hybrix Protocol Tokenomics

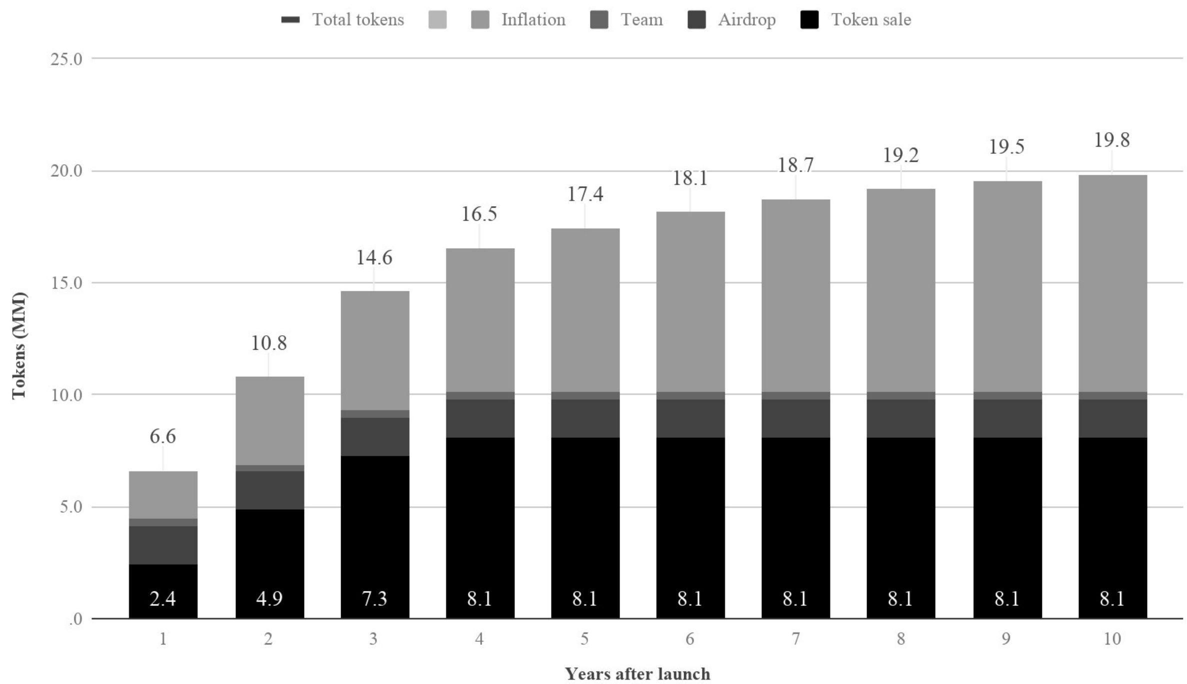
Economy assumptions

Token function. The **hy** token (HY) will be a primer implementation of a cross-ledger token, realised on top of the *hybrix* protocol. The main use cases of the **hy** token are:

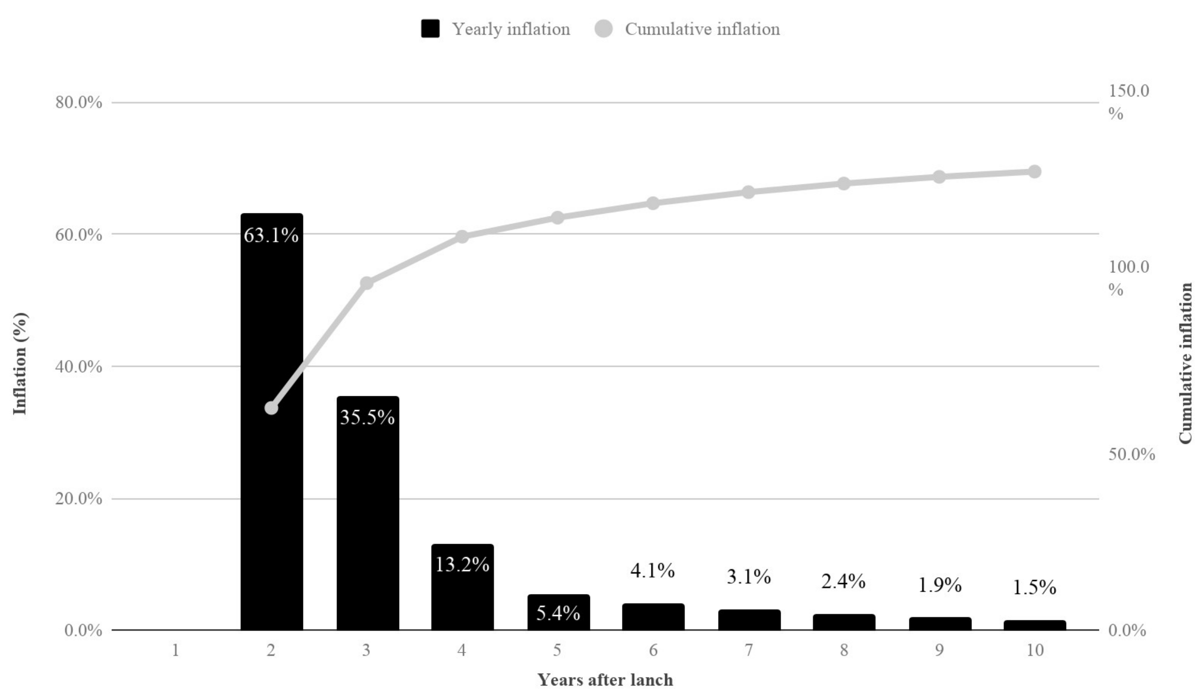
- Registration and renewal fees for new cross-ledger tokens issued on top of the *hybrix* protocol
- Settlement of fees for network validators
- Settlement of fees for network validations for other tokens issued on top of the *hybrix* protocol

Furthermore, given its function as a cross-ledger token, we expect that the **hy** token will be used as a store of value and as a currency for token sales.

Token supply. **hy** will have a limited supply of 21 MM tokens (as an homage to Bitcoin). Similarly to Bitcoin (BTC) this supply will be released gradually over time with the initial supply being a maximum of 8.1 MM (split between a token sale / AirDrop / team members). Each subsequent year 1/5th of the remaining tokens will be issued and used as an additional reward to network Validators (on top of the transaction fees).



Breakdown of the token release schedule, by year and by allocation.The numbers on top are the total tokens released, the number on the bottom - tokens form the token sale.



Token inflation, based on release schedule. Cumulative and year-on-year.

Registration and renewal fees. Registering an HRC1 token on the *hybrix* protocol requires a fee paid in **hy** tokens (HY). This fee is then distributed to network validators over the course of a year by the *hybrix* protocol. Initially this process will be handled manually by the *hybrix* protocol organization and subsequently automated decentrally across the protocol. This fee enables the token listing in the Common *hybrix* Index (CHI). This can be done in several tiers, depending on the cap they would like their token to be listed in. The caps that a HRC1 token may be listed in are: Primary, Medium, Minor, Minute. We make a distinction so that larger organizations pay for the network to operate smoothly. In return they get the benefit of cheaper transactions and more visibility in the ecosystem, the higher the tier.

Of the Primary tier, only 255 places are available. This is the largest registration cap, and is intended for governments and large-scale international businesses that need a very high security in validation, expect a large flow of transactions, and large market exposure. Cost of listing is 150 000 HY. Renewal costs 15 000 HY annually.

The Medium tier has 65 535 places available. This cap is intended for businesses that have a sizable market share or IPO listing, need proper validation, expect many transactions and have medium market exposure. Cost of listing is 15 000 HY. Renewal costs 1 500 HY annually.

The Minor tier has 16 777 215 places available. This cap is for organizations or startups that have a small market share, need occasional validation, expect a few transactions and have little market exposure. Cost of listing is 150 HY. Renewal costs 15 HY annually.

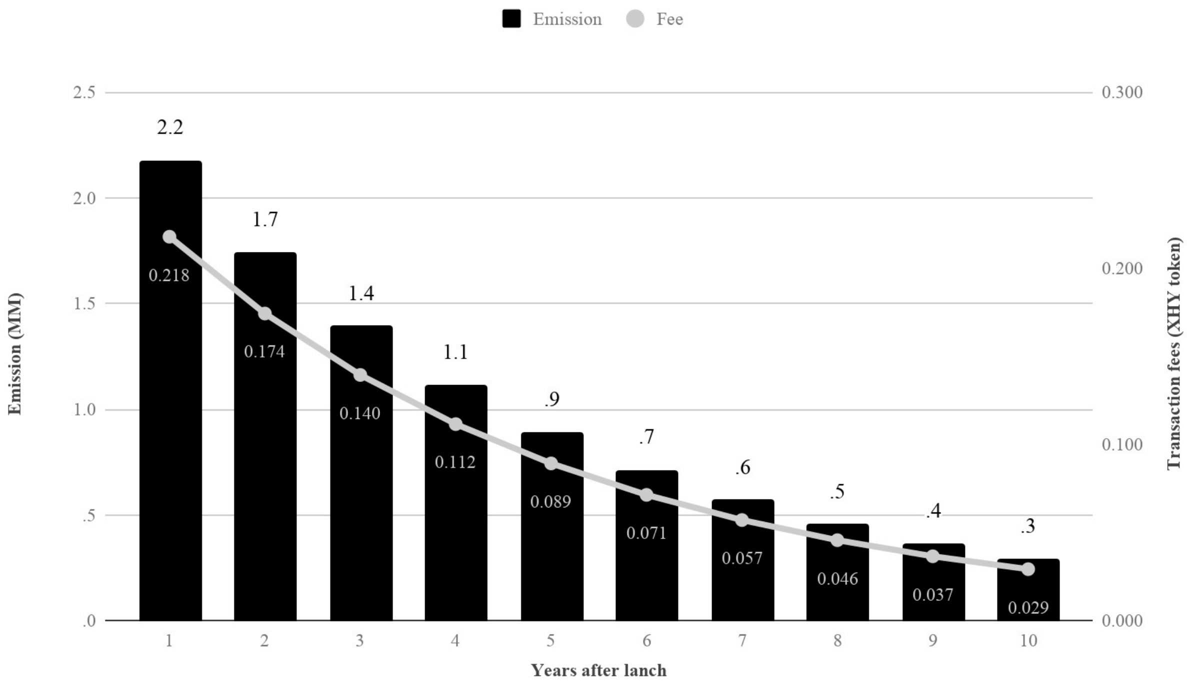
The Minute tier has 4 294 967 295 places available. This cap is for experimentation, small projects and individuals who want to put **hy** to work for them, expect very few transactions and have almost no market exposure. They can expect no validation, unless they request it from the market. Cost of listing is 15 HY. Renewal costs 1.5 HY annually.

Listing and renewal costs may be subject to changes if the decentralized economy market cap growth exceeds expectations. This can be implemented by amending the genesis recipe and hashing this as a followup to the genesis transaction, however, initial recipe governance rules apply.

Settlement of fees for network validations for tokens issued on top of the *hybrix* protocol. Each token issued on top of the *hybrix* protocol will decide its reward structure for transaction validators. The most common (and expected) way to achieve this will be through transaction fees. Each token can opt to reward the validations in their own native token or in another token or cryptocurrency. Since there is already a significant incentive for validators to operate the **hy** token (in the form of annual inflation distributed to them + token registration fees), we expect that the majority of HRC1 tokens (>90%) issued on top of the *hybrix* protocol will opt to choose the **hy** validator network, rather than build one of their own. In this scenario, they will have to abide by the **hy** token fee structure.

hy token fee structure & token burning. Each transaction through the **hy** validator network will require a two component fee:

- A minimum required fixed amount for burning, equal to 1 / (10 MM) the HY emission rate for the current year. In the case of tokens other than **hy**, this amount (or the lack of it) is determined by the token's issuer, in which case this token can build out its own validator network.
- An addon floating amount (also could be 0), which the transaction issuer is willing to pay to the validator network for a quicker settlement of the transaction. In subsequent protocol versions this fee could also be paid in another currency, depending on what the validators accept as payment.



Nominal transaction fees, required for burning

Similarities and benchmarks. Conceptually no adequate benchmarks exist for the **hy** token, however we expect that it will bear some similarities with the Ethereum network in terms of its transaction volume and velocity, due to the use case functions of the two. We also expect some similarities with Bitcoin in terms of its use case as a store of value, due to its limited supply and delayed release schedule. We will use those two currencies as benchmarks when doing comparisons and assumptions regarding the **hy** token valuation.

Lost tokens. Inevitably a limited percentage of tokens is going to be lost each year (lost private keys). We have done a conservative estimation of 0.5% of all tokens being lost per year. This is a conservative estimate, as studies have found that approximately 4 MM Bitcoins have been lost (approximately 25% of the available Bitcoin supply as of 2017), over the course of 10 years[1].

1 JEFF JOHN ROBERTS and NICOLAS RAPP (2017) Exclusive: Nearly 4 Million Bitcoins Lost Forever, New Study Says http://fortune.com/2017/11/25/lost-bitcoins/

Token generation event and financials

Basics:

∟ Ticker:	HY
∟ Campaign start date:	TBD
∟ Campaign end date:	TBD
∟ Campaign denomination currency:	USD
∟ Accepted currencies:	TUSD, ETH, BTC
∟ Jurisdiction:	The Netherlands
∟ Eligibility:	Subject to KYC and AML
∟ Compliance:	None
∟ Token purchase contract:	SAFT
∟ Campaign waves:	2

Token Generation Event Summary:

∟ Sale type:	Exchange offering
∟ Softcap:	1.5 MM USD
∟ Hardcap:	24 MM USD
∟ Campaign token amount:	8.1 MM HY*
∟ Remaining tokens post campaign:	Locked into validator pool
∟ Campaign allocation:	80%
∟ Initial total tokens:	21 MM HY
∟ Token type:	Deflationary (burning)
∟ Important notice:	Under SEC rules, this token is a security and a such will not be usable by / offered to US and Canada citizens!

***IEO tokens calculated under the assumptions of**

∟ Pre-sale : 0.6 MM HY sold @3.00 USD, with bonuses: 15.0% for all investors and 5.0% for large investors (>100 000 USD) = 1.5 MM USD raised

∟ Public Sale : 7.5 MM HY sold @3.00 USD, with bonuses: 0.0% for all investors and 0.0% for large investors = 22.5 MM USD raised

Wave 1:	Pre-sale
∟ Token price:	3.00 USD
∟ Bonuses:	15.0% for all investors
∟ Bonuses for large investors:	5.0%
∟ Wave number of tokens available:	0.6 MM HY
∟ Wave cap:	1.5 MM USD
∟ Cumulative number of tokens available:	0.6 MM HY
∟ Cumulative cap:	1.5 MM USD
∟ Minimum investment:	100 USD
∟ Maximum investment:	1 000 000 USD
∟ Wave start:	20-02-2020
∟ Wave end:	20-04-2020

Wave 2:	Public Sale
∟ Token price:	3.00 USD
∟ Bonuses:	0.0% for all investors
∟ Bonuses for large investors:	0.0%
∟ Wave number of tokens available:	7.5 MM HY
∟ Wave cap:	22.5 MM USD
∟ Cumulative number of tokens available:	8.1 MM HY
∟ Cumulative cap:	24 MM USD
∟ Minimum investment:	100 USD
∟ Maximum investment:	40 000 USD

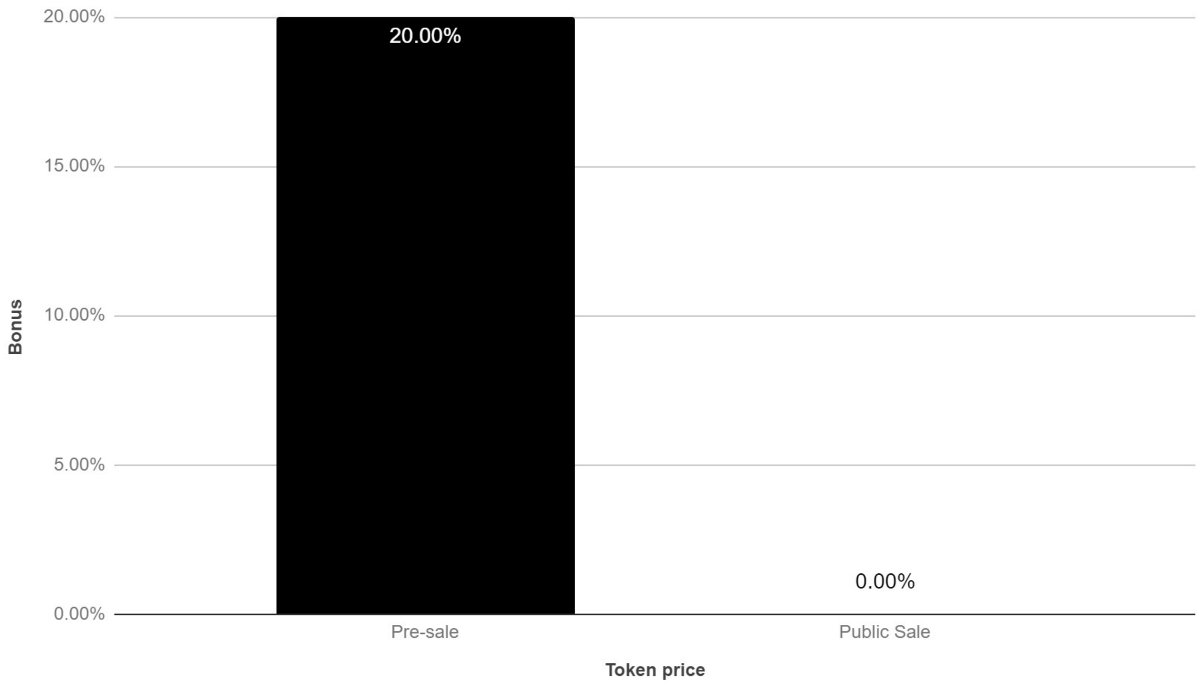
∟ Wave start: 13-03-2020

∟ Wave end: 13-06-2020

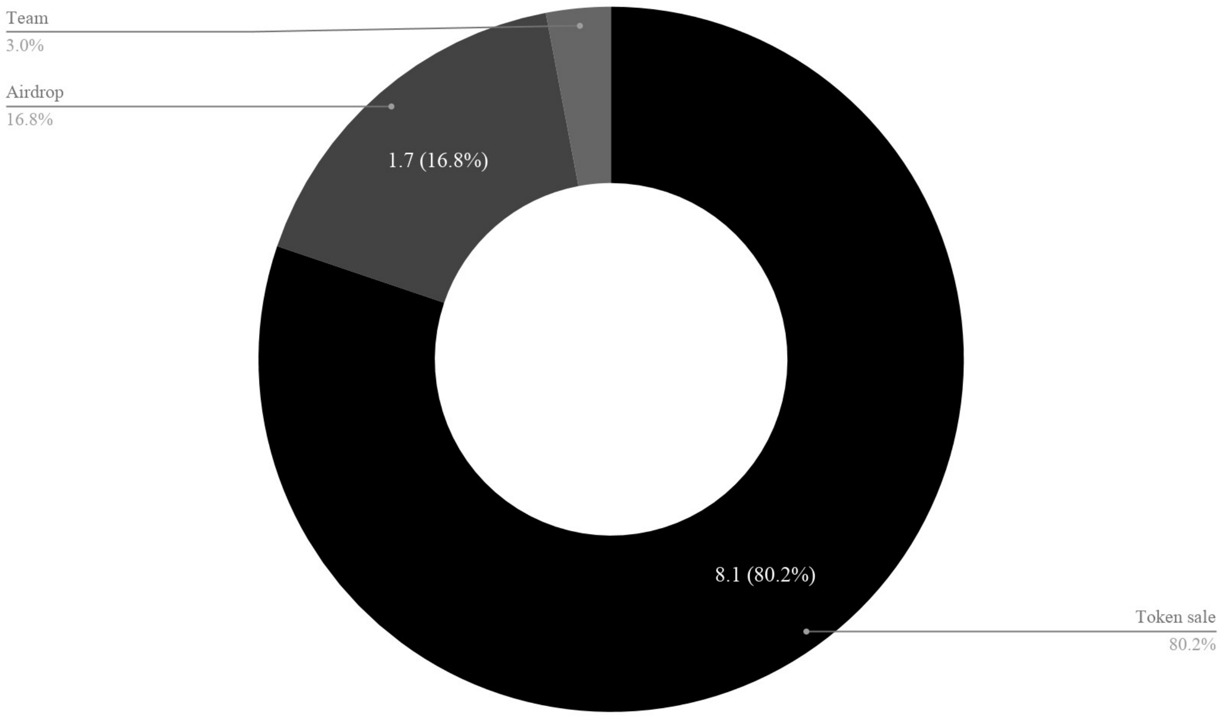
Vesting schedule, per token allocation:

∟ Token sale 30% ann release after 0 years cliff

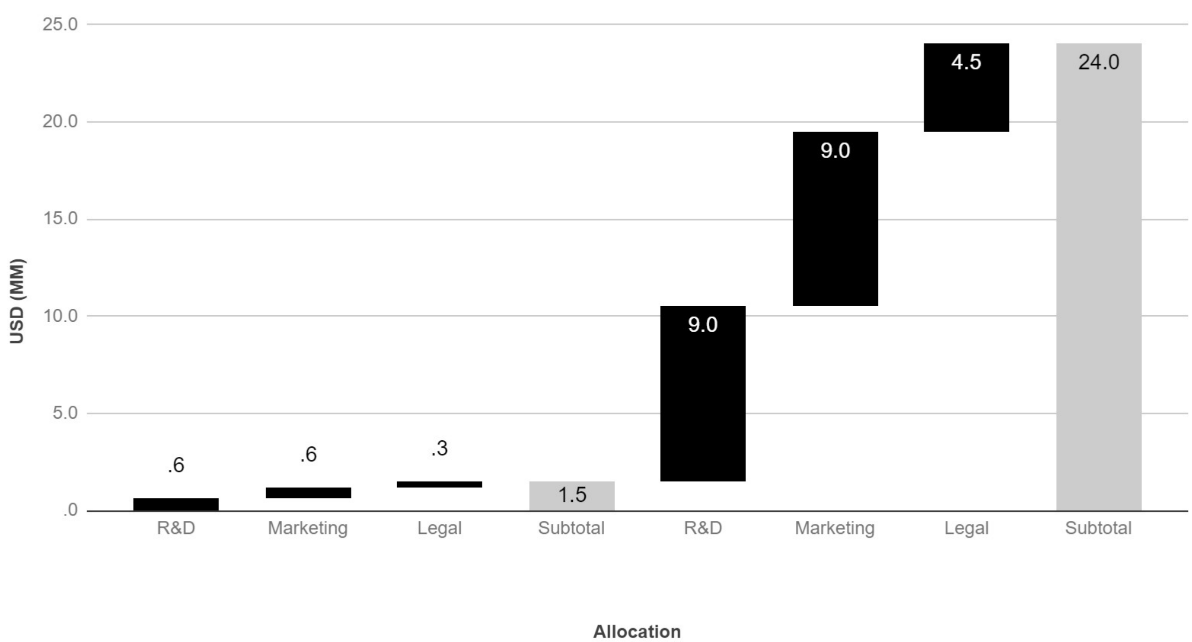
Important: Under SEC rules, this token may constitute as a security contract and as such will not be offered to US unaccredited investors.



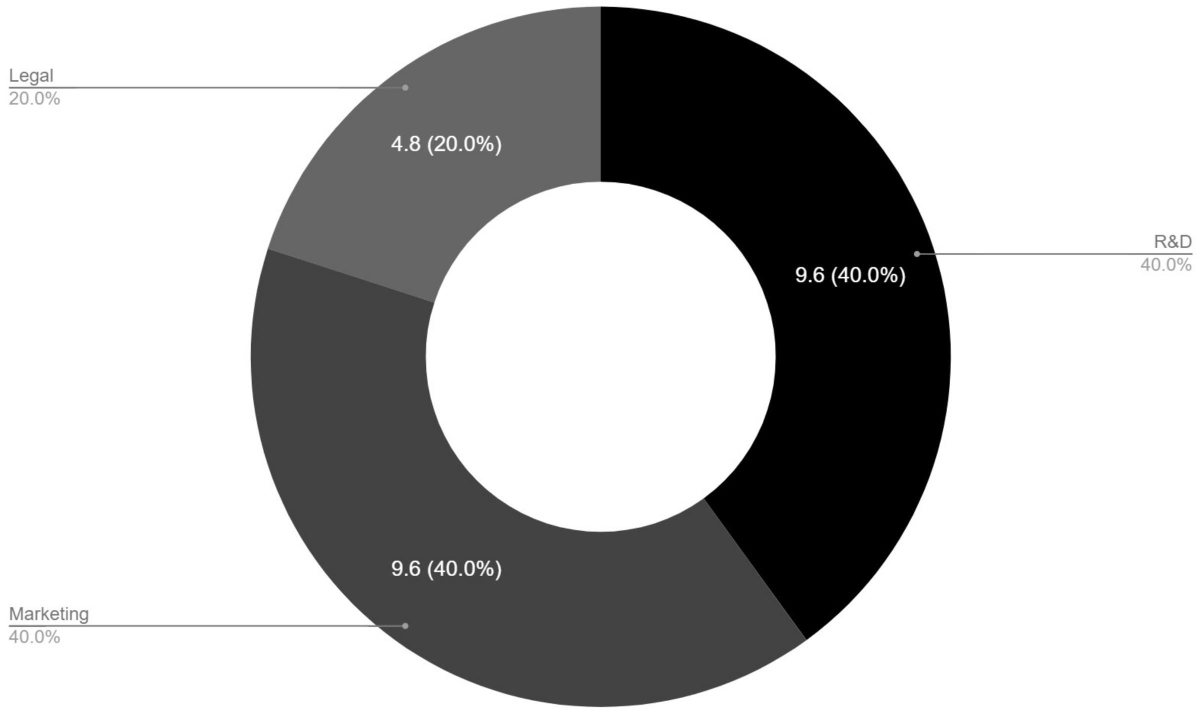
Bonus tokens for each stage. Figures are shown as % bonus versus the minimum campaign event bonus.



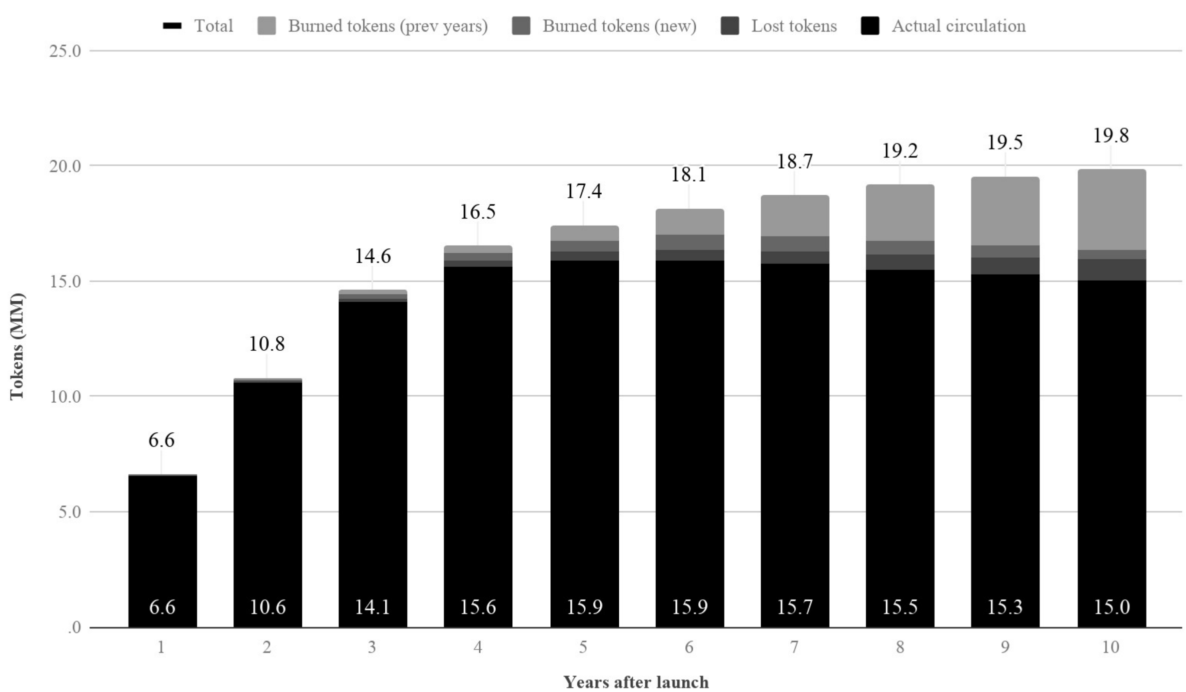
Total tokens allocation. Assumes reached Hardcap.



Breakdown of the funds' utilisation between the Softcap (left) and the Hardcap (right).



Allocation of funds, raised during the ICO (in MM). Assumes reached Hardcap.



Expected actual token circulation (numbers at the bottom) compared to the total released tokens to date (numbers at the top).

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The document presented here is developed by the author based on an evaluation method generally accepted by the cryptocurrency community (quantity theory of money and discounted cash flow analysis) and relies on a generally accepted school of economic thought (monetarist school of economics). That being said, it is important to note that the blockchain and cryptocurrency area is still very new and there is little to no historical data, past performance results and academic research on the topic of cryptocurrencies, let alone on the tokenization , economics and long term valuation of those asset classes. Stocks(equity) has been around since the early 1600s, and it is only in the past 100 years that we have begun to have more comprehensive and widely accepted valuation models. They, however, are still subject to a lot of bias, interpretation and suffered from the quality of their inputs. Cryptocurrencies, on the other hand, have been around since 2008, with a wider recognition around 2016 and an explosion in the number of tokens in 2017. As such it is way too early to evaluate or comment on the performance, monetary policy and models behind any of them. As a result, the author of the current document prefers to rely on sound economic principles backed by data and reasonable assumptions.

Furthermore, the current model relies on a number of assumptions, forecasts and requirements explicitly specified by the company behind the token offering. As such this model is only as good as those assumptions are. Any significant deviation from the input numbers would subsequently impact the outputs of this model. The model presented here aims to provide a fair token price valuation based on the merits of the business behind it (as far as they are known/estimated at the time of the creation of this model) and cannot account for any possible speculative actions and market manipulation by any party as well as for irrational market behaviour.

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Given that the “regulations” for cryptocurrency in most countries at best are highly ambiguous, or completely non-existent, each buyer is strongly advised to carry out a legal and tax analysis concerning the purchase and ownership of cryptocurrency and tokens according to their nationality and place of residence.

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