ORIGYN Tokenomics

About ORIGYN Foundation

ORIGYN is a Swiss non-profit foundation dedicated to identifying, authenticating and unlocking powers of ownership for objects of value. The foundation is the first pan-industry platform built on DFINITY's Internet Computer (ICP). Artificial intelligence represents the core of ORIGYN's detection and authentication framework, and the foundation uses advanced AI on decentralized computing to unlock new forms of value for some of the largest consumer verticals in the world, including art, digital media and luxury. ORIGYN was founded in Neuchâtel, Switzerland and operates in major technology and blockchain hubs globally.

ORIGYN Art ORIGYN Art establishes a connection between physical works of art and NFT certificates to create the ultimate marketplace experience for art professionals, collectors and enthusiasts.

ORIGYN Digital Media enables influencers, artists, creative talent and individuals to protect their digital property while increasing the exposure and tradability of their works.

ORIGYN Luxury brings guaranteed authenticity to original and pre-owned luxury items using their own biometry, enabling customers to prove and trace lifetime ownership of treasured objects.

ORIGYN Foundation Token Model
October 8, 2021

ORIGYN Token

ORIGYN Token (henceforth OGY) is the native token of the ORIGYN platform. OGY is the principle mechanism for the creation of ORIGYN certificates of authenticity and is required to interact with the platform.

The OGY token is a Utility Token by the standards put forward by the Swiss Regulators (FINMA) regarding token classification[1] and will be publicly traded. Specifically, the OGY token provides the utility of access to a platform where ORIGYN certificates are minted, referenced and transacted. The ORIGYN certificate is a non-fungible token (NFT), referring to a unique item. The ORIGYN certificate is a digital twin of the unique item, and every new luxury object (e.g., watch, bag, artwork, etc.) is paired with a digital twin (NFT) during the minting process.
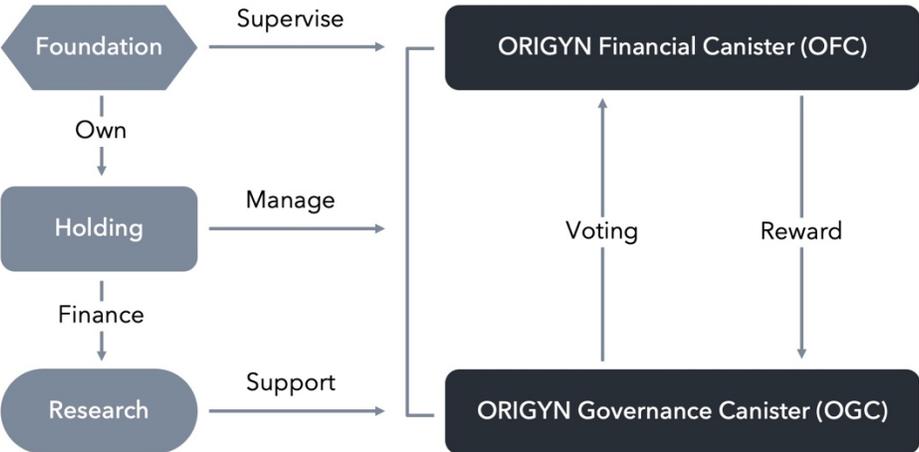
Token Distribution

10 billion OGY tokens are minted at genesis, and tokens are split into ~thirds between fundraising, foundation and team/partners for the following distribution:

OGY Token Distribution	Quantity (in billions)	Vesting (in months)
Private Sale	1.11	1-48
Sale Nodes	0.43	N/A

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[1] https://www.finma.ch/en/news/2018/02/20180216-mm-ico-wegleitung/

Public Sale (Institutional)	0.33	1-36
Public Sale Individual Reserve Price	0.10	1-36
Public Sale Auction	0.14	N/A
ICP Swap Round	0.20	1-48
Reserve for Future Fundraising	1.0	N/A
Team	2.84	1-48
Strategic Partners	1.09	1-48
Foundation	2.76	1-48

Staking and Voting Power

ORIGYN has an on-chain governance system where token holders collectively vote on proposals.
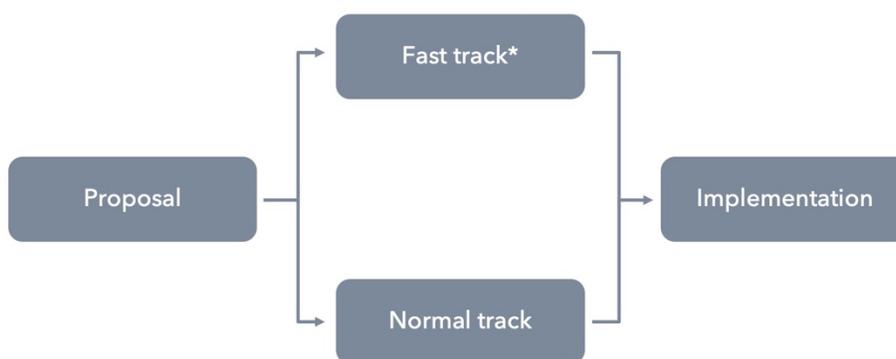
*Fast track is for the system upgrades, emergent bug fixes, etc. TBD by ORIGYN Research.

Token holders will be able to stake their OGY tokens to gain voting power. Staking involves locking OGY tokens in the OGC to support the security and operations of the ORIGYN network. The voting power is linearly proportional to the number of tokens staked. Tokens that are locked due to vesting are treated like staked tokens until they are removed by the owner and reallocated. Therefore, tokens with lockup periods of >= 12 months will generate voting power. The Voting Power (VP) is defined as follows:

VP = # of staked OGY with a lockup period >=1 year

To prevent short-sighted voting outcomes, the minimum lockup period is set at 1 year. That is to say, tokens with lockup periods >= one year have the same VP. Those with lockup periods < 1 year have no VP.
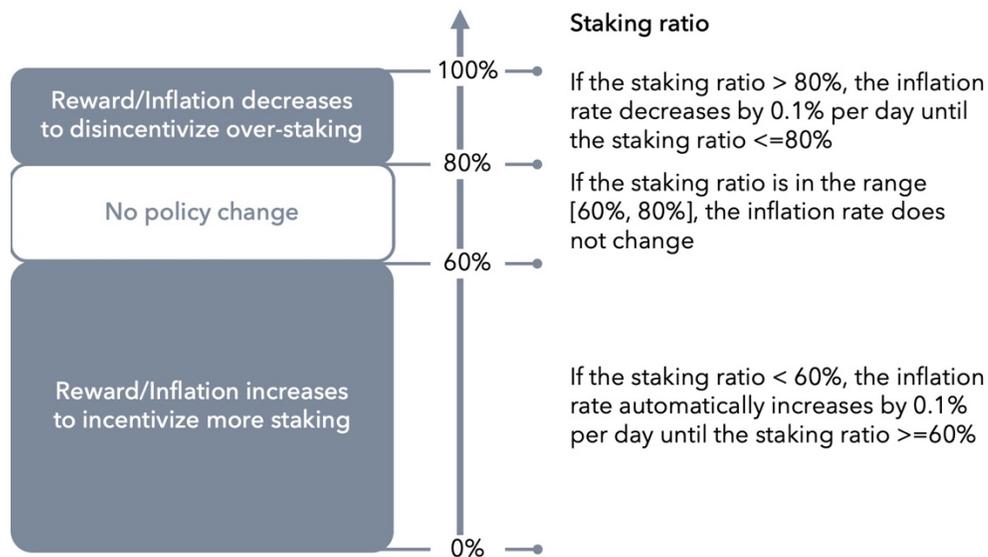
Note that 20% of voting power is secured for brands regardless of how many OGY tokens are staked in the OGC by token holders. Brands have 20% of voting power on issues related to their industry (e.g., watch brands do not have voting power on issues related to the art industry.) The voting power of brands is proportional to the revenue generated by their brands over the last 12 months.

Algorithmic Inflation

New tokens are minted to reward staking. This represents inflation in the model. Inflation is dynamically adjusted between 2%-20% to achieve a 60%-80% staking ratio.

staking ratio = staked OGY/OGY circulating supply

Staked tokens are OGY tokens with lockup periods >=1 year. The staked OGY tokens have VP and receive a staking reward. The staking reward comes from inflation as shown in the figure below.

Staking ratio

Reward/Inflation decreases to disincentivize over-staking

100% — If the staking ratio > 80%, the inflation rate decreases by 0.1% per day until the staking ratio <=80%

80% — No policy change — If the staking ratio is in the range [60%, 80%], the inflation rate does not change

60% —

Reward/Inflation increases to incentivize more staking — If the staking ratio < 60%, the inflation rate automatically increases by 0.1% per day until the staking ratio >=60%

0% —

The staking reward is proportional to the lockup period and the number of staked tokens. The Staking Reward (SR) is defined as follows:

SR ∝ α * # of staked OGY

where **α** is as follows:

- = 0 if the lockup period < 1 year
- = 1 if the lockup period is 1-2 years
- = 1.25 if the lockup period is 2-3 years
- = 1.5 if the lockup period is 3-4 years
- = 2 if the lockup period is > 4 years

Longer lockup is rewarded by up to a 200% multiplier for longer commitments.

> **Example:**
>
> Scenario 1: Bob has 100 tokens, and he locks them up for 4 years. He has a 2x multiplier in an economic reward and full voting power.
>
> Scenario 2: If Bob decides to liquidate his tokens, he clicks the unlock button. His economic rewards reduce to 1.5x, and his voting power remains full.
>
> Scenario 3: In 12 months, Bob's economic reward reduces to 1.25x, and his voting power remains full. This continues until the lockup period is less than 12 months, when the voting power drops to zero.

ORIGYN Fees and Deflation

In order to counteract inflation, ORIGYN is committed to a deflationary model and will commit proceeds from operations to regularly collect and burn OGY tokens. The ORIGYN business model collects fees beyond the costs of operating the ORIGYN Foundation and affiliated companies. These are defined as proceeds. Fees required during the certification process are specific to the industry. Fees are associated with initial minting of the certificate, as well as other parts of the ORIGYN identification, ORIGYN authentication process, or in ORIGYN certificate management.

The Certification Process is driven by the NFTs created for the physical objects. The certificate is an on-chain representation of the full digital twin and represents ownership of the object.

There can never be more than one digital twin/NFT for any physical object. Transfers of the certificate indicate a transfer of ownership and updates lineage of the object on-chain. These interactions with ORIGYN have fees associated with them. THE NFT token is involved when providing proof, buying, selling, giving, bequeathing. Fees are also charged for custody of NFT tokens, which are held in escrow.

Non-token holders who have the ORIGYN mobile app may choose to use validation tools and components available in the mobile app. Such in-app purchases are also included in the fee and reward structure.

The ORIGYN token will produce a deflationary model through a collect and burn. Coin burning is the process of permanently removing coins from circulation, reducing the total supply. ORIGYN Enterprise SA orchestrates Coin Burn events through the use of a smart contract function known as burn function. The OGY burning events are scheduled to take place every quarter. Once the burn function is executed, they are destroyed forever. It is impossible to recover coins after they are burned. The burning transactions are public, irreversible and permanently recorded on the blockchain.

Resources:

- Official ORIGYN website: www.origyn.ch
- Official DFINITY website: https://dfinity.org/
- See details on the Beacon Fund at https://dfinity.org/ecosystem/fund/
- View details on DFINITY's roadmap at https://medium.com/dfinity/announcing-internet-computer-mainnet-and-a-20-year-roadmap-790e56cbe04a