

# Brazilian Real Coin (BRC)

# Summary

Changelog .....	3
Abstract.....	4
Monetary System.....	4
Blockchain and Technology .....	5
Governance .....	6
BRL - Collateral, Proof of Reserve and Audit .....	7
Use Cases .....	8
Flow of Funds.....	10
Price Regulation .....	11
Glossary of Terms .....	12
References.....	13

# Changelog

Version	Date	Changes
1.0	July 2022	White paper release

---

# Abstract

We believe that the global cryptocurrency market should be more accessible to all people. The **Brazilian Real Coin (BRC)** is a token with **stablecoin** properties indexed to the Real (BRL), 100% collateralized and developed at Ethereum with the future possibility of expansion to other blockchain platforms. It facilitates the exchange between Real and other cryptocurrencies, eliminates volatility problems and will allow payments and several other use cases in the future. Issued by an entity dedicated to this purpose and backed by reais in regulated accounts by the Brazilian Central Bank, the BRC is robust, secure, and has high liquidity and ease of integration with major market players, bringing real utility on a large scale. In order to ensure its integrity and transparency to the market, the BRC is regularly audited by renowned companies to monitor and ensure that the parity between the tokens and their reserve in Brazilian reais always exists. Throughout this document its technological basis, governance, and movement models will be described.

## Monetary System

Since the 16th century Brazil has had nine fiduciary currencies instituted in its history: Réis, Cruzeiro (3 times), Cruzeiro Novo, Cruzado, Cruzado Novo, Cruzeiro Real, and **Real** (Banco Central do Brasil, 2007). All of them existed in their historical contexts and served the population as a method of payment, as a form of attributing value to things and also as a way to save their economies. Just as the world is evolving, so is money and the way we use it. We deal more and more in our daily lives with technologies for electronic money transfers, online payments, digital wallets, and the trend is for this to increase.

As part of this evolution, we bring you the **Brazilian Real Coin (BRC)** token, a stablecoin indexed to the Real, with one-to-one parity and fully backed. The BRC comes to innovate the way of dealing with the Real and to democratize access to cryptocurrencies, being an easy and safe way to have their equivalents in Real.

The BRC's role is not to replace but to be part of the current monetary system, facilitating the sending and receiving of values, the way payments are made, creating new applications and incorporating cryptocurrencies into everyone's routine. Working together with regulatory initiatives to build a strong, secure currency that brings benefits and relevant applications to all its users.

## Blockchain and Technology

The Brazilian Real Coin is developed using **blockchain**: a decentralized infrastructure for storing records that enables the existence of digital assets of various kinds, including, primarily, digital currencies. It is the blockchain that makes cryptocurrencies secure; it keeps the history of all the movements that have already taken place. The records made are encrypted and decentralized, which makes fraud and intrusion attempts impossible

The chosen technology for the initial development and deployment of the Brazilian Real Coin is **Ethereum**. Ethereum is the next generation of decentralized encrypted ledgers, designed to allow users to encode transactions, smart contracts and decentralized applications on the blockchain (Ethereum, 2022). Some of the applications enabled by Ethereum are:

- **Cryptocurrency and Tokens (Fungible tokens);**
- **Smart Contracts;**
- **NFTs (Non-fungible tokens);**
- **And other applications that are still being created.**

In November 2013, Vitalik Buterin released the whitepaper that inaugurated Ethereum. In April 2014, its technical definitions were published and, in July of the same year, ethereum began to be traded. Ethereum's philosophy is described by some values defined in its whitepaper: simplicity, universality, modularity, non-discrimination and agility (Ethereum, 2014).

In a second step, BRC can be deployed on other blockchain platforms to give more agility and scalability to its users. A future deployment

of BRC could happen on both Ethereum-based Layer-2 solutions (e.g. Optimism, Arbitrum, etc.) and other prominent Layer-1 platforms (e.g. Polygon, Solana, Avalanche, Neo, etc.).

The **Brazilian Real Coin (BRC)** is a token developed using the Ethereum platform's **ERC-20**<sup>1</sup> standard. ERC-20 introduces a standard for **Fungible Tokens**, meaning that they have a property that makes each Token exactly equal (in type and value) to another Token of the same type. This is an important property for the creation of a stablecoin, as it ensures that circulating tokens can be broken into smaller amounts but treated equally.

**Stablecoins** are cryptocurrencies with low volatility, which means with little price fluctuation over time. These cryptocurrencies seek to follow a reference price, such as the dollar, euro, real, or other economic indexes. In other words, if a stablecoin has the dollar as a reference, its price follows the price of the dollar, seeking to maintain parity with it.

To follow the reference price, stablecoins can be made in two ways: **collateralized** or non collateralized. In this white paper will be addressed only collateralized cryptocurrencies. Being collateralized means that the stablecoin is fully backed, a guarantee that assures its value. For every 1 **Brazilian Real Coin (BRC)** there is 1 real that will serve as a collateral to ensure the value of the cryptocurrency.

## Governance

The issuance of the BRC is carried out through a issuer company<sup>2</sup>, an independent company created for this purpose, from now on referred to as "issuer". Its goal is to provide support and governance for the issuance of BRCs and its main sponsor is PicPay.

Founded in the city of Vitória, Espírito Santo, Brazil, PicPay is a technology company with a mission to make life easier by reinventing the way people deal with money, shop, and communicate. PicPay is part of this initiative for the same reason: to use the BRC to democratize and simplify access to the world of cryptocurrencies and transform the way people deal with them.

---

1 ERC-20, available in <https://eips.ethereum.org/EIPS/eip-20>

2 Issuer company in founding process.

As a **super app** PicPay seeks to offer products and services for every moment of its customers' lives by combining the benefits of the business model's pillars into a single platform: social, crypto, digital wallet, financial marketplace, PicPay store and ads (PicPay, 2021).

## BRL - Collateral, Proof of Reserve and Audit

The collateral is responsible for guaranteeing the value of a stablecoin. The BRC is backed by Brazilian reais held in low-risk, high-liquidity investments (e.g. Brazilian government bonds, U.S. treasury bonds, and other financial products), where the funds are always greater than or equal to the total amount of BRCs issued. In other words, there is always a quantity of reais in financial investments equal to or greater than the number of BRCs issued.

PicPay participates in the custody of all BRCs collateral, ensuring their security and that all the value is stored in segregated accounts regulated by the Brazilian Central Bank. Since the values in these accounts are segregated, they are not company assets and are guaranteed in case of insolvency.

And in order to provide the necessary transparency to users and the market around the collateral, periodic audits will be performed and disclosed by an independent company to ensure that the volume in reserve is equivalent to the volume of stablecoins in circulation. The issuer works together with the most renowned auditing firms in the market to monitor and guarantee to the market the parity of the tokens and their reserve in Real.

In addition, the issuer has the goal of providing a Transparency Page (also called "BRC Dashboard"), where the following information is made available, initially, on a three-monthly basis:

- **Total BRC issued in the market;**
- **Total Reais in reserve;**
- **External Auditors' Report.**

# Use Cases

Below we list the **long-term** vision for the BRC use cases:

## **Facilitate the exchange between cryptocurrencies and Real, giving investors greater access to different cryptocurrencies**

Sending and receiving fiat currencies to exchanges can be expensive and slow. BRCs can be kept as a reserve in stablecoins and serve as an intermediary between fiat currencies and other cryptocurrencies, making these transactions more agile. Thus, BRCs could be used as a unit of value when buying and selling other cryptocurrencies.

## **Avoiding the volatility of other cryptocurrencies**

Because it is backed by reais, the BRC follows its reference price. This makes its volatility, the price oscillation, smaller. This characteristic is valuable in times of market instability if the user wants a more conservative position. Therefore, the BRC can be an alternative for the cryptocurrency investor who seeks to be in a less volatile position and with lower fluctuation of her capital.

## **Be a form of exchange between Real and other currencies**

Being backed and seeking 1:1 parity with the Real, the BRC is an opportunity for investors who want to use Brazilian currency to buy cryptocurrencies, foreign currencies, or hold some kind of reserve. Foreign exchange remittances can take days to complete and can be expensive. With the BRC these transactions are virtually instantaneous and at a fraction of the traditional cost.

## **Value Reserve**

As a stablecoin pegged to the Real, rather than keeping all your capital in paper money or usual electronic currency, the BRC is a stable alternative and can be used as a value reserve.



## **Payment in commercial outlets and stores**

The BRC will enable its users to make payments in stores and commercial outlets using the token as a currency, being a complementary alternative to paper money and traditional electronic methods.

## **Value Transfer**

Being developed on the Ethereum blockchain the BRC can be sent and received by another person who also has an **Ethereum Wallet** anywhere in the world.

## **Using Smart Contracts for Payments**

Smart contracts can be used as solutions in delivery versus payment situations. Those events where one party will only execute the payment when the counterparty executes the delivery.

Smart contracts solve this problem without requiring a third party. Smart contracts are programs on Ethereum blockchain that execute a transaction automatically and BRC can be used as a form of payment in these smart transactions.

## **Asset Tokenization**

Tokenization is the transformation of a physical asset into a digital asset. Its economic value and the rights derived from the assets (securities, real estate, receivables, and commodities) are linked to tokens, which exist on the blockchain and are a “digital reflection” of the real assets (Anbima, n.d.). The BRC can be used in these processes.

And being present in a fast and continuously evolving ecosystem, the BRC will be ready to give its users access to new use cases that emerge over time.

# Flow of Funds

The issuer is solely responsible for issuing and burning the stablecoin according to the existing collateral in Real. The Brazilian Real Coin has a one-to-one parity to the fiduciary Real, and the minting and burning process through the issuer will work according to the the following flows:



Figure 1 – BRC Issuing Process.

From a request for the purchase of BRCs by exchanges or entities that want to trade them, the issuance process begins. The money sent by exchanges to issuer for the purchase of the coins is used as BRCs collateral . Then the minting process of the new virtual currencies is carried out, and the tokens are sent to the buyer, providing liquidity.

If the request is to exchange the BRC for fiat currency, the reverse process occurs: the tokens are sent to the issuer, which will return the equivalent value in reais from the collateral, and will burn these tokens, reducing liquidity.



Figure 2 – BRC Burning Process

# Price Regulation

As previously stated, stablecoins follow a reference price of some collateral asset. In the Brazilian Real Coin model, the objective is to follow the price of the Real.

The issuer operates in the secondary market to provide liquidity to buy and sell BRC at R\$1.00 in order to converge the stablecoin price to the Real price.

And even if the BRC price goes through any oscillation the issuer will actively seek the convergence of the price to the Real using the arbitrage mechanisms, asset reserves, issuance, token burning and direct negotiation to buy or sell the BRC unit at R\$1.00, ensuring the stability of the stablecoin and dealing with any price volatility.

# Glossary of Terms

**Blockchain:** decentralized ledger that enables cryptocurrencies.

**Brazilian Real Coin:** stablecoin pegged to Real.

**Ethereum Wallet:** "Ethereum wallets are applications that let you interact with your Ethereum account ... Your wallet lets you read your balance, send transactions and connect to applications." (Ethereum, n.d.).

**Smart Contract:** "A 'smart contract' is simply a program that runs on the Ethereum blockchain. It's a collection of code (its functions) and data (its state) that resides at a specific address on the Ethereum blockchain." (Ethereum, 2022)

**Cryptocurrencies:** digital or virtual currencies, encrypted and decentralized based on blockchain.

**ERC-20:** "The Ethereum Request for Comments 20 is a Token standard that implements an API (Application Programming Interface) for tokens within Smart Contracts. This standard allows developers to build token applications that are interoperable with other products and services" (Ethereum, 2022).

**Ethereum:** "distributed cryptographic ledger that is designed to allow users to encode advanced transaction types, smart contracts and decentralized applications into the blockchain" (Ethereum, 2014).

**Collateralized Currency:** stablecoins that have collateral, a fiduciary asset tied to the stablecoin that guarantees its value.

**Stablecoin:** cryptocurrencies with lower volatility, i.e., with smaller price variations. They are pegged and seek to follow a reference price such as the dollar, real, or gold.

**Super App:** applications that offer multiple services within a single platform: messaging, payments, purchasing services, among others.

**Tokens:** non-native cryptocurrencies built on a blockchain.

# References

**Anbima. (n.d.). Tokenização de Ativos. Retrieved June 13, 2022, from**  
<https://www.anbima.com.br/data/files/02/30/82/CB/68001810C27A8F08882BA2A8/Tokenizacao%20de%20ativos.pdf>

**Banco Central do Brasil. (2007, Maio). Síntese dos Padrões Monetários Brasileiros. Banco Central. Retrieved June 27, 2022, from**  
<https://www.bcb.gov.br/content/acessoinformacao/museudocs/pub/SintesePadroesMonetariosBrasileiros.pdf>

**Ethereum. (n.d.). Carteiras Ethereum. O que é uma carteira Ethereum? Retrieved June 13, 2022, from**  
<https://ethereum.org/pt-br/wallets/#main-content>

**Ethereum. (2014, Janeiro 26). Ethereum Whitepaper. Retrieved Junho 08, 2022, from**  
<https://web.archive.org/web/20140126163413/http://ethereum.org:80/>

**Ethereum. (2022, May 22). What is ERC-20? ERC-20 Token Standard. Retrieved June 27, 2022, from**  
<https://ethereum.org/en/developers/docs/standards/tokens/erc-20/>

**Ethereum. (2022, Junho 3). What is Ethereum? | ethereum.org. Ethereum. org. Retrieved June 8, 2022, from**  
<https://ethereum.org/en/what-is-ethereum/>

**Ethereum. (2022, Maio 2). Introdução aos contratos inteligentes | ethereum.org. Ethereum.org. Retrieved June 13, 2022, from**  
<https://ethereum.org/pt-br/developers/docs/smart-contracts/#top>

**PicPay. (2021). Earnings Release. Results Center. Retrieved June 8, 2022, from**  
<https://api.mziq.com/mzfilemanager/v2/d/f4269298-97ef-427d-ac29-04f9d6a6054a/5a324874-dfbb-c7d9-b6e3-6e341a2b1fd0?origin=1>