



WHITEPAPER

SEPTEMBER 2021

# KEY HIGHLIGHTS

Grexie is a new ERC20 crypto token offered for free on the Polygon blockchain, users just need to pay the negligible Polygon gas price to receive decreasing allocations of up to 1 million GREX.

The total supply for the token is 1 quadrillion GREX ( $1 \times 10^{15}$ .)

60% of the supply is allocated to a long-running Initial Coin Offering, available through our website at <https://grexie.com>

40% of the supply is allocated to the team and its philanthropic causes, as well as team-led liquidity pools, exchange fees, and airdrops.

The amount of GREX allocated per issue in the Community Distribution halves roughly every 350 million issues. If interest steadily grows, and while there are no guarantees, this should double the value of the token roughly every 350 million issues. This is because the gas price paid for an allocation remains the same, while the amount allocated halves.

There is enough currency for around 12 billion issues of tokens, with 1 GREX allocated per issue after around 8 billion issues of the token.

Available on QuickSwap to purchase in bulk at market-led prices.

# INTRODUCTION

There are a multitude of crypto tokens out there, some of them with several properties and use cases, fulfilling needs of the communities that invest in them and providing value in different ways.

Crypto tokens generally go through an Initial Coin Offering – to seek a community to invest in that token for a promise of greater value in the future.

Many ICOs have hyper inflated token valuations and dubious benefits to the community that they propose to serve.

What if we were to have a simple exchange token that is purely market-led and offered initially for free to anyone willing to pay the negligible gas fee?

Grexie (GREX) offers this. A free token for all, in a long running free Community Distribution, which is deflationary and allows everyone to get a tranche of the crypto token.

Free it is, and initially valueless it is too, but why would anyone want to sell for less than the gas price they paid for it? That is the power of the deflationary long-running Community Distribution – a mechanism that gently influences the market value over time.

# WHY OFFER A FREE TOKEN

We've founded Grexie on two simple but important principals: the value of cryptocurrency; and the importance of speed of adoption within an ever-expanding market.

Firstly, we believe that crypto tokens are the future of the world economy and should be accessible to everyone, but right now they haven't reached their full potential.

If crypto is to truly reach it's potential, we need to find a way to distribute a secure coin to a huge population, and to do so before the waters become so muddled with scams and rug-pulls that the market loses confidence in the general product.

This is why we've created Grexie. We are offering a free coin with no intrinsic value open to anyone and everyone. We believe that over time, if enough people flock to Grexie, there is no reason why it shouldn't be a useful currency for online transactions. However, we are determined that this should be the result of market forces and not some invented ICO stage valuation, hence why we are making the commitment to provide the limited supply of 600 trillion GREX open to the market for free, for over 12 billion allocations.

# OUR BACKGROUND

Grexie is the brain-child of Tim Behrsin. Tim has over 20 years experience in technology, serving many startups and big-name organizations. He has a strong background in full-stack JavaScript and software engineering in general. His interest in Ethereum was garnered in 2015 when it was launched: an innovative platform to create smart verifiable contracts with a secure blockchain environment.

His interest in Ethereum grew from there, and he has been playing with Solidity smart-contracts for the last 6 years on and off, until the idea struck him in 2021 to create his own crypto token on the Ethereum proof-of-work blockchain.

Grexie started on Ethereum in June 2021 after creating an ERC20 token and a smart contract for a deflationary Community Distribution. It soon became clear that gas prices were too high for widespread adoption, and he moved the project to Polygon's proof-of-stake blockchain network in August 2021.

Since then, the project has started to gain traction, with over 200 organic allocations and over 1.5 million courtesy allocations distributed to people's wallets.

## WHY POLYGON

We believe the Ethereum blockchain will emerge as the front-runner in crypto due to its versatility in creating and running smart contracts.

Ethereum, as a classical proof-of-work blockchain, has some pitfalls that mean operating a free crypto token on it, we believe, will not lead to wide adoption across the world's population. As an example of this, gas prices in August 2021 for ERC20 smart contract transfers were very high, and the price for one allocation of GREX would have been exorbitant.

As a result, we have launched on the layer-2 protocol Polygon, which operates a proof-of-stake algorithm to verify transactions. This results in much lower gas fees.

Polygon was designed to interoperate with Ethereum and offers bridging contracts on the Ethereum blockchain to convert WETH to ETH, WMATIC to MATIC, and back again.

This means that whatever value Grexie attains on the Polygon network, can be traded by proxy to tokens and currencies on the Ethereum network, and vice versa.

We believe Polygon is the right choice for Grexie.

# TOKENOMICS

There is no special use case for GREX other than to use it as an exchange token. One day it might be possible to withdraw and deposit fiat-currencies at ATMs connected to your Polygon wallet, connecting GREX to the wider monetary ecosystem, however this is not our aim.

Our aim is simple: to offer an exchange token for free.

The total supply of GREX is 1 quadrillion tokens ( $1 \times 10^{15}$ .) 40% of tokens, 400 trillion GREX, is allocated to the team, liquidity pools on decentralized exchanges, fees for exchanges and airdrops. Fiat for liquidity pools is funded by Grexie, and we aim to offer around 1 trillion GREX on QuickSwap by Jan 2022. 60% of the tokens, 600 trillion GREX, is allocated to Community Distribution, with any remaining quantity once the pool is exhausted being allocated to Grexie.

The Community Distribution pool will have some residual tokens remaining in it once it is exhausted, as not all transactions will have an affiliate associated with them.

To understand the mechanism by which we offer tokens for free, and the tokenomics behind it, it is helpful to have a bit of a refresher of high school mathematics.

A geometric series is a series of the form:

$$\alpha + \alpha r + \alpha r^2 + \alpha r^3 + \dots$$

For  $r < 1$ , a property of a geometric series is that it converges to a finite sum. For example, for  $\alpha = 1$  and  $r = 1/2$  the series converges to 2.

We are giving away tokens with each issue being an element in a geometric series. This leads to a total allocation being a fixed quantity, a finite quantity, and a quantity planned for in advance... and is a limited supply that cannot grow. The fact that it is fixed and finite is important, as we cannot increase the supply to suit our whim. The quantity is fixed, forever, and everyone knows it when they are making investment decisions about the token.

Each allocation is of the form:

$$\propto \left( \frac{\gamma - \alpha}{\gamma} \right)^{n-1}$$

where  $\alpha$  is 1 million GREX,  $\gamma$  is the total Community Distribution pool available of 600 trillion GREX, and  $n$  is the issue number, starting from 1 as the 1<sup>st</sup> issue.



Each allocation might also supply 10% extra GREX per issue to social media affiliates through affiliate links, and so the total pool available is  $600 \div 1.1 = 545.45$  trillion GREX.

Since the Ethereum blockchain is based on fixed-point arithmetic, this doesn't lead to an infinite series, and tends to a limit of 600 trillion GREX after around 12 billion allocations.

In the smart contract, for which you can view the Solidity code on [polygonscan.com](https://polygonscan.com), we calculate the dividend and the divisor to the lower half of the above formula iteratively, so we don't reach an integer overflow in the smart contract and error out.

Due to each allocation being part of a geometric series, the value of GREX received in each allocation decreases in an exponential fashion.

The allocations halve roughly every 350 million issues. Leading to 1 GREX being allocated per issue after about 8 billion issues.

Since the gas price for each issue will remain roughly the same, the value per GREX, solely based on the gas price, roughly doubles every 350 million issues. This assumes, of course, that people don't sell GREX for less than they paid the gas price, and it doesn't account for inflation/deflation in value on open markets. It should not be used as a basis for investment.

With Polygon gas prices for the Community Distribution smart contract currently being between \$0.0001 to \$0.003 this leads to a potential value per issue at the start of the Community Distribution increasing to the region of between \$800 to \$23,000, depending on gas prices, after 8 billion issues.

This is purely a trajectory, and not guaranteed, and no investment advice should be understood or gained from these statements. It is simply mathematics, and there are several factors which could otherwise inflate or deflate this market value of GREX, including but not limited to the price of Polygon and people's perception of GREX on the open markets.

# HOW WE INTEND TO USE PROFITS

The founders are philanthropic Christians at heart. We have seen the struggle homeless people face, firstly in getting housed in safe, secure and comfortable housing, and then to build lives on benefits or low incomes.

We have in the past gone on sandwich runs and donated large sums of money to homeless people on the streets in order to secure nightly accommodation in shelters, or to buy furniture and appliances for their first house on benefits after being homeless. We have also donated money for emergency rental accommodation to avoid being homeless in the first place.

We need capital in order to support this work going forward, and part of the money we raise from the cryptocurrency will be used for the purpose of providing social housing and rehabilitation projects across the world for homeless and low-income renters.

Ultimately, we love God very much, and don't want to see His people suffer on the streets anymore. We want to give what God gives us to His servants on the streets and those struggling on benefits. To give them the chance to live the lives they want to live. Go check out Hebrews 13:3 if you want to know more.

# THE INITIAL COIN OFFERING

People interested in receiving GREX can do so by going to <https://grexie.com> and connecting their wallet using MetaMask or any other Web3 wallet provider.

They can receive up to 1 million GREX per allocation, decreasing for each allocation, and deposit this into their Polygon wallet.

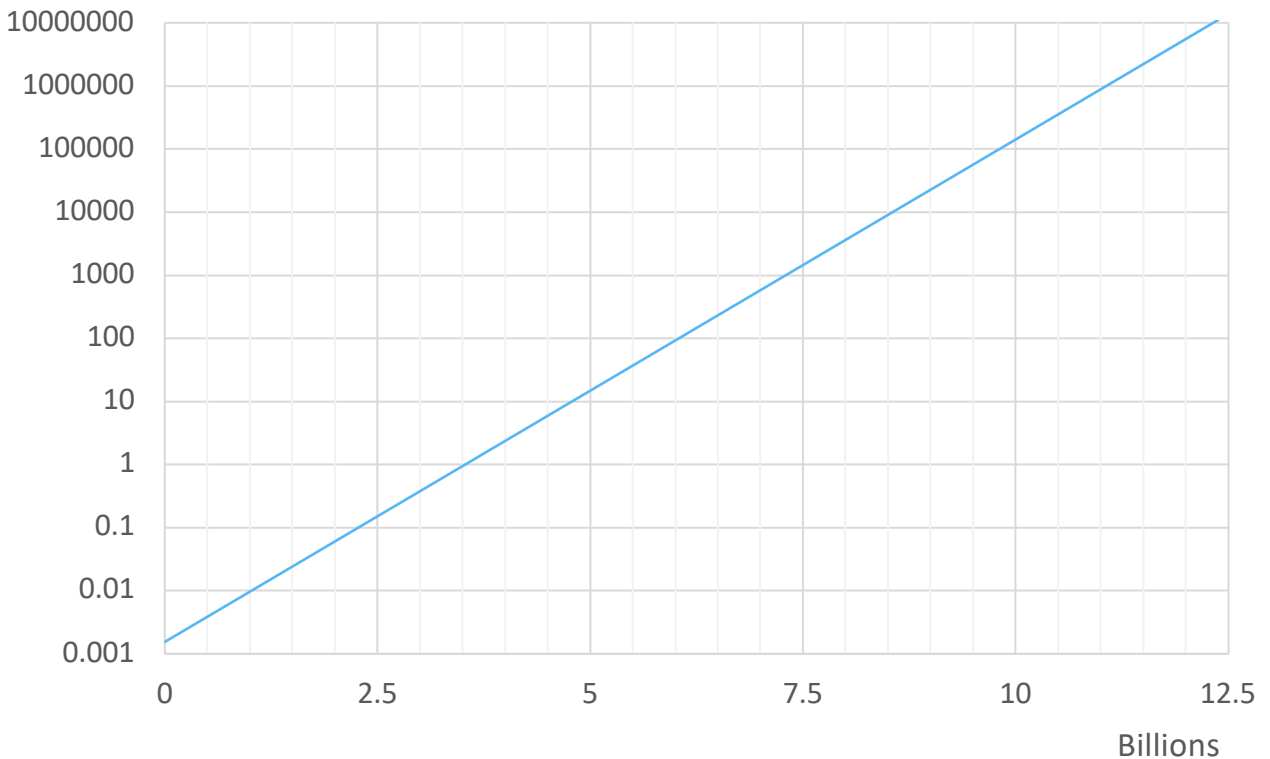
Each allocation costs the user a small gas fee of between \$0.0001 and \$0.003 which is non-refundable and goes straight to the verifier nodes on the Polygon network. The GREX is therefore offered for free, no Polygon is exchanged with the smart contract, it is solely a gas fee the user must pay.

There is always a danger of scams and threats to the Grexie project, and it is more than likely that scam tokens will pop up over time. So, be sure to use the following addresses for interacting with the Grexie Token and the Grexie Community Distribution smart contracts:

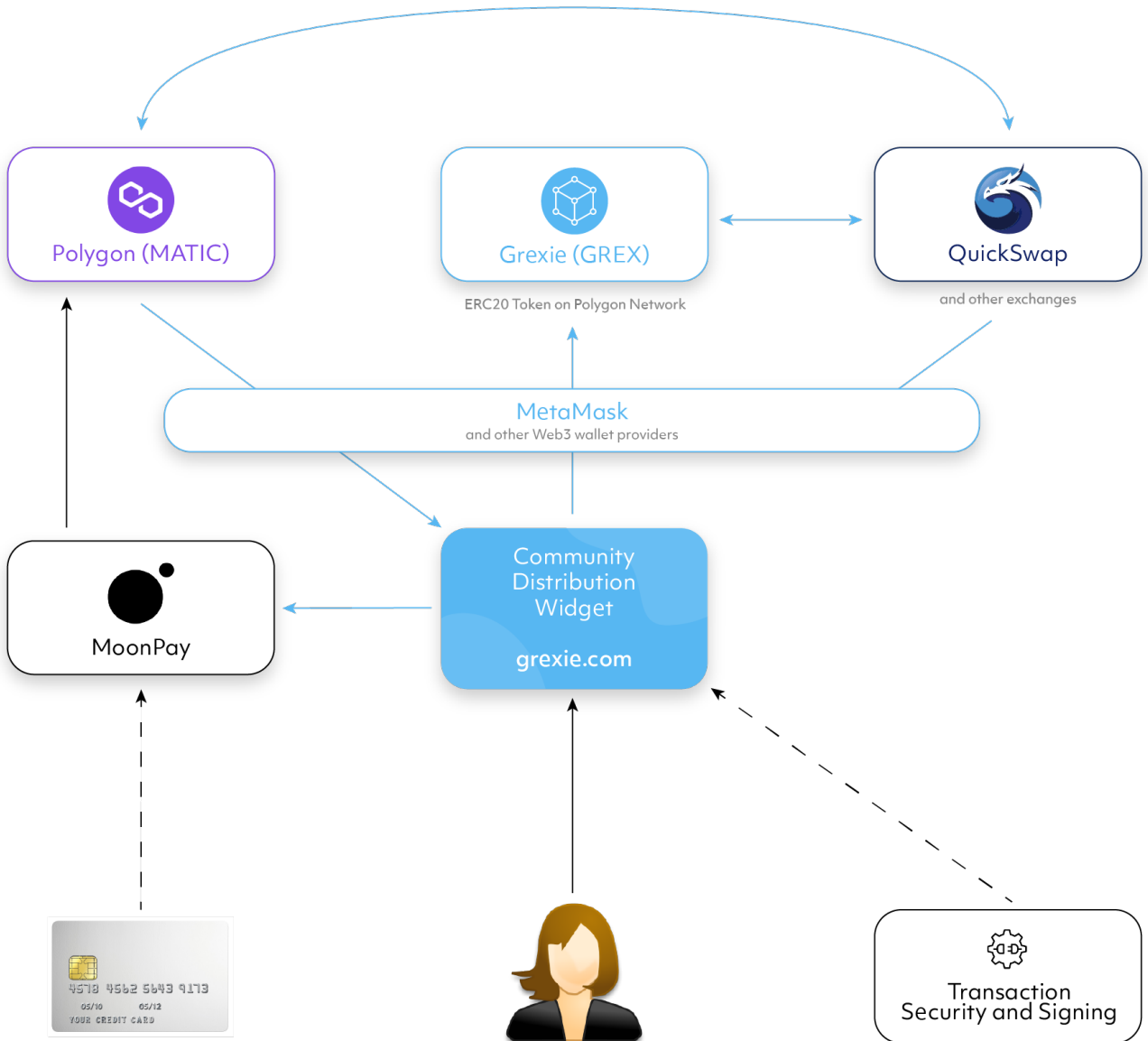
Grexie Token: `0xf9a75e8881af1be80ae80050616185f0b924a03e`

Grexie CD: `0x19F5a4b3B79E220664f27a6Ff3cb927Ae7189506`

The following chart illustrates the potential USD value of 1 million GREX tokens (y-axis), based solely on the average gas price and the amount allocated for each issue, with the issue number on the x-axis. It is solely illustrative and based on simple mathematics, do not use this as a basis for investment.



The following diagram shows how the Grexie infrastructure is set up. Note that all transactions on the Community Distribution Smart Contract require off-chain signing using a reCAPTCHA v3 check to mitigate automation attacks.



# LIQUIDITY ON QUICKSWAP

The previous page shows a potential valuation based on gas prices. This is highly unlikely at the higher end. Instead, the real valuation of the crypto token comes from the market, and it is important to speak of our WMATIC/GREX position on QuickSwap.

We have created a liquidity pool of around 200 billion GREX on QuickSwap. We aim to increase this to about 1 trillion GREX by the end of January 2022.

You can get to the swap page for the WMATIC/GREX pair using this link: <https://bit.ly/grexie-quickswap>

We encourage users to stake WMATIC and GREX and extend this liquidity pool to help encourage growth of the crypto token. Users who create a liquidity pool get a proportional 0.25% fee for transactions on QuickSwap relative to your position in the pool. You can add your own liquidity pool using this link: <https://bit.ly/grexie-quickswap-pool>

We will extend our coverage to other exchanges as we can over the coming months, connect with us on Telegram and Twitter to be informed of updates to this.

# CONCLUSION

We're excited to see the progress Grexie is making already and are very hopeful for its future.

We hope you enjoyed reading through our whitepaper.

Now go get yourselves a few hundred allocations of GREX on <https://grexie.com>

Make sure you join the Telegram Grexie Official Community group chat on our website and follow us on Twitter.

Also be sure to connect your wallet on our website and share the news far and wide by posting a Tweet from the Community Distribution widget to your followers – you will receive 10% additional GREX when your followers receive allocations.

Happy GREXing!





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<https://grexie.com>

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