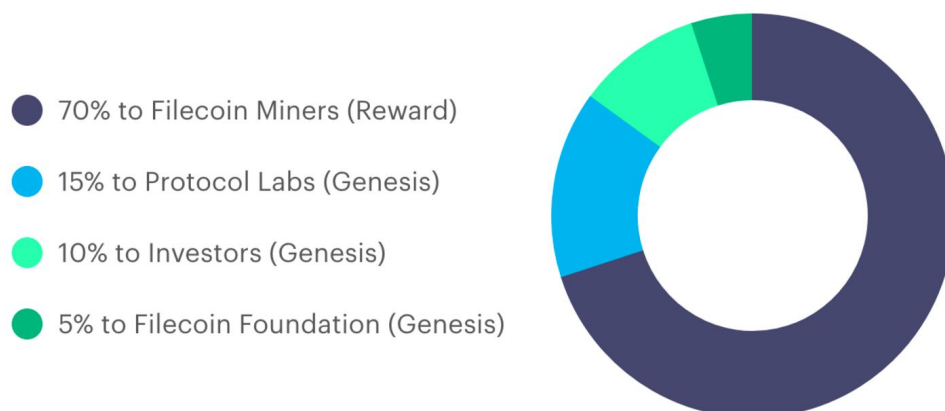


Filecoin Token Sale Economics

*This document describes various aspects of the Filecoin Network, the Filecoin Token Sale, and the economics of both. Any updates to this document will be posted on the CoinList webpage for the Filecoin Token Sale: <https://coinlist.co/currencies/filecoin>. **LEGAL DISCLAIMER:** This document contains forward-looking statements, subject to risks and uncertainties that could cause actual results to differ materially.*

1. Token Allocation

The Filecoin Token will be distributed to the 4 major participating groups in the Filecoin Network. This allocation is written into the protocol itself and the Filecoin blockchain's Genesis block.



Each group is critical to the network's creation, development, growth, and maintenance:

- **70% to Filecoin Miners (*Mining block reward*)**
For providing data storage service, maintaining the blockchain, distributing data, running contracts, and more.
- **15% to Protocol Labs (*Genesis allocation, 6-year linear vesting*)**
For research, engineering, deployment, business development, marketing, distribution, and more.
- **10% to Investors (*Genesis allocation, 6 month to 3 year linear vesting*)**
For funding network development, business development, partnerships, support, and more.
- **5% to Filecoin Foundation (*Genesis allocation, 6-year linear vesting*)**
For long-term network governance, partner support, academic grants, public works, community building, et cetera.

2. The Filecoin Token Sale

Fundraising. [Protocol Labs](#) requires significant funding to develop, launch, and grow the Filecoin network. We must develop all the software required: the mining software, the client software, user interfaces and apps, network infrastructure and monitoring, software that third-party wallets and exchanges need to support Filecoin, integrations with other data storage software, tooling for web applications and dapps to use Filecoin, and much more. We must deploy the network, facilitate its growth to large scale, market to and onboard miners and clients, bring key partners into the ecosystem, and much more.

Offering of Filecoin SAFTs. To raise this funding, Protocol Labs is conducting an offering of SAFTs (see the legal section of this document) through [CoinList](#), our brand new platform for token sales. This offering is happening in two parts: (1) a sale for Protocol Labs and Filecoin advisors, and (2) the broader community and accredited general public. Check out Filecoin's CoinList page: <https://coinlist.co/currencies/filecoin>. Please refer to the **[How to Invest in Filecoin](#)** document for detailed instructions on how the sale will work.

Token Sale. We hope to bring together a large and diverse group of investors from around the world, who want to work closely with us to build the most powerful cloud storage network. We primarily seek strategic investors who have something high-value and unique to offer to Filecoin. We also wish to reach as broad of an investor base as we can; we want people and organizations from countries all over the world, who work in many different kinds of industries. We want our investors to represent many different groups so that Filecoin can quickly come to serve those users and spread across these networks. We want investors who add value, investors who will work with and for the network. We want investors who will share their skills, their knowledge, and their networks to achieve our success. We have structured the token sale to reward a large group of people that can help us build the network, by selling Filecoin at what we think is a much lower price than it will be worth some day (caveat: as with any risky investment of course we cannot make guarantees or predictions). We are unfortunately legally restricted to involve only accredited investors (world-wide investors accredited to US standards or similar -- see legal section).

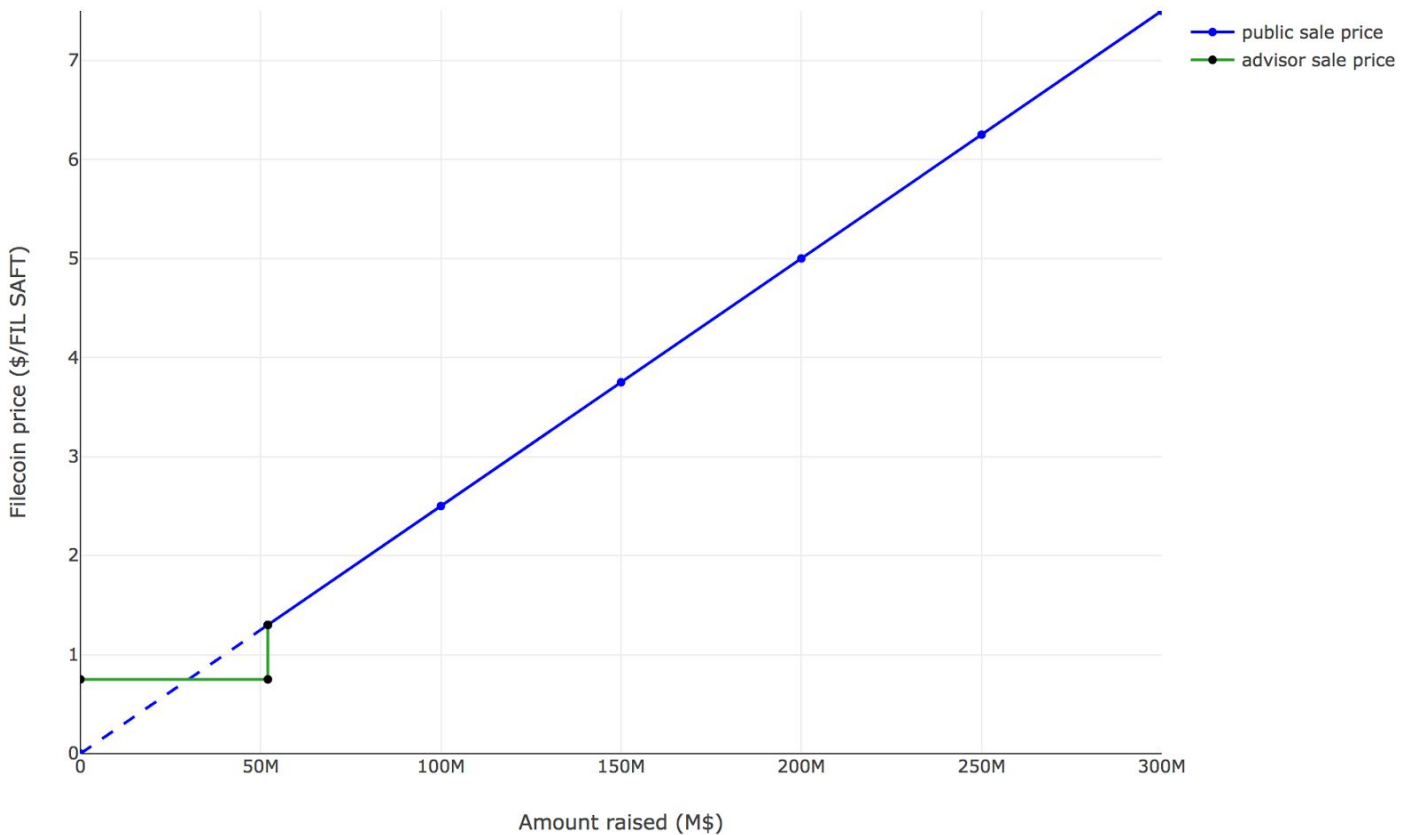
Advisor Sale. For the last few years, we have been working with a group of tremendously valuable strategic advisors; these are individuals and organizations who have helped to build the Filecoin network, who have made strong long-term commitments for the future, and/or who present very significant future opportunities for the network. In order to secure their long-term commitment and alignment, they were offered vesting/discount choices of 1-3 years and 0-30% discount. (Note: to reflect their strong commitment to the Network, the minimum vesting for all advisors is 1 year, a significant time for crypto token networks. This is 2x larger than the public sale minimum vesting.) The Advisor Sale was priced at 0.75 USD/FIL for all advisor sale investors.

Token Sale Details

- **Instrument:** Filecoin SAFTs
- **Increasing Price:** as investments are made, the price increases along the **Price Function**
- **Advisor Sale Price:** \$0.75 USD/FIL for all
- **Public Sale Price Function:** $\text{price} = \max\left(\$1, \frac{\text{amountRaised}}{\$40,000,000}\right) \text{ USD/FIL}$
- **Sale Cap:** 200,000,000 Filecoin (unknown how much in \$USD, as discounts affect totals)
- **Sale Timeline:** Opens August 7th, runs for up to 4 weeks.

$$\text{price} = \max\left(\$1, \frac{\text{amountRaised}}{\$40,000,000}\right)$$

Filecoin Sale Prices

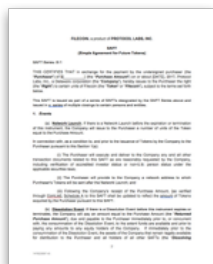


3. Legal Work & The SAFT

Offering Docs. Our offering is being conducted with a novel instrument, called the **SAFT**, created to enable compliant token pre-sales. Read our **Private Placement Memorandum** for a detailed description of our offering and a number of important legal disclosures.

Token Sales & Securities Laws. Most token sales happen as direct sales of the token, a crypto asset. Some happen as pre-sales before the token and the network exist. Some such token sales may not comply with the securities laws of the U.S. and other jurisdictions. Some token sales have chosen to bar US investors from participating for this reason. Others have chosen to offer only to accredited investors. For an excellent review of securities laws as they may or may not apply to crypto tokens, please see [Coin Center's](#) thorough [Framework for Securities Regulation of Cryptocurrencies](#).

Reg. D, 506(c). After months of extensive legal review, and much thought about the evolving landscape of crypto assets and their legal structures, we have come to the conclusion that token sales such as ours should be cautious. Other projects have been found to be selling securities. Therefore, out of an abundance of caution and with the best, long-term interests of the Filecoin Network at heart, we must structure our fundraising sale as an offering of SAFTs, according to and in compliance with SEC Reg D. 506(c) and other U.S. securities laws (see our PPM). Accidentally violating these laws could be a project-ending event!



SAFT. Since the Filecoin Network is in development and it is not yet live, in order to do a compliant token sale, we created the Simple Agreement for Future Tokens (SAFT). The SAFT is a fundraising instrument and legal agreement between two parties, where one party (the buyer) buys tokens to be delivered at a future date by the other party (the seller), after the **Network Launch** or some other event important to the creation of a crypto token network. You can find out more about the SAFT by reading it, and our PPM.

U.S. Accredited Investors. We are required by law to ensure that all U.S. investors who participate in our sale qualify as "[Accredited Investors](#)" (e.g. have over \$200K (or \$300K w/ spouse) in income, or a net-worth over \$1M, etc.). We unfortunately cannot offer the Filecoin Token Sale to US investors who do not meet that requirement. This is understandably thoroughly disappointing for us and for many people in our community, as so many of our staunchest supporters are not accredited. That said, we understand the regulations are in place to protect people from [bad actors](#), and we hope our community understands we must abide by them.

Non-U.S. Investors. Technically, we are not required to apply the same standard to non-U.S. investors, and we may be able to classify the sale to those as a Reg. S offering. In such a case, we would need an extensive, world-wide review of each jurisdiction to figure out what restrictions we do or do not need to apply. This could take months of legal work to address thoroughly. Since the US restrictions tend to be more stringent -- and world-wide investors often invest in US ventures according to US securities laws -- our legal team requires us to apply either our investors' jurisdiction restrictions or at least US restrictions to all investors. We know this comes as a big disappointment to many, and we hope you understand the restrictions we must work under.

4. Vesting & Discounts

Filecoin is not just a network of computers, it is also a network of people and organizations. It will be made successful through the work of all its participants, for many years to come. We aim to make Filecoin massively valuable in the long-term, and we want to attract investors similarly interested in long-term value creation and growth.

Vesting creates long-term alignment. Long-term vesting is a powerful way to strongly incentivize early network participants to improve the network and increase the value of Filecoin for years to come. Protocol Labs and the Filecoin Foundation are deeply committed for the long-term, and 6-year vesting boldly proves that to all other network participants.

Vesting is tough with volatility. We do understand that — especially for smaller investors — a lock up with typical crypto asset volatility can be hard to deal with.

Rewards for vesting. Therefore, instead of forcing long-term vesting for investors, we **reward** it with discounts, and we provide multiple options that can fit different risk profiles.

The vesting schedule for each participating group is as follows:

- **Investors:** 1 year minimum (advisor pre-sale), 6 month minimum (public sale)
- **Protocol Labs:** 6 years, linear vesting
- **Foundation:** 6 years, linear vesting
- **Miners:** Release half life of 6 years

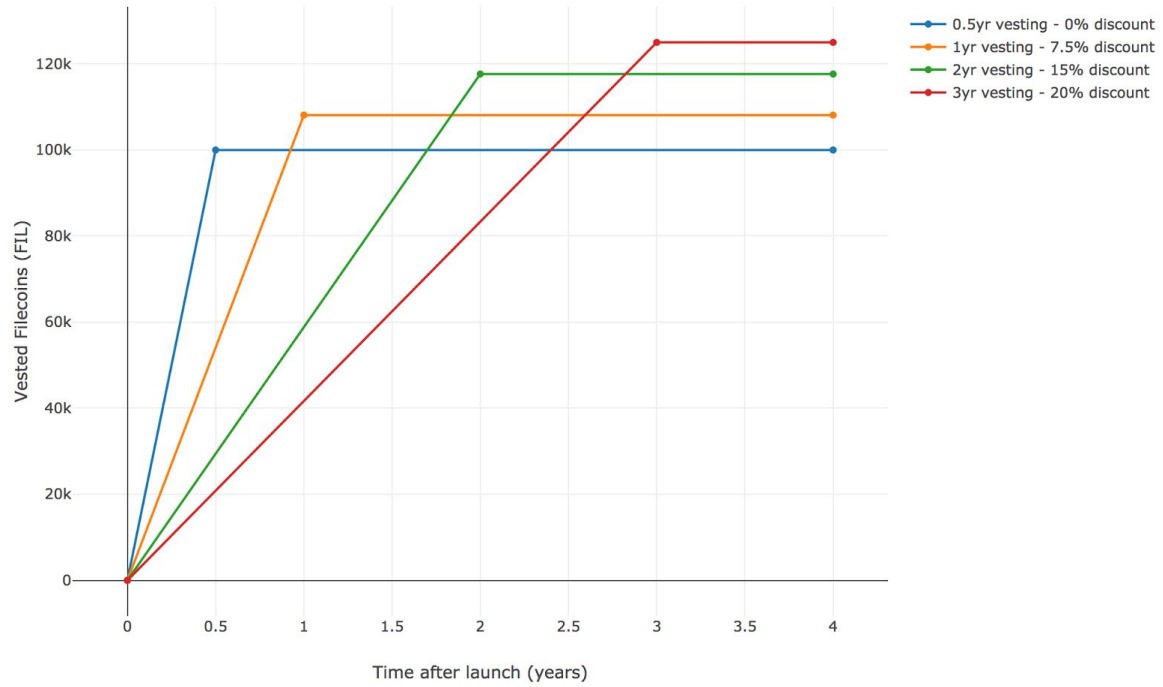
For investors, the following vesting periods and discounts are available:

- 6 month vesting, 0% discount
- 1 year vesting, 7.5% discount
- 2 year vesting, 15% discount
- 3 year vesting, 20% discount

You can see these discounts and linear vesting at work here:

Investor Vesting Schedule

Filecoin liquidity over Time for Different Vesting Schedules for an initial buy of 200,000 USD at 2 USD/FIL.



5. Network Supply, Release Schedule, Market Cap

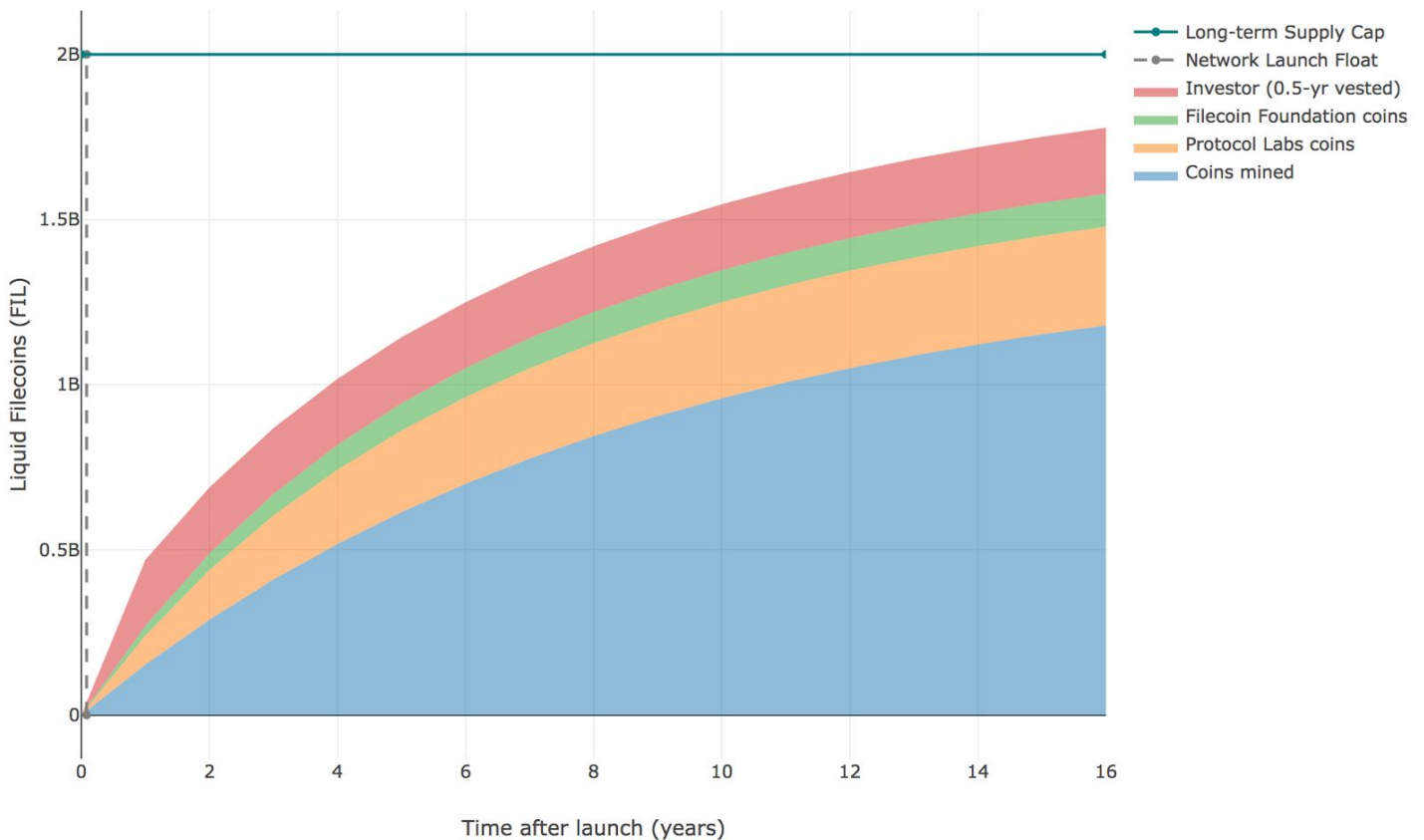
We've created the following graphs to illustrate the Filecoin price during the sale, the network supply, the release schedule, and the market cap at various times and prices. You can find an interactive version, where you can explore different vesting options and other parameters, here:

<https://protocol.github.io/filecoin-econ-graphs/>

Filecoin block rewards are set according to a **6-year half-life** (Bitcoin's is 4), sampled as frequently as every month (Bitcoin is sampled once every four years). Six years is significantly better for the Filecoin Network because it disperses a much larger amount of tokens in years 3 - 9 than the alternative schedule. We think this is important to both sustain network growth during that critical period, and to reward long term investment in the network. Sampling the distribution more frequently than in Bitcoin causes a much smoother adjustment in block reward, and reduces the sudden and drastic overnight effects to the miner base.

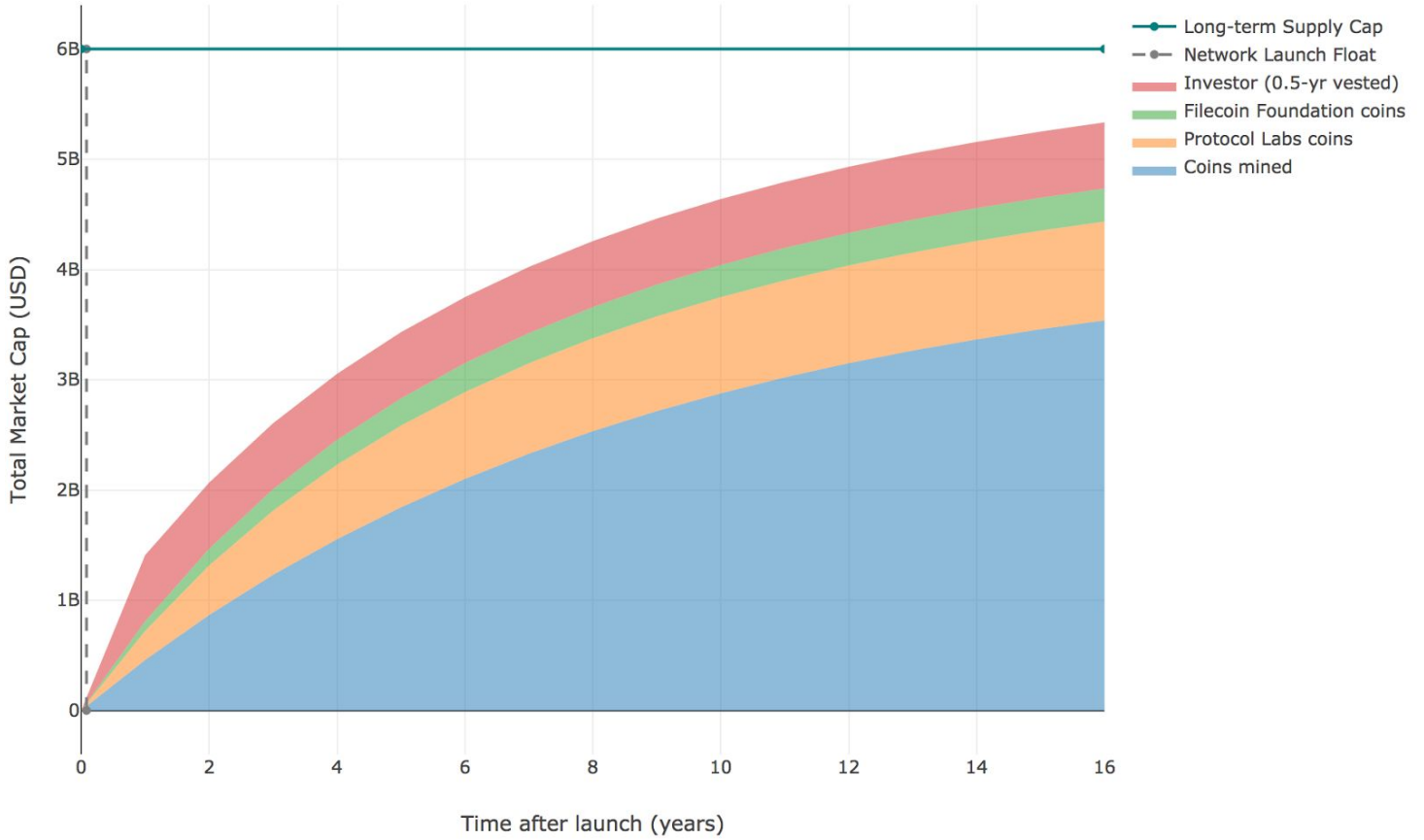
Coin Supply

Model all investors choosing to vest at a constant rate of (simplified)



Market Cap - Value of Filecoins in Circulation

Assume a constant FIL / USD price of 1 FIL is 3 USD



* We may launch the network with 1 month vested already, to ensure float is not zero.

6. Network & Token Sale FAQ

What is the token sale cap?

The cap is in terms of amount of filecoin (FIL), and it is **200,000,000**.

What is the total supply (ever)?

The total supply ever will be: **2,000,000,000 (2 Billion) filecoin**, to be released over decades, similar to Bitcoin. The network should cross half of its supply (1 Billion tokens) around year 4.

But to value the investment, this is the wrong question to ask for valuations. While important, it is not as important immediately and in the early years of the network. Better questions to ask are: “What do the release schedules look like? What is the circulating supply **in the next year, 2 years, 3 years...?**” These questions are much more relevant in the early years of the Network, and for investors seeking to understand token and network valuations at various points in time.

What do the release schedules look like?

The Filecoin token will be released according to the release schedules described earlier in this document. It has long-term, 6-year vesting for Protocol Labs and the Filecoin Foundation, vesting between 6 months and 3 years for investors, and a mining release half-life of 6 years. See the graphs above for a visual representation of these schedules.

What is the circulating supply in the next N years?

There are a number of things affecting the amount of circulating filecoin tokens: (a) the mining release schedule, (b) the vesting schedules, (c) locked up filecoin to cover miner pledges, (d) filecoin locked up as rewards or collaterals in the storage and retrieval markets, (e) filecoin locked up by smart contracts, and (f) filecoin in addresses whose keys are lost. The circulating supply will be affected most by the release and vesting schedules, so take a look at the graphs earlier in this document to get a sense of estimated maximums at various points in time.

What is the implied valuation of the network?

Valuing crypto assets and their networks is hard, and Filecoin will be no exception. The most popular method is by calculating the market cap of the circulating supply (i.e. “last price paid per token” x “total circulating supply”). This method is obviously flawed in many accounts: it does not capture the underlying value of the network, the volatility and fluctuation of these assets, the significant security risks associated with these networks and assets, nor the value of the technology improvements over time. Please do not use this or any other method to value the Filecoin Network or any potential investment, without fully understanding what how a given measure works, what it captures or fails to capture, and how other models work.

That said, taking the release schedules into account, and assuming investors choose medium vesting, a sale ending with Filecoin at \$3 could mean a market cap between \$0 - \$1B in the first year, with circulating supply between 0 and 380M Filecoin. This market cap is similar to the market cap of the Ethereum Network in its first year.

Are we getting the token or paper right now?

The Simple Agreement for Future Tokens (SAFT) is a legal agreement, similar to the YC SAFE. Think of it a bit like a forward contract — the seller (Protocol Labs) sells tokens ahead of time to a buyer (you); the seller must then build the network, and deliver the tokens at Network Launch in the future. We chose to develop the SAFT due to the nature of token pre-sales and questions about legal regulations on token network investments. It turns out that

most investors we've consulted with prefer this structure as it clearly establishes risks, includes provisions that address risks of failure, and legally bind the seller.

What do we do about keeping the token safe? Are there custodians?

Since this transaction is for SAFTs (legal agreements tied to legal entities), you do not have to worry about private keys and custody until we deliver the token. As we get close to Network Launch, we hope to work with popular crypto asset wallets and exchanges to add support for Filecoin.

When do we get the tokens?

All tokens are delivered on network launch and are subject to a certain amount of vesting (also known as a usage restriction). Vesting is selected at time of SAFT purchase, commences at network launch, and ranges from a minimum of 6 months to a maximum of 3 years.

How does vesting work?

Tokens subject to vesting have a usage restriction. They cannot be sold, transferred, spent, or otherwise made use of on the Filecoin network. As each block in the Filecoin blockchain is mined this usage restriction is lifted on a certain amount of tokens, making those tokens usable. This is referred to as **vesting**. The rate at which the usage restriction is lifted — at which the tokens **vest** — is linear, and per blockchain block. For example, an investment with 2 year vesting would have 25% of its tokens available for use 6 months after network launch, 50% available after 1 year, and 100% available (fully vested) 2 years after network launch. Click [here](#) for an interactive tool to view vesting over time.

How often do tokens vest? Monthly, daily, or per block?

Tokens vest per block. This means that some portion of vested tokens is released with each block in the Filecoin blockchain.

Is there a vesting cliff, such as 1-year cliffs in equities?

No. The vesting on Filecoin tokens for investors, Protocol Labs, and the Filecoin Foundation does not have a vesting cliff. Vesting starts linearly from the first block of the network.

What will the float be at Network Launch? 0?

No. We will make sure there is some float at Network Launch. Our current plan is to start off the network with 1 month already vested, but we may opt to do something different, such as start off the network with some small percentage vested.

When do my investment and purchase price get confirmed?

Investments and prices are not final until after payment is confirmed.

CoinList shows you estimated filecoin amounts at current price for convenience only. After payment is received (which can take several seconds for USD payments via pre-funded Angellist accounts or up to 60-120 minutes for certain crypto currencies), the exchange rate and filecoin amounts are confirmed. As investments confirm sequentially, each investment raises the price for all investments following it. Let's say a payment is initiated at price X and takes 30 minutes to confirm. During that time, any inflight payments that get confirmed will increase price to X + Y.

What are the confirmation times for each payment method?

Please check the "How to Invest" document for exact timing and comparisons. Each payment method we accept has different characteristics, particularly different confirmation times. For example, the Bitcoin block time is

estimated to be around 10 min, and CoinList payments clear with 2 confirmations, which means a Bitcoin payment is ***estimated*** to clear in around 20 - 30 min. Warning: network congestion can make blockchains proceed much slower than anticipated! We cannot clear an investment until it is fully confirmed.

Is there a minimum investment requirement or a maximum investment limit for any individual investor?

There is a minimum investment requirement of \$10 USD (or the equivalent in cryptocurrency). There is no maximum investment limit for any individual investor or investing entity.

What happens if I send some payment, but not enough to cover the full investment?

All investments remain open until the full-purchase price is received. This means any underpayment will keep the transaction open and uncompleted. You may still send additional money to the deposit address to complete the transaction until the sale closes, at which point any uncompleted transactions are cancelled. We CANNOT issue a SAFT for partial investments, because the legal agreements signed will be for the EXACT amount you entered and agreed to.

What happens if I send more money than is required for the investment? Will I receive extra filecoin?

No. Please send EXACTLY the amount listed on the CoinList payment page. This is easy with USD, but many crypto token wallets force investors to manually enter the payment amount to send. Please be careful and enter in EXACTLY the right amount (including any additional network transaction fees, if applicable). DO NOT send more than your investment amount. We CANNOT count it, because the legal agreements signed will be for the EXACT amount you entered and agreed to. If you would like to invest more than the original requested amount, please create a new investment.

I sent too much or too little money to an investment. What happens to that money?

Any funds contributed to investments that were NOT completed by the end of the sale (i.e. too little money) will be cancelled. Any extra funds contributed to an investment beyond the investment amount (i.e. too much money) will not be counted. Those funds may be: (a) refunded to the investor, (b) used to cover token sale costs, or (c) donated to the Filecoin Foundation, entirely at our discretion. ***For security reasons, we CANNOT return, use, or donate any such monies until after the sale has ended. Please do not ask us to. We WILL NOT make exceptions, as this is a very high security risk.***