i>	22
9. Risk Disclaimer	22

The Open Metaverse is a network for Everyone to create, work and interact

1. Abstract

When Neal Stephenson coined the term “metaverse” in 1992, no one imagined it could be the next great leap in the advancement of the web nearly 30 years later. Today, the metaverse is increasingly receiving the world’s attention as the next phase of the internet revolution, where users can visualise and experience the web with a natural user interface.

The word “metaverse” is a contraction of two words: “meta,” which means beyond, and “verse,” which is shorthand for the universe. The term universe typically describes the concept of a future iteration of the internet as a collection of shared, persistent, and 3D virtual spaces that are interlinked to create a virtual universe.

It is a collective digital space bringing together virtual worlds in a way that generates presence in Web3.0. An open metaverse, on the other hand, describes a *decentralised* digital space in which numerous blockchain-powered virtual worlds coexist. Coupled with the imminent decentralised evolution of the internet from Web2.0 to Web3.0, the open metaverse will have a profound influence in shaping the future of the “*internet*”.

The internet revolution that began nearly five decades ago sent the world from brick- and-mortar retail experiences to online shopping. With online storefronts, users can conveniently browse for products and buy them at the comfort of their homes, but without a shopping experience.

Now, thanks to the metaverse, shoppers can now have both convenience and an enjoyable shopping experience. For example, instead of shopping from a traditional Amazon.com, users could visit the virtual Amazon mall in the metaverse.

This evolution of digital experiences enabled by the power of XR and the metaverse will revolutionise every aspect of business, just as the internet has been over the past decades.

Ever since Stephenson coined the term, many concepts similar to metaverse have emerged, as summarised below:

Table 1: Brief history of the Metaverse

Year	Name	Description
1993	A multi-user domain (MUD), object-oriented (OO) system	MOO was a text-based online VR system that simultaneously connected multiple users.
1995	Active Worlds	Active Worlds was a distributed VR system that allowed users to develop custom 3D content and own them.
1998	There.com	There was a 3D online virtual where users appeared as avatars and could socialise and buy assets.
2006	Roblox	Roblox Corporation publishes the Roblox product — an online gaming platform and creation application.
2007	OpenSimulator	OpenSimulator was an open-source virtual world software that users could leverage to construct virtual worlds.
2014	VRChat	VRChat launched as a social VR platform, allowing users to publish avatars and 3D spaces implemented with external tools.
2017	Sansar	Sansar launched as a social VR ecosystem, enabling user-created 3D spaces and social spaces.
2019	Facebook Horizon	Facebook announces Facebook Horizon as a social VR world.
2020	Decentraland & Sandbox	Both Decentraland and Sandbox launched as a Blockchain-enabled metaverse with decentralised NFT marketplaces
2020	Core	Manticore Games unveils Core as an integrated game creation platform.
2021	Facebook Metaverse	Mark Zuckerberg announces that Facebook intends to develop a metaverse.

At *reitio*, we envisioned a future where bulk of the commerce today will exist on the decentralised metaverse over the next decade. In order to foster an open metaverse transaction, we have an ambitious goal — to bridge virtual worlds built on different blockchains to not just co-exist, but to interact and eventually create an economy where virtual assets could be transferred seamlessly from say, a Solana-based virtual world, to an Enjin-based virtual world

This will potentially unlock limitless value transfer and also enable virtual assets tagged with a real world value, to be migrated to another world, while retaining its value and utility

Further, most virtual assets (NFTs) are designed as e.g. Avatars or land, by professionals, and there is no means for ordinary users to create an usable Avatar or building.

This is where *reitio* will be the first mover in allowing anyone, regardless of design or coding experiences, to easily create customised virtual assets, or metaverse-focused NFTs, which they could trade, use and interact on their preferred virtual worlds anytime through a low-code creation tool, while at the same time, creating a new creator economy which is unbiased by nature.

Our slogan - Interact Beyond Worlds, closely reflects our vision and our goal to facilitate an Open Metaverse Finance (or MetaFi), and to value add to the buoyant metaverse economy, powered by our partners (metaverse projects, creators, stakeholders and more)

2. Identifying the Gap

Blockchain is crucial to the metaverse for the simple reason that in the real world, unless you are a celebrity or popular influencer, your identity is probably less likely to be copied and stolen. Even if someone steals your ID or identity card, when you stand in front of your family and friends, they will still recognize the real you. But this is not the case in the metaverse.

To put it simply, the decentralised metaverse is like logging into a large online game where your doppelganger "exists" on your behalf. If someone steals your doppelganger, your appearance, voice, and expression in the metaverse will be stolen.

Blockchain technology can ensure that every "existence" in the virtual world is private, unique and cannot be easily duplicated. Because conceptually blockchain is a decentralized way to make these data untamperable through collective authentication, it is widely favored by the financial sector and is actually used in back-end transaction clearing.

Currently, the world was introduced to Non-fungible tokens (or NFTs) as a way for creators and companies to monetise their designs in the form of GIF, JPEG, or PNG. It is proven that although images could be freely downloaded by anyone in the world wide web, the ownership of these NFT artworks are secured and legitimised by the underlying blockchain technology.

However, with the transition from Web2.0 to Web3.0, NFTs could play a crucial role in the decentralised metaverse, beyond just artworks. With consistent upgrades to existing NFT standards, NFTs will be able to represent digital identities of every individual in the open metaverse, and other intricate aspects of virtual worlds.

The emphasis on decentralized blockchain technology, in the face of tech giants who want to control everything, is destined to merge with the metaverse, eventually creating an open metaverse ecosystem in which individuals could have maximal ownership over their digital assets.

We can use a question to knock on the door of this dialectic, do you think governments will allow people of all countries to use the metaverse?

Our idea was born from the emerging NFT adoption, and the market need to enable virtual assets used in the open metaverse, to be freely transferable across these virtual worlds.

On a grander scale, we do foresee virtual worlds being built on multiple blockchains and *reitio* will be deploying smart contracts on popular infrastructures such as Ethereum, BSC, Fantom and more as we work to expand further.

We do identify several challenges pertaining to metaverse commerce, as explained in the following section.

2.1 Lack of Interoperability Across Metaverse

Before the introduction of the metaverse, digital connectivity was perceived as a series of disparate, standalone digital experiences². Unfortunately, that is where we are now as an interoperable digital-physical hybrid universe is yet to be realised.

Even with the growing attention of development in the virtual realm, current metaverse platforms are disjointed, comprising thousands of individual experiences requiring a separate account, avatar, hardware, or payment infrastructure as the entry price.

Because of the lack of openness, moving virtual worlds from one platform to the next is a challenge. This contrasts with the internet's vision of allowing users to communicate seamlessly among themselves. An open metaverse is one that allows users to seamlessly transfer their virtual assets from one platform to another without challenges.

For metaverse and the entire web 3.0 to become a reality, different blockchains must interact with one another. This is not the case with current decentralised platforms because individual Blockchains cannot communicate properly with each other despite the technology being conceived with decentralisation in mind.

Therefore, the vision of interoperable metaverse assets rests on many functionalities, such as the ability to seamlessly integrate with existing networks and initiate transactions on other systems. The platform must also undertake transactions with other chains by integrating applications and simplifying the switch from one platform to another.

² "The Metaverse Isn't Just Gaming Worlds," The Drum, accessed September 12, 2021, [thedrum.com/profile/admix/news/the-metaverse-isnt-just-gaming-worlds](https://www.thedrum.com/profile/admix/news/the-metaverse-isnt-just-gaming-worlds).

2.2 Deployment Incompatibility of Virtual Assets across the Metaverse

An ideal metaverse is one that resembles the physical world. For example, when bodies move between locations in a physical world, their identities also travel alongside them without problems. The movement also includes assets and possessions that can seamlessly get transferred from one place to another.

This continuity in the physical world that keeps users and their assets intact during transit should be experienced in the metaverse. In this regard, a metaverse should integrate various virtual worlds to facilitate socio-cultural interaction, like the case with the real world.

While millions of virtual assets exist worldwide, there is a lack of a framework to integrate these assets, let alone millions of users who want to participate in a shared, persistent, and synchronous experience.

To achieve these experiences, the metaverse requires an environment with deployment compatibility across the ecosystem. Such an environment is necessary to create shared and persistent connections where users get updated in near real-time and with enhanced accuracies.

2.3 Absence of Virtual Asset Data Aggregation

Presently, there is an absence of data analytical support for users in NFT and decentralized virtual world marketplaces. Therefore, users are unable to gain access to critical information such as the history of global floor prices and sales numbers for various virtual items that assist them in forecasting the future direction of such items in the metaverse.

Without aggregated datasets, consumer behavioural data such as items purchasing activities, user traffic, and virtual assets preferences are not readily available for parties such as advertisers, thus impeding the optimization of marketing initiatives on the marketplace.

At reitio, we believe that any users can leverage the platform's data aggregation capability for predictive analysis in streamlining market research and make informed decisions for marketplace activities which optimizes their experience with virtual worlds across the metaverse.

2.4 Inaccessibility to Straightforward Virtual Asset Creation process

Virtual assets offer the prospect of a trustless economy where people can transfer value between accounts, and it is gaining massive attention from both retail and institutional investors alike.

In June 2021, a virtual plot of real estate on Decentraland sold for more than US\$ 913,000³. This figure is the average price of a real-world house in expensive cities such as Brooklyn in New York. Earlier that year, The Sandbox recorded a virtual land sale worth nearly US\$ 2 million, becoming the largest sale of virtual real estate in history.

In most of today's decentralised metaverse, these NFTs are perceived as proprietary and exclusive. Many creators have flocked into the NFT markets with innovative and more often creative artwork series such as Bored Ape Yacht Club and Cryptopunks.

However, as the open metaverse is gaining a strong foothold in the blockchain ecosystem, there is a growing consensus of NFTs being minted to represent more complex assets in virtual worlds, beyond what the market has seen in Decentraland or The Sandbox.

Unfortunately, virtual asset creation tools are sparse and uncommon. In order to build complex virtual assets such as a custom monument on a plot of land in Decentraland, it will require a certain level of design and coding expertise. This reality has blocked out the customisation feature to the majority of users in the open metaverse.

Further, existing creation tools are not designed to facilitate the generation of complex metaverse assets that could be deployed across virtual worlds powered by different blockchain infrastructures.

³ "Digital Land in Decentraland Sells for \$913K... to a Virtual Property Developer," Cointelegraph, accessed September 12, 2021,

cointelegraph.com/news/digital-land-in-decentraland-sells-for-913k-to-a-virtual-property-developer

Changing the way you interact within the Metaverse

3. The Objective

Our platform facilitates a seamless onboarding experience for metaverse participants via a permissionless metaverse protocol that unlocks accessibility and interoperability in metaverse

assets. The *reitio* ecosystem will provide unique ways that users can leverage to create, assemble, fractionalise, monetise and share 3D models.

We will empower creators to create their own intuitive and powerful virtual assets via drag and drop facilities. You can quickly make your own virtual assets (e.g., wearables and collectables), animate them, and monetise them in metaverse marketplaces. Below are the primary objectives of *reitio*:

3.1 Virtual Assets Deployable Across Metaverse

Most 3D world assets creators, avatars, or environments are siloed and unable to collaborate across virtual worlds. For instance, the virtual item which you own in Sandbox could not be deployed and used in Decentraland. Similarly, you cannot open a game that was built in Unity with an Unreal Engine application.

reitio wants to unlock the metaverse's potential by allowing users to create and monetise their creations in multiple environments. We believe that enabling users to deploy their creations across different metaverse environments unlocks many prospects in the hitherto untapped sector.

3.2 Data Analytics Unlocks Valuable Insights Through Curated Datasets

Data analytics through curated datasets is the key for users in acquiring valuable insights to the metaverse commerce economy. Unlike other platforms, *reitio*'s platform is data-driven where any user can utilize data analytics to streamline research and content assessment, understand consumer preferences, and forecasting of market trends for investment opportunities.

For example, advertisers can leverage on consumer behavioural data to optimize their marketing efforts while retail investors are able to utilize the platform's analytical capabilities to make better investment decisions on virtual assets. Similarly, content creators and virtual influencers can have the edge with aggregated datasets to estimate their popularity and growth.

Build. Boost. Explore. Get ready for the next phase of the open metaverse.

4. The *reitio* Protocol

Our platform facilitates a seamless onboarding experience for metaverse actors via a permissionless metaverse protocol that unlocks accessibility and interoperability. The *reitio* ecosystem will provide unique ways that users can leverage to create, assemble, fractionalise, and share 3D models.

4.1 Virtual Asset Creator

Presently, NFT minting on marketplaces is through uploading of predetermined file types. However, at reitio, we would like to bring one step beyond in terms of virtual asset creation with the Virtual Asset Creator. Users will be able to create metaverse assets without limit.

Through the Virtual Asset Creator, it empowers the users in expressing their creativity by creating and customizing their desired virtual assets. The drag-and-drop feature of the Virtual Asset Creator is a unique aspect whereby it is a codeless design tool which provides a user-friendly environment that technical and non-technical users could commence with the asset creation process almost immediately. It also features many unique default elements, including blocks, widgets, and modules that users can choose from when creating their very own virtual assets.

4.2 Virtual Asset Swap

We want to grant our users the freedom of not only buying and selling but also to exchange their virtual assets with other users through the virtual asset swap feature. It is an avenue that allows for easy and direct exchange of virtual assets between users.

When two individual users are interested in the virtual assets held by each other, they could skip the process of regular transaction prior to attaining their desired pieces simply by exchanging the virtual assets.

In addition, users will also be able to swap their virtual assets with the platform's governance token, REG of the corresponding value. This would unlock liquidity for the virtual assets possessed by users and provide them with more options for platform related activities.

reitio will leverage on the Decentralized Finance (DeFi) mechanism of cross collateral feature to allow for virtual assets collateralization to facilitate borrowing and lending of cryptocurrency assets. This would benefit in providing liquidity and flexibility to users who do not want part ways with their virtual assets in enhancing accessibility to cryptocurrency assets which could be utilized for purchase of more virtual assets.

4.3 Open Metaverse Interoperability

We envision the future of an open Metaverse where virtual assets could be bought, utilized and sold across the various virtual worlds. For that to happen, interoperability across the vast Metaverse would need to be inaugurated.

With the present virtual worlds, the users could only limit their creation and experience within these individual capsules. Therefore, reitio aims to build cross chain bridges to establish the interoperable connection between these virtual worlds built on different blockchains. This enables the facilitation of virtual assets deployment and transfer across virtual worlds. With the added connectivity, it would bring forth a frictionless and seamless Metaverse experience.

To facilitate the true open metaverse experience, reitio aims to develop the de-facto NFT standard for creator NFTs: the "(Virtual Asset Standard)VAS-122". This enables future artists to

create world-agnostic virtual assets straight from reitio's Virtual Asset Creator interface. Behind the scenes, reitio will automatically embed the metadata on-chain based on the visual design of the created virtual asset and mint its corresponding VAS-122 token. This way, user-created virtual assets will be displayable across multiple virtual worlds, as long as their engines support the VAS-122 standard.

Powered by reitio bridge (lock-and-mint architecture, similar to Wormhole), the virtual assets will also be chain-agnostic. After the virtual asset is created, users can proceed to deploy through our platform. If the specified virtual world runs on a different chain, once the user confirms the deployment through the platform, reitio will automatically bridge the asset to the user's address on the subject chain. Hence, users can just focus on what they do best - creating virtual assets for their world(s) of choice, and they will be treated to a seamless experience on reitio's platform through its user-friendly interface.

4.4 Data Aggregation & Monetization

reitio strives to curate and unlock the value of Metaverse related datasets which provides game-changing insights for our users. With that, we will implement a Metaverse Data Marketplace to assist users such as content creators, metaverse advertisers and retail investors in streamlining market research via a transparent ecosystem.

Our users have full control of their individual data but at the same time having the option to monetize through the sale of selected datasets. The Data Marketplace leverages blockchain-powered secure transactions and smart contracts to allow users in transacting data streams, maximize profits with machine learning, and even inculcate a fair and transparent promotional methods in a NFT marketplace.

In addition, as the platform generates more datasets with the increased user activities, users will have the opportunity to own a piece of the data with unique algorithmic patterns. However, the generative art will not be created unless users specify to mint a new virtual asset. The art is generated instantly when this is done, allowing a user to own and interact with it. Each time a user mints a virtual asset, the blockchain generates a seed. The platform then generates a unique art by using the data available on the marketplace.

Once created, the platform distributes the generative art to the marketplace, granting creators the right to the exclusive virtual asset and some perks if they wish to stake such assets on the marketplace.

5. Technical Overview

reitio Protocol will be creating a state-of-the-art Layer 3 solution for the open metaverse

5.1 Protocol Layer

The protocol layer of reitio's platform facilitates collateral virtual assets loans and virtual asset swap that supports the decentralized finance aspect of the Metaverse economy. In addition, the dedicated wallet provides integrated service to reitio's platform where it ensures secured storage of user specific assets. Data aggregation will be the other key aspect of the protocol layer which allows for value creation from curated datasets for the masses. Through the open API nature of the protocol, it would greatly benefit the community in gaining valuable insights into the Metaverse economy.

5.2 Application Layer

The core of reitio's application layer is the Virtual Asset Creator which democratizes the creation of virtual assets on a transparent and secured platform. With the other associated features, reitio's platform will provide our users the means for creation, exchange and interaction across the Metaverse on a single user experience focused platform.

6. Tokenomics

6.1 Defining *reitio* token use case

Token Economics, or Tokenomics in short, is an important component for tokenized projects like reitio. It has a direct influence over how reitio protocol is designed, types of incentives, as well the potential effect that it has on the price of reitioGOV (REG).

We will be taking a deep dive into some of these aspects in the following sections to better illustrate how REG could benefit the reitio ecosystem.

REG tokens will first exist in the form of ERC-20 (Ethereum) and it will subsequently be made available on Polkadot and other blockchains in later stages of our project development.

The total supply of REG will be 1 billion tokens, in which various segments noted in the following section will determine its token distribution and overall network adoption. REG will act as a governance and utility token on the reitio platform, facilitating transactions and enabling interactions within the ecosystem. Moreover, it will encourage the participation of the network users in the area of platform's governance, future development and more.

6.2 Dual token economic model

Decentralised governance forms the basis and objective of the blockchain and cryptocurrency industry. Oftentimes, decentralisation as mentioned within the industry refers to the governance in securing the network, tokenization and more.

At reitio, our project uses the dual-token mechanism, where:

reitioGOV (REG) is the governance token issued for 1 billion in total and will not be increased further. It enables protocol governance, allowing REG stakers to vote for and receive rewards. It is intended to allocate control rights over reitio protocol such as change of fees and protocol amendments. It offers a clear path to decentralization in our project lifecycle, gradually handing over control from reitio to our distributed community after launch.

In order to create an effective decentralised governance, we will be shaping our tokenomics with an incentivisation system that ensures REG holders are able to vote for the greater good of the ecosystem. This will in turn, create a robust model for the long term sustainability of reitio Protocol. Thus, instead of distributing REG as a secondary token, we will be distributing our governance tokens through our early stakeholders from private to public sale.

In addition to the basic governance features that REG confers, the token will also double as an utility token in the reitio Liquidity Protocol where it will be used as a connector to achieve highly efficient routing.

Since the reitio Protocol will be focused on cross chain interoperability, REG will be a multichain token. It will be first minted on Ethereum and later on other blockchain protocols via token bridging methods, with no additional token issuance.

On the release day, 5.2% of the REG token's total issuance of 1 billion was unlocked. The remaining tokens will be gradually unlocked over a three-year period through Feb 1, 2025. This is to prevent a large amount of sell pressure and/or gamification of the token price.

This lockup is especially important for early investors and team members. Early buyers and users of the platform should be able to accumulate and hold REG without worrying that investors nor team members will sell large amounts of tokens all at once. As such, we propose a slow-release vesting schedule whereby the majority of the token supply is locked early on, then tokens are released daily.

Regal (REGAL) will be reitio Protocol's secondary token that will be distributed evenly across the ecosystem's participants. REGAL will be allocated as part of our gamification process that will be implemented into the reitio platform, and users will be rewarded based on a calculated model. Simply put, sellers, creators and buyers can obtain REGAL through transaction and

virtual assets creation in reitio. The near term plan for REGAL will be a secondary token that is non-transferable but exchangeable into REG through the Swap pool. More information will be updated in this Greenbook.

A total of 2 Billion REGAL tokens will be minted for rewards distribution to reitio ecosystem participants, of which 10% will be unlocked through various distribution methods within the reitio ecosystem. Similar to REG, REGAL will be gradually unlocked depending on the supply and demand, as well as participation rate on reitio platform.

In order to foster a fair and healthy token economy of REGAL, ecosystem participants and/or reitio Protocol may periodically mint new REGAL, upon a consensual vote agreement through reitio's DAO. Hence, the maximum supply of REGAL is uncapped, and is wholly determined by REG token holders, ecosystem participants and reitio.

In the reitio ecosystem, our users could hold and vote with the REG token and receive a variable APY in REGAL to use as a utility on the platform.

6.3 reitioGOV (REG) token

The team at reitio strives to design a fairly executed governance structure and thereby leveraging REG, its governance token, as an effective means to grant token holders the right to participate in the decision making process of the project's operations. Each token holder is also conferred a certain veto power, while the protocol transits to a Decentralised Autonomous Organisation (DAO).

DAO is a crucial infrastructure for reitio as it represents one of our core beliefs of community building. Our community will have the right to exercise voting, so as to ensure that reitio users could participate in the direction of the platform. Simply put, anyone who stands to benefit from reitio should have been able to make decisions on the long term sustainability of the reitio Protocol.

Our flagship product - reitio Virtual Asset Creator, is built to reward creators and platform users. Hence, the first goal of reitio is to design the tokenomics for virtual assets creators' incentivisation.

Two years after reitio's mainnet launch, the reitio DAO will be introduced to handle the ecosystem's governance. The DAO will be responsible for the platform growth, voting rights and other proposals by REG holders. Other aspects may include crucial project's decisions, oracle providers, trading fees, platform transaction fees, virtual world listings, and more. It will eventually govern the network parameters through an instantaneous token governance model that enables REG holders to easily participate, benefit and vote for various protocol settings without a time consuming voting window.

Another important to note is the presence of a decentralized autonomous organization or DAO to oversee the platform's governance likely means some REG tokens will be locked in the DAO as part of its functioning mechanism.

reitioDAO I: REG token distribution (Q3 2022 - TBA)

During the kickoff stage, REG will be distributed to community members through various token fundraising and incentivization activities in accordance to a lockup release schedule. The goal of this phase is to create a ground community to implement DAO.

reitioDAO II: DAO governance launch (December 2023 - TBA)

Community participants could anticipate a full DAO launch in the second stage, giving its participants an access to the extended governance mechanisms on the mission to completely decentralise the *reitio* network, and gradually achieving the fully decentralisation status.

Virtual Assets Creator Incentivisation

The growing mainstream popularity in NFT has brought about massive market opportunity not just for the cryptocurrency industry, but for the virtual assets creators space as well. We do envision a future where the sale and issuance of NFTs become commonplace within a decade. Thus, the NFT ecosystem will thrive far beyond the current hype revolving around the new monetisation means of digital artworks.

In order to establish a firm foothold in the bustling NFT economy, the onboarding process of great virtual assets creators are of paramount importance for the *reitio* platform. While analysing existing NFT marketplaces and virtual asset creation processes, a problem has been identified by the *reitio* team. Most creators have no prior cryptocurrency experience, and many users with great concepts fail to create their own virtual assets due to a lack of coding or design experience. Existing NFT marketplaces also do not facilitate an easy way to allow ordinary users to realise their artistic visions.

To counteract the issue pertaining to creators, *reitio* will propose a rewards program called *reitio* Squad to incentivise creators to join and use the *reitio* platform. The program's funds will be derived from the Ecosystem wallet and the token supply will be announced in the next iteration of this Greenbook.

Features of the *reitio* Squad program will include, but are not limited to REG grants and privileges such as:

- To encourage NFT minting on the *reitio* platform, gas fee waiver is available for eligible virtual assets creators and users of the virtual assets creation tool.
- Familiar registration onboarding process that will allow users to choose login methods via email addresses.
- Easy-to-use REG and NFT staking interface

- Discounted transaction fees as well as higher rewards for early adopters, ie. virtual asset creators and users of the virtual assets creation tool.
- Eligible creators artwork to be promoted on reitio's media and community outreach initiatives.
- Dedicated support for newly onboarded creators and users of the virtual assets creation tool.

Additionally, the reitio Squad program will be manually vetted for grants approved for early creators of the platform, and later a code-based verification system will be installed to ensure the authenticity of all creators and their work. The authentication method is similar to the mandatory Know-Your-Customer (KYC) process used in most centralised exchanges today. This is to prevent situations that Rarible has encountered such as wash trading on the Rarible marketplace.

Loan facilitation for the blockchain-powered Metaverse economy

The reitio platform is catered primarily for the blockchain-powered metaverse, and the fast-growing space with valuable NFT transactions will require loan features to allow users in the platform with sufficient REG or NFT as collaterals, or to lend their assets to users within the reitio ecosystem. Lenders will earn dividends for every successful loan executed in reitio.

To counteract massive price volatility in the loan process, the reitio protocol will require borrowers to have sufficient REG tokens or liquid NFTs in their connected cryptocurrency wallet in a smart contract to serve as collateral for the loan. These assets will be unlocked once borrowers have fulfilled the repayment within the stipulated timeline as determined by the smart contract, with any interest accrued to be paid in full as well.

Deflationary Burn events for REG

To encourage price stability and REG holders traction, reitio will burn up to 10% of the Ecosystem wallet and mined rewards over the next 8 years.

The burn events will coincide with BNB deflationary burn mechanism which accounts for factors such as unspent budgets, fees, network growth in TVL and users, as well as the stability of the protocol.

Proposed model will be announced over the next iteration of the Greenbook.

The initial proposed token supply for the reitio Ecosystem fund will also be reviewed bi-annually, and subsequent rewards not given to creators or buyers of NFTs will be burned as well. The goal of said function is to provide a strong deflationary pressure for the overall supply of REG. Future proposals relating to the burn event will be open for community vote and suggestions.

Stake-for-Data API

To foster a democratic exchange of data processed and listed on the reitio platform, anyone could draw data from the platform through an open API. This will enable virtual assets creators to access creator liquidity preference and the ability to swap various assets using NFTs. In order to pull data through the API, reitio will require data partners to commit to the network by staking REG to unlock the accessibility of the data.

Multichain deployment

reitio Protocol supports multiple chains, and therefore, any public chain may be deployed with REGAL output through mining. However, the Swap contract between REGAL and REG will be deployed on one public chain only, as well as the case of REG.

6.4 REGAL — Secondary Tokens for Rewards

Transaction fees & buyback-and-burn

The REGAL token can be used to add Ravage Values, Rarity of Virtual Assets created and minted on the reitio platform.

REGAL is an ERC-20 utility token compliant with the Ethereum network. The REGAL token does not have a hard cap to its maximum supply, and its circulating supply is in constant flux. This is because REGAL tokens are continuously being generated from eligible user activities, and are burned each time an asset's wear process is delayed.

Due to its token nature, all ledgers will be stored permanently on the blockchain.

Use Case Overview:

1. The **Rarity** of each asset is determined by the Ravage Rating. For instance, 0-25% (Exquisite Level), 25-50% (Regular Level), 50-75% (Tattered Level), and 75%-100% (Shattered Level). REGAL tokens will be awarded while staking these assets, with some added benefits. While the reward amount varies depending on the Season.
2. Every reitio Asset comes with a **Ravage Rating** with a default value of 0% (in whole number, from 0% to 100%) upon minting. The user and reitio have no control over the Rating as it is determined by the number of usages of the virtual asset on partner virtual worlds. Technically speaking, the lower rating translates to a higher selling price, with some added benefits. However, as each item will wear over time and users may decide on each asset price based on preference. For instance, a highly Ravaged asset may be deemed valuable by scalpers or resellers of the virtual assets. reitio has no control over the price. However, to incentivise users to retain assets, REGAL tokens will be distributed upon every update of the Ravage Rating. Since Ravage ratings are irreversible, no asset minted via reitio will be subjected to a reversal in the rating. However, users may delay the wear process by spending using REGAL, which these tokens will be burnt out of the total supply of REGAL. E.g. 1000 REGAL to slow the wear

- by 1 transfer and 2 usages, 2000 REGAL by 2 transfer and 4 usages.
3. REGAL will be rewarded upon prompt repayment and reclaiming of leased assets through **Cross-collateralization**. However, delayed payment will result in a REGAL penalty, in which the funds will be returned to the REGAL foundation, increasing the total supply of REG.
 4. REGAL are **Tradable Tokens** that can be purchased and sold on DEX, and a predetermined price is set by *reitio*. However, upon its first listing on DEX, the price will be fully determined by users and the *reitio* community, as well as the partner ecosystem.

6.5 Transaction fees, buyback-and-burn, and governance mechanism

While many token swap platforms earn profits through transaction fees, *reitio* takes a different approach. The token buyback ensures that the platform controls the supply of the tokens in the market, a good strategy for ensuring price stability and transactional demand. It is similar to share buybacks in the corporate world, where companies maintain control of the supply of their shares in the market.

Token burning is a common practice to ensure a balance within their blockchain's protocol. For example, a platform performs a token burn to produce a type of reward that's later distributed to the market's participants. Rewards also indicate that the platform will allow people to participate as liquidity providers by staking their crypto holdings. And those who decide to run a node to help further decentralize the network will also be rewarded.

Burning tokens also ensure that the supply is deflationary, meaning that there will be fewer tokens in circulation. Token burning in the crypto is usually done by sending tokens or digital assets to a dead wallet, where they'll be rendered useless.

The minimum initial values of transaction fees of *reitio* Protocol are the following:

- Fixed-price platform transaction 2.5%;
- Auction 0.3%;

The transaction fees of *reitio* Protocol are mainly used for deployment of the smart contract, cross-chain, invocation of other contracts, Oracle, etc. After deducting necessary expenses, 50% of the profits of the *reitio* Protocol will be used for REG buyback-and-burn once per quarter.

6.6 *reitio*'s Token Distribution

A token's distribution to specific stakeholders and community segments highlights several aspects important to the project's evolution. For example, some projects conduct private funding rounds to gain capital for the project's development, while the investors gain early access to the token at lower price levels. In addition, some tokens are reserved for future developments while a fraction of them are sold to the public.

In the REG token distribution case, 13.0% of the tokens are allocated to the private sale with a vesting schedule.

Instead of an initial coin offering, we'll conduct an IDO as our token generation event (TGE). The TGE unlocks up to 10% of private sale tokens, with the remaining token placed in a lock-up period ranging from three months to three years, where a small portion of tokens will be distributed monthly. 36% of the total token supply will be set aside for foundation and ecosystem usages, and future developments.

The project's team will receive 12.0% of the token subject to a 1 year lock period after the token generation event (TGE), after which tokens will be unlocked monthly for two years. Advisors will receive 5% of the total REG supply. Their tokens are locked for 180 days after TGE. After the locking period, tokens will be unlocked monthly for the next 28 months.

Finally, the general public will receive 25.0% of the tokens unlocked at TGE public sale, after which tokens will be unlocked monthly for 3 months.

Inhibiting Volatility in Price

Note that the vesting schedule will impact the token supply and subsequently influence its price. Cryptocurrency prices tend to be highly volatile, and some projects counteract this through their vesting schedules as the first line of defense against too much volatility. For example, the limited nature of the REG tokens at just 1 billion in total supply with a starting public supply of 52 million tokens means it might quickly spike in value. However, the vesting schedules with limited releases will counteract that price spike.

The reitio platform has a deflationary economic approach tied into its fee mechanism. It will charge a 2.5% percent fee on every transaction, and those fees are essential for maintaining the platform's operations. In addition, smart contracts on our platform send half of the fees to reitio's insurance fund to ensure its security.

The remaining 50% of fees are allocated across different areas, including on-chain referral fees, competition prizes, lottery prizes, and a buyback program that will also feature a token burn. The latter plays into the token's deflation since it will reduce the circulating supply. Note that lower supply with constant or higher demand is a recipe for a higher token price.

The power of possibility

7. Roadmap

Q1 2022: Spectre Phase

- REG Staking
- Reitio NFT Staking
- Token Generation Event

Q2 2022: Sigil Phase

- Testnet
- Creation Tool
- Ethereum NFT Swap
- CEX Listing 1
- DEX Listing 1

Q3 2022: Singa Phase

- NFT Ravage Rating
- Cross-Collateralization
- DEX Listing 2
- CEX Listing 2

Q4 2022: Scion Phase

- Mainnet
- CEX Listing 3
- Cross-chain Virtual Asset Swap

Q1 2023: Sith Phase

- Drag-and-Drop Marker tool (Ethereum)

Q3 2023: Saber Phase

- CEX Listing 4
- reitio mobile app - cross-chain swap
- reitio mobile app - virtual assets maker

Q1 2024: Sanctum Phase

- reitio mobile app - SocialFi features, including Messaging

- Stake-for-Data API

Q3 2024: Sentient Phase

- Reitiosapien (AI)

8. Friends of reitio

reitio emissary program (REP)

While our longer term of creating a seamless *reitioDAO* still stands, we've partnered with established and up-and-coming entities to bring you special perks, simply by joining us as a *reitio* emissary.

The selection process for the pioneer batch of *reitio* emissaries will first be hosted by *reitio*, through a four-point check which includes, but not limited to:

- Individual's skill set and contribution to *reitio*
- KYC/AML verification process
- *reitio* usage duration
- Staked REG and vesting period

Additionally, *reitio* may undergo further review process for the following group of emissary candidates:

- Social presence (for social media and other marketing-related emissaries)
- Github and work portfolios (for programming, and other development-related emissaries)

Upon the launch of *reitioDAO*, the REP will be chosen via a decentralised voting process which will be made on our platform, chosen by the *reitio* community.

More information will be announced in our [Medium account](#) and [official blog](#) after REG token sale.

9. Risk Disclaimer

Investing in virtual assets generally involves high risks and is not appropriate for all investors. Before you decide to invest in such kinds of investments, tokens, or any other crypto asset, you should carefully consider your investment options, risk appetite, and level of experience.

We would like to remind you that while our platform will endeavour to offer a robust metaverse ecosystem. However, reitio will not bear any responsibility in instances where you incur losses after investing with us. This Greenbook is for educational purposes, providing analysis and generic information related to crypto-assets, IEOs, and Blockchain.

No content on the Greenbook constitutes—or should be construed to mean—a recommendation to enter in any transaction or any of the profitable investment strategies. We also do not offer personalised views or recommendations as to whether REGs, REGALs, or the investment approach is suited to the financial requirements of a specific user.

The Greenbook is intended to be used solely for informational purposes. In this regard, you must undertake your own analysis before investing in the project or getting involved in a crypto-based project based on your own personal experiences. If in doubt, you can solicit independent financial advice from an expert before making the decision.

Specific Risks

Crypto marketplaces have multiple associated risks that you need to be aware of before making any investment decision. Below are some of them:

1. **Fraud.** As decentralised entities, crypto markets are largely unregulated. As such, fraudsters can solicit funds to build a project but never deliver on their promises. You should thoroughly conduct your own research to ascertain whether the project is genuine or not.
2. **Hacks.** Whereas it is less likely that Blockchain can get attacked, there is a greater risk for the applications built on top of the technology. For example, applications like wallets and browsers can easily get compromised by hackers. Like many Blockchain projects, reitio is not insured. In the event of a hack, we will not be held responsible for the loss of your funds.
3. **Extreme volatility.** Cryptocurrencies and, by extension, virtual assets are largely volatile assets. As such, the value of REGs or REGALs may or may not advance reitio's users' interests because of fluctuations in prices.
4. **Accidental loss of tokens.** There is the possibility that you can lose your entire token from your wallets due to various factors. For example, if you lose your wallet keys or failure to adhere to IEO's instructions. You may also lose your tokens if you fail to remember your password.

Want to learn more about reitio?

Follow us on via our official [Linktree](#) account