Koii

Tokenomics of Koii

Koii is the first decentralized network which is designed not only for scale, but fairness.

Network Overview

We are building an economy dedicated to transparency. This disrupts market segments such as social media, publishing, advertising, and search by creating *a single canonical record,* storing it permanently and rewarding its creators proportionate to viewership.

The ultimate goal of the Koii network is to provide the reputation infrastructure required to reliably decentralize traditional internet use without compromising performance.

The KOII token is at the core of all of these activities, and the foundation of peer-to-peer trust.

Token Activities

There are four main components of the Koii token economy:

1. **Consensus Activities**
   Under Gradual Consensus, there is no finite 'confirmation' of information, so Koii awards nodes for participation in consensus "Tasks" via Bounties, instead of the typical 'Block Rewards'.

2. **Token Generation**
   New KOII are created daily to reward creators for building things that bring more attention to the network. As users engage, they generate Proofs of Real Traffic (PoRTs) which are aggregated daily in the principle network task; this aggregated total is used to distribute new tokens to creators' wallets based on the volume of PoRTs they earned.

3. **Lock Up**
   In order to offset the inflation from Token Generation, participants are encouraged to lock their tokens into *Bounty* and *Staking* contracts. These mechanisms both protect the network and encourage long-term engagement to facilitate network growth.

   a. **Bounty Contracts**
      Any user can submit a 'Koi Task' which defines specific node activity ("Executable Bundle") along with a reward mechanism ("Distribution Function") and a security mechanism ("Audit Function"). When a Task is created, a Bounty denominated in KOII must be locked into the Task contract to reward participants.

   b. **Staking Contracts**
      In order to participate in Tasks and earn Bounties, a node operator must lock tokens into a Stake. The Stake is unable to be released during Task participation and can be slashed if the node is shown to have behaved dishonestly via the Audit Function.

4. **Burning**
   Because KOII has a default inflation rate of 3.6% per year, the network will also implement token destruction mechanisms ("Burning") in specific actions, and the rate of burn can be updated over time through a vote by existing token holders. In particular, burn mechanisms will exist for activities like

   a. Withdrawing from staking
   b. Bounty distributions
   c. Transactions
   d. Registering assets for Attention Tracking

Digital Assets

In the Koii ecosystem, digital assets go far beyond the typical functionality of NFTs. While digital art and collectibles will make up the initial market, the Finnie Wallet provides an easy way to edit and configure these assets, and the Koi-X framework provides the ability to create web applications which serve a similar purpose.

Token Utility

The Koii Network provides three ways for participants to use their tokens:

I. **The Attention Game**
    KOII can only be generated by earning verified attention via PoRT, so users can spend their tokens to mint or buy digital assets and burn them to register those assets for attention tracking.

II. **Asset Management**
    Once assets have been created, the network provides services to manage them and increase their utility. Some examples of digital asset services include personalized galleries, caching and file availability, ad placement, content enrichment, indexing, and even attestations from verified DIDs.

III. **Distributed Tasks**
    Finally, Koii nodes also provide task execution services via Gradual Consensus. A task can be programmed from an existing template and deployed using KOII tokens. Once deployed, a task will be executed autonomously by nodes in order to earn a share of the bounty tokens. Typical tasks range from web scraping to message passing, but can be modified to include any executable script, as long as it can be verified by other nodes.

    When a developer deploys an application with Koii, they will pay tokens to register the app, they will set bounties for services, and then earn KOII based on the attention it receives.

Supply and Generation

At launch, the network will have a supply of 10B tokens, and will mint an additional 1,000,000 KOII per day forever. In order to use the network, participants must stake and burn tokens to access certain activities (e.g. validating network activity and registering Atomic NFTs, respectively). Products built upon the network will be priced in KOII due to the accessible-to-newcomers nature of the token as a common medium of exchange.

Over time, the network may vote to increase burn rates on certain activities, such as withdrawing from a stake or registering content. In the Gradual Consensus framework, the voting power of a participant is proportional to their stake amount and time staked. As more participants join the system, the required stake to earn rewards will gradually increase due to competition between players.

	At Launch	Year 1	Year 2
Total Supply	10,000,000,000	10,365,000,000	10,730,000,000
Burn Rate	0%	1%	2%
Inflation Rate	3.65%	3.64%	3.63%
Circulating Supply	510,357,000	~3,900,000,000	~7,000,000,000
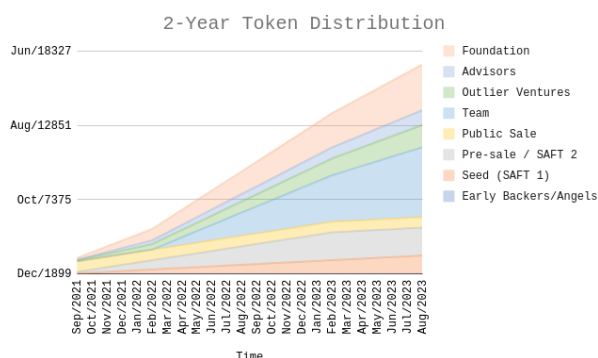
Token distribution over 2 years
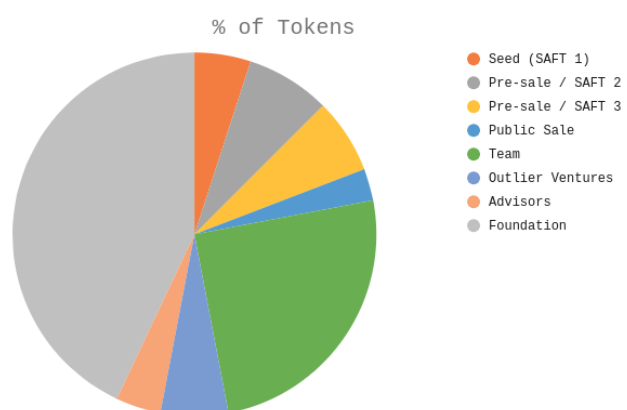
Breakdown of tokens at network launch

Applications and Use

The Koii Network provides a cross-compatible node network that can bridge blockchains, allowing for dynamic use cases that are not possible in traditional decentralized networks due to their focus on currency. Instead, the Koii Network implements a Gradual Consensus process to incorporate nearly infinite amounts of information into the execution of *Tasks*.

Koii nodes facilitate the Proofs of Real Traffic (PoRT) system, which will grow to replace traditional ad tracking, and also provide a scalable foundation for building decentralized social media, search, and web services. The ultimate goal of the Koii network is to provide the reputation infrastructure required to reliably decentralize traditional internet use without compromising performance.

As the network grows and engages more users, the Koii infrastructure and token will become a stable medium of exchange which is accessible to participants and can be easily integrated into cross-chain applications and traditional centralized services.

Access via Attention Rewards

Once a user registers all their content permanently with Koii, they will earn a trickle of KOII in the form of rewards, which allows them to access services within the network, and associated with their content. As users engage with the network more, they will be significantly more likely to purchase additional KOII from the market in order to interact with network services.

Koii Tasks

Koii Nodes can also perform computational tasks on data sets, such as indexing for search, tagging images, or other necessary infrastructure like caching and bundling blockchain writes. These services are useful well beyond the scope of the Koii ecosystem, and products like getstorecat.com (a decentralized web scraping prototype) already provide useful tools that accept KOII tokens as tender. As more projects enter the ecosystem and use Koii Tasks, the token will become more scarce since the amount of KOII released daily is fixed.

Advertising and Traffic Aggregation

The most profitable application of the internet has so far been advertising, but existing players are wary of opaque business models, and advertising networks such as Facebook and Google continue to further obfuscate their work each year. Using the transparent and scalable infrastructure of the Koii Network, it is possible to replace these systems, and even allow users to entirely opt out of existing ad networks by using Koii tools to override those ads.

Koii

Network Participants

There are five main types of network participants in the Koii ecosystem:

1. Publishers

Content creators can use the Koii network as a one-stop publishing tool, permanently securing their work from censorship and allowing transparent traffic records across any web-based platform. Publishers burn a small amount of KOII to register their content, and earn new KOII by drawing attention to and within the ecosystem. Once they have earned KOII, they can use it to access network services and enrich their content.

2. Collectors

As the network evolves, Publishers may wish to sell the work they have registered, and Collectors may build portfolios of content to earn more KOII over time. Collectors are likely to spend their tokens on network services to increase future earnings.

3. Users

While most users create some content, there are others who simply enjoy the benefits of the ecosystem and may silently observe. These participants do not directly influence the value of the KOII token, but contribute to growth by validating the network and expanding the reach of the Publishers and Developers, incentivizing Publishers and Developers to create more content and burn KOII to do so.

4. Developers

Koii provides a suite of tools and technologies with the aim of making decentralized services trivially easy to launch, providing a new standard of transparency and ownership for web users. When an app is deployed on Koii it earns attention rewards like any other content, and can be permanently deployed to the network to reduce hosting costs. Separately, Developers can use Koii Tasks to perform actions like web-scraping or message-passing between nodes, providing a flexible network for decentralizing almost any web service, from search to email.

5. Node Operators

Finally, Nodes form the backbone of the network, allowing reliable storage of information without centralized control. Nodes stake tokens to participate in Tasks, ensuring they can be trusted to perform most actions. Some nodes may elect to operate in 'witness mode', during which they will not perform tasks or support services directly, but instead can 'audit' other nodes and take their stake.