

# Nucoin Litepaper



December

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# What is Nucoin?

With the Nucoin program, we set out to empower our users by giving them ownership over their digital identity in a decentralized world. In this world, Nucoin (NCN) is the native crypto utility token that powers and rewards our users' engagement with their favorite brands, as part of a new, innovative loyalty network.

Different brands, or "Program Sponsors", besides Nubank can join the network in the future. By doing this, they will receive a certain amount of Nucoins that they can then in turn distribute to their users as benefits. The more value these sponsors create for users, the more Nucoins they will receive to distribute. This mechanism incentivizes widespread adoption of the program, empowers users to vote for their preferred brands through their interactions, and ultimately creates a network effect that is greater than the sum of its parts, for the benefit of users and sponsors alike.

Nubank will be the first sponsor of Nucoin and provide the initial utility for Nucoin holders as detailed below. Besides, the Nucoin network infrastructure and blockchain protocol are currently being developed and maintained by a dedicated internal team at Nubank, and further supported by Polygon labs.



# Who is Nubank?

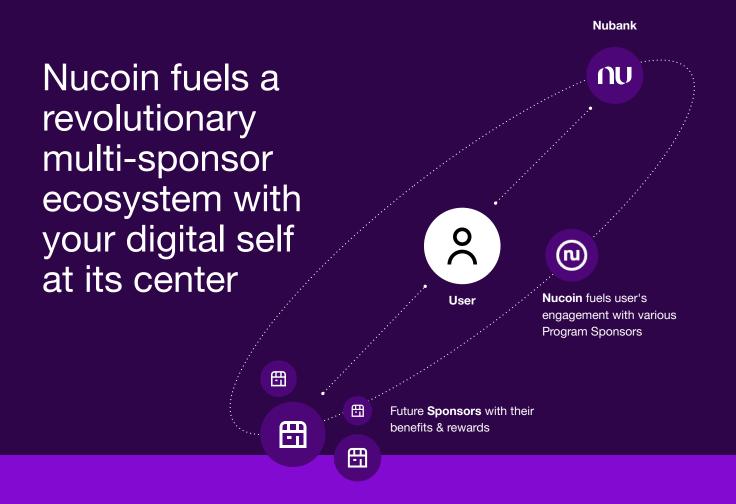
Nubank is one of the world's largest digital banking platforms, serving over 90 million customers in Brazil, Mexico and Colombia. The company started its operations in 2013 in Brazil offering a free digital credit card which quickly went viral for its simplicity, clean - purple design and impeccable customer service.

Since then, Nubank expanded its product portfolio and currently offers a broad suite of products ranging from checking accounts to personal loans, investments, insurance and a marketplace. The company has offices in all the countries it operates in and also in the US, Germany and Argentina with over 8,000 employees worldwide. Nubank went public on the New York Stock Exchange in December 2021 (NYSE:NU).

Throughout that journey, Nubank kept very high standards of quality and customer-centricity for its products and services. Recently, Nubank was named <u>the most valuable brand in Brazil</u> across all categories.

For more information please refer to Nubank's investor relations webpage.





#### Your digital self at the center

You and your digital self are put in the very center of the entire Nucoin loyalty ecosystem. *You* decide which brands within this ecosystem you want to interact with. Once you have earned Nucoins as rewards, you as the owner are in full control of these tokens. They don't expire and it's up to you to decide whether you want to keep and store your Nucoins for later use, freeze them to level up, spend or trade them with other users for real money as well as other digital assets.

#### **Our active NuCommunity**

Our user-centric philosophy extends to how we design and develop products. As part of the Nucoin program, we invited key members of Nubank's NuCommunity as well as crypto experts to collaborate with us and give their feedback and input to our product ahead of the public launch. In the spirit of web3, we want to make our users co-owners of the program they use. Nucoin users will be invited to join this community and contribute to the future development of Nucoin. Unlock benefits of your preferred sponsors by *freezing* Nucoins for 6 months



#### Your decision to freeze Nucoins as a vote for your preferred sponsors

By freezing a certain amount of your Nucoins, you can demonstrate your support for a particular brand and unlock rewards in return. Frozen Nucoins are locked for a period of 6 months and can not be spent for any other purpose during that period. This mechanism allows us to track which brands are offering the most value to customers. The amount of new Nucoins that sponsors can use to reward their customers is based on the number of Nucoins that users have frozen in support of those brands. After the lock-up period ends, your Nucoins unfreeze and you can freely use them again.

Over time, those brands that provide the best benefits to Nucoin users will be able to distribute a larger proportion of Nucoins to their own customers, creating a flywheel effect. The more value a brand offers to Nucoin customers, the more Nucoins it will be able to distribute, leading to even more value for its customers. By engaging with sponsors and freezing Nucoins as a commitment to them, you can effectively vote for your preferred sponsors and shape the future direction of the program.

As Nucoin's first sponsor, Nubank offers a variety of exclusive rewards





**Airdrop.** Get your initial amount of Nucoins free of charge as a symbol of recognition for your loyalty to Nubank in the past.



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**Nucoin community.** Give suggestions and feedback on decisions that will be implemented in the future Nucoin protocol and product.



**Card transaction coinback.** Receive a fixed amount of Nucoins for every R\$1 you spend on your Nubank card, either debit or credit.

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**More to come in the future.** The Nucoin loyalty program will be constantly evolving, based on the feedback from our community - stay tuned for more!

**NuCrypto purchase coinback.** Receive a fixed amount of Nucoins for every R\$ of crypto you purchase on the Nubank crypto exchange.

### Freeze Nucoins and level up to activate benefits with Nubank

Sign up for the program in the Nubank app to achieve the first level and increase your benefits by freezing more of your Nucoins for a period of 6 months

	Frozen Nucoins required	Bonus Nucoins for every R\$1 spent	
		Card transactions <sup>1</sup>	NuCrypto purchase <sup>2</sup>
Level 1	0	0.00	0.00
Level 2	50	0.01	0.01
Level 3	150	0.02	0.02
Level 4	750	0.04	0.04
Level 5	2,500	0.07	0.07
Level 6	50,000	0.30	0.30
Level 7	500,000	1.00	1.00

1) Bonus is given in number of Nucoins for every R\$1 spent;

2) Bonus is given in number of Nucoins for every R\$1 spent; Only applicable on purchases using NuCrypto;

General note: The Nucoin benefit program will be reviewed every 6 months after its launch and may be changed in the future.



### Earn Nucoins as a reward whenever you engage with eligible Nubank products such as credit card, debit card or NuCrypto.



#### Nico

Earns NCN 0.01 for every R\$ 1 spent

Level 2 NCN 61 frozen

Spent R\$ 480 on his credit card last month and received a bonus of NCN 4.8 as a reward.



Marcela
<u>Earns NCN 1.00 for every R\$ 1 spent</u>

Level 7 NCN 512,746 frozen

Bought a R\$ 1,200 ticket to travel with her friends and received NCN 1,200 back on the spot.



**José Carlos** Earns NCN 0.04 for every R\$ 1 spent

Level 4 NCN 1,278 frozen

Invests R\$ 500 in Bitcoin every month and receives a reward of NCN 20 with each purchase.

100 billion Nucoins will be created. Up to 80% will be distributed as rewards.

A maximum supply of **100 billion Nucoins** has been minted upfront and will be distributed among various pools, including Sponsors and Treasury, as outlined below. Of these 100 billion Nucoins, 80% can be distributed as user rewards by Nubank and other sponsors in the future. This distribution will only take place gradually over several years.

You can find more details on token allocation on our <u>Nucoin Block Explorer</u> website.

Sponsor Round Pool 60%

Sponsor Seed Pool 20%

Nucoin Treasury 20%

## Sponsor Round Pool

60%

Nucoins from the Round Pool are constantly issued on a daily basis, starting at a rate of 6% of the total supply per year, or roughly 16 million Nucoins per day, for the first 2 years. This rate is then decreased by 20% every second year, to 4.8% per year or roughly 13 million Nucoins per day at the start of year 3, and so on. This mechanism ensures that the loyalty program will not run out of Nucoins in the foreseeable future and allows it to operate for decades. A portion of these daily-issued Nucoins is immediately burned, based on underutilization of the Seed Pool. E.g., if 30% of the Seed Pool has already been allocated, 70% of that daily lot is burned. This ensures that newly created Nucoins that are not used for the purpose of the loyalty program are not brought into circulation.

## Sponsor Seed Pool

20%

Initially, each sponsor is assigned a fixed amount of Nucoins to distribute from the Seed Pool. The size of the lots can vary based on the time the sponsor joins the program and the relative value it brings to the user base. Nubank, as the first sponsor of the program, will receive 25% of this seed pool, or 5% of the total supply.

## Nucoin Treasury

20%

The Treasury will use a portion of the Nucoins to pay for expenses associated with maintaining and expanding the protocol. These expenses include marketing costs, partnerships, and operational expenses such as salaries and infrastructure costs. Nucoins will only ever be sold by the Treasury to incur or reimburse these expenses. Up to 5% of the total supply can be allocated to Nucoin team members under a specific schedule as well as lockup restrictions.

## We leverage state-of-the art blockchain technology, built on the Polygon network

## Leveraging industry-leading Polygon technology

Nubank has developed Nucoin as a native token on its own network, utilizing the Polygon Edge and Supernets technologies. Polygon is one of the leading blockchains globally, with over 53,000 applications built on its platform, over 2.1 billion total transactions processed, and more than 174.9 million individual user addresses. The Polygon network hosts some of the biggest web3 projects, such as Aave, Uniswap, and OpenSea, and has partnerships with renowned companies like Meta, Stripe, and Adobe.

#### A blockchain built for scale, with environmental responsibility in mind

Nucoin uses a Proof-of-Authority (PoA) consensus algorithm, in which a select group of trusted network participants confirm transactions by attesting to their validity using their reputation rather than their assets or computing power as in Proof-of-Stake (PoS) and Proof-of-Work (PoW) algorithms, respectively. Transactions on the Nucoin network are validated by 8 validator nodes operated by trusted sponsors and partners of the Nucoin ecosystem, who are nominated for this role, known to us, and can therefore be held accountable for their actions. PoA generally requires less computing power and energy compared to PoW, making it more scalable and environmentally sustainable. The Nucoin network leverages Polygon Edge technology to deliver highly scalable transaction processing and rapid block confirmation times. Polygon itself is carbon neutral and aims to lead the carbon-free web3 ecosystem.

# Commitment to the highest standards of security and transparency

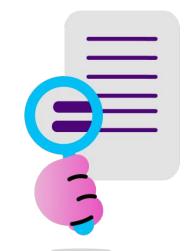
Nubank provides a highly secure and user-friendly solution for holding Nucoin funds in safe custody, which is seamlessly integrated into the Nubank app. In the future, we also intend to cater to users who want to take custody into their own hands by either generating and storing their own keys or withdrawing Nucoins into a separate wallet. To ensure the highest level of security, the code for our blockchain, including wallet architecture and smart contracts, has been audited by industry expert *Hexens*.

In general, all Nucoin transactions are made transparent - of course in an anonymized way - and can be monitored on our public <u>Nucoin Block</u> <u>Explorer</u>.



# Nucoin Legal Disclaimer

Nucoin is a utility token that is part of a rewards and benefits program offered to customers of Nubank and other companies within the Nubank Group. The materials and/or information provided here are for informational purposes only and do not constitute, under any circumstances, an offer of securities, in Brazil or any other country. Nucoins are available only to customers of Nubank Group companies in Brazil, so U.S. person(s), persons located in the U.S. or restricted locations (as defined in the Nucoin Program Rules) may not receive, own, purchase, sell or trade Nucoins. We recommend that you familiarize yourself with the terms and features of Nucoin and read the Nucoin Program Rules before joining the Program and/or before purchasing Nucoins.



## Nucoin Liquidity Pool disclosure

You, as the owner of Nucoin ("NCN"), are in full control of your assets. You may be able to buy and sell NCN for R\$ at any point in time. Each buy and sell transaction that you or other customers initiate on Nubank's app is executed through a mechanism called "**Liquidity Pool**"<sup>1</sup>.

In essence, the Liquidity Pool is a pool composed of a mix of two assets: (i) NCNs and (ii) Brazilian Reais (R\$). The proportion between the two assets determines the reference price of NCNs in R\$ at any point in time. To illustrate this concept, when the Liquidity Pool was first established in June 23, 2023, it received a contribution from Nubank of exactly 1,438,220,385 NCNs (the "**Initial NCNs Contribution**") and R\$ 14,764,202.38 (the "**Initial Cash Contribution**") which defined the initial reference price of R\$ 0.010266 per NCN. The initial reference price was obtained by the division of the initial cash contribution by the initial NCNs contribution.

That ratio between NCNs and R\$ - and, by consequence, the reference price of NCNs in R\$ - changes based exclusively on supply and demand as purchase and sale orders are processed by the Liquidity Pool. Whenever a customer buys Nucoins, he or she sends a certain amount of R\$ to the Liquidity Pool (the "**Cash Proceeds from Customers**") and, in exchange, receives a certain amount of NCNs based on the reference price at that moment. Conversely, whenever a customer sells Nucoins, he or she sends Nucoins to the Liquidity Pool and swaps them for R\$ based on the price at that moment - as a result, the Liquidity Pool uses its cash balances (which are formed by the Initial Cash Contribution and the Cash Proceeds from Customers) to pay customers, consequently reducing the total cash remaining in the Liquidity Pool (and also the reference price of NCNs).

Over time, if there are more Nucoins being bought from than being sold to the Liquidity Pool (a "**Net Positive Demand**"), it will end up with (i) a lower amount of NCNs and (ii) a higher amount of R\$ - as a consequence, Nucoin's price will increase. Conversely, if there are more Nucoins being sold to than being bought from the Liquidity Pool (a "**Net Negative Demand**"), it will end up with (i) a higher amount of NCNs and (ii) a lower amount of R\$ - as a consequence, Nucoin's price will decrease.

Since we launched, we have had periods of Net Positive Demand from Clients and periods of Net Negative Demand from Clients. At the end of December 28, 2023, for instance, the Liquidity Pool had approximately R\$ 45,018,478.01 and 500,822,599 NCNs. Compared to its launch, the Net Positive Demand led to an increase in the Liquidity Pool of R\$ 30,254,275.63 and a decrease of 937,397,786 NCNs. As a result, NCN's reference price related exclusively to the cash and NCNs which are part of the liquidity pool increased from the initial R\$ 0.010266 per NCN to R\$ 0.089889.

Nubank has no intention of adding more R\$ or more NCNs to the Liquidity Pool and, as a result, Nucoin's price can fluctuate significantly based on the Net Positive or Net Negative Demand from customers. In a scenario of customers deciding to sell all their Nucoins back to the Liquidity Pool, the total monetary value that would be available to customers in the Liquidity Pool is limited by the amount of R\$ available inside the Liquidity Pool. As more Nucoins are distributed over time by Nubank to its customers or to partners from the ecosystem, the total reference price can decrease because the total number of Nucoins in circulation increases and therefore circulating supply grows which can happen independently of the amount of R\$ inside the Liquidity Pool. For reference, on December 28, 2023 there were R\$ 45,018,478.01 inside the Liquidity Pool and 3,617,784,967 NCNs in circulation, implying an average reference price of R\$ 0.012444 per NCN in circulation. **That means that if the customers decide to sell all Nucoins in circulation, Nucoin's reference price would drop significantly with customers receiving, on average, a much lower price than the initial reference price of that day or the price they paid for; and consequently customers may incur losses. In the same case, Nubank would also lose the initial cash contribution to the liquidity pool, which corresponds to the total amount committed by Nubank with the liquidity pool mechanism. <b>Nubank has no commitment or legal obligation to repurchase NCNs by the reference price or the total reference price.** More information on Nucoin's price, circulating supply and liquidity pool depth can be found at <u>https://explorer.nucoin.com.br/</u>.



1) We chose a specific implementation of the Liquidity Pool using an algorithm called the "Constant Product" model in which the multiplication of NCNs inside the Liquidity Pool and R\$ inside the Liquidity Pool is kept constant over time except for the spread charged by the Liquidity Pool in each transaction.



Our partners

