TERO CARBON
CERTIFICAÇÃO
DIGITAL DE ATIVOS
AMBIENTAIS

TOKENIZATION PROCESS

VERSION 2.0

ASSETS PROGRAM

TERO CARBON AVALIAÇÕES E CERTIFICAÇÕES S.A.

IDENTIFICATION

DOCUMENT	Tokenization Process
VERSION	2.0
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PROGRAM	All
SECTOR	All
TYPE	All

LIST OF ACRONYMS

ERC	Ethereum Request for Comments
GHG	Greenhouse Gas
IPFS	InterPlanetary File System
NFT	Non-Fungible Token
URI	Uniform Resource Identifier
URL	Uniform Resource Locator

LIST OF PROGRAMS

Certification Program
Methodologies Program
Assets Program

LIST OF SUPPORTING DOCUMENTS

NAME	PROGRAM
Definitions	All

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1. INTRODUCTION

The Tero Platform is a technological solution developed for project registration, subsequent management, and the tokenization of environmental assets on the blockchain. Utilizing the infrastructure of the public Polygon network, the Tero Platform combines the ERC-1155 and ERC-721A token standards to provide a robust and secure approach to the issuance, management, transfer, and retirement of tokenized environmental assets. This document outlines the procedures and practices adopted by Tero Carbon to ensure the integrity and transparency of operations conducted on the platform.

2. OBJECTIVE

The purpose of this document is to briefly describe the process of tokenizing environmental assets for the audit of tokens minted by the Tero Platform.

3. PROCESS FLOW (STEP BY STEP)

The minting process (with or without asset distribution among project quota holders), transfer, and retirement of assets follow the flow illustrated in **Figure 1**.

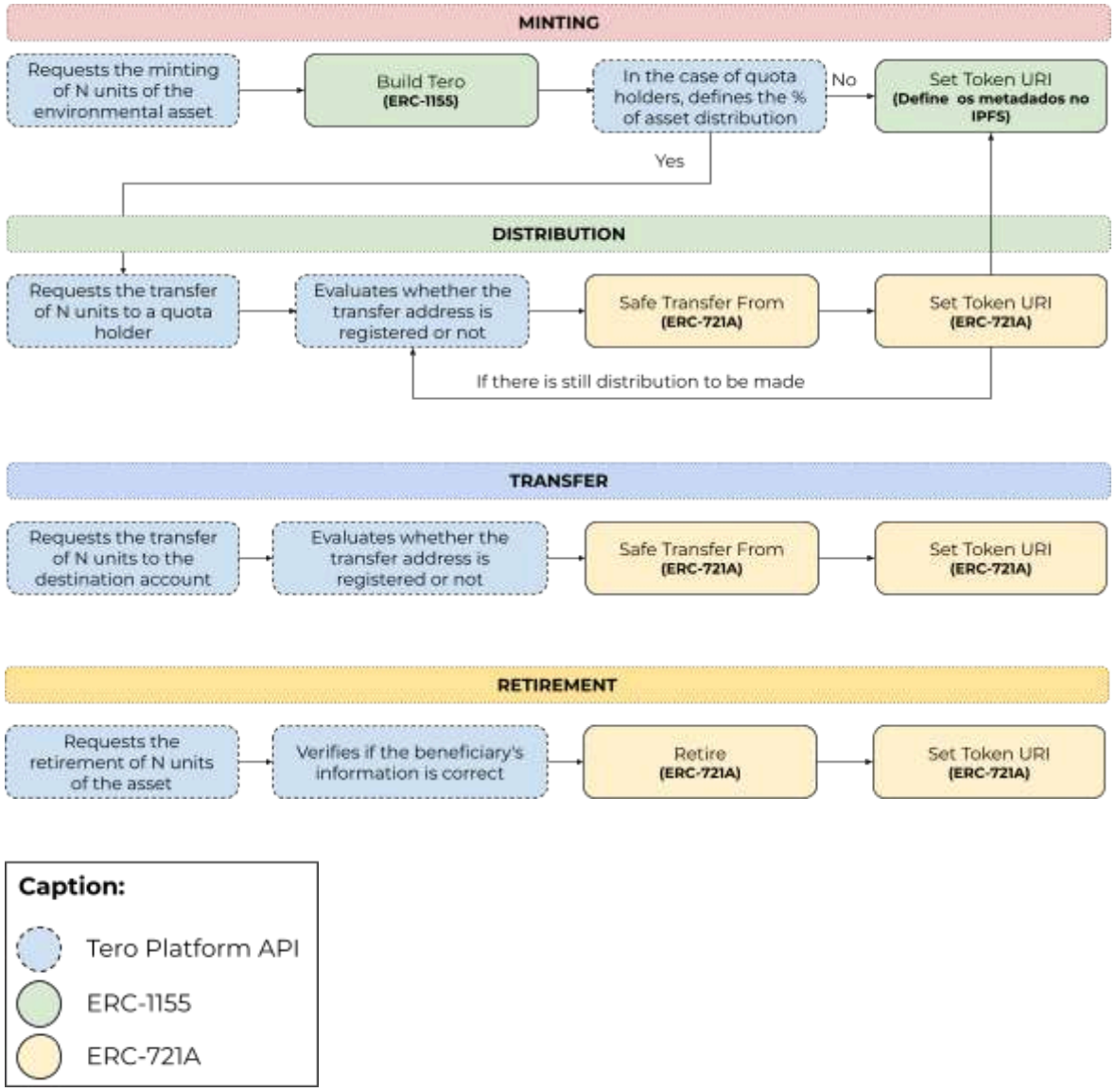

Figure 1: Flowchart of the tokenization stages (minting, transfer, and retirement) of Tero Carbon assets..

4. TOKENIZATION METHODS

4.1 Tero (Build Tero)

The "Build Tero" is a tokenization method that mints environmental assets in the wallet of the main project proposer. This process creates digital tokens based on the "ERC-1155" standard, each representing a specific quantity of verified assets, with the total balance registered accurately and transparently.

4.2 Transfer Tero (Safe Transfer From)

The "Safe Transfer From" is a tokenization method that generates a transfer token, in the "ERC-721A" format, in the sender's wallet. Then, a specific number of "ERC-1155" tokens, previously minted via the "Build Tero" method, is transferred to the recipient's digital wallet. The entire balance update and asset transfer process are securely and efficiently managed by the "Safe Transfer From" method.

4.3 Tero Retirement (Retire)

The "Retire" is the tokenization method responsible for the retirement of assets. Initially, it generates a retirement token in the "ERC-721A" format in the wallet of the user withdrawing the asset. Then, a specific number of "ERC-1155" tokens, previously minted via the "Build Tero" method, are transferred to the null wallet (0x0), effectively burning those tokens. The entire balance update and transfer process is managed by the "Safe Transfer From" method, which is invoked by the "Retire" method to ensure the security and accuracy of the operation.

4.4 Set Token URI

The "Set Token URI" is a standard smart contract method used to update the URL associated with a token. In Tero Carbon, this method is configured to use links from the Interplanetary File System (IPFS), ensuring that the metadata associated with the tokens remains immutable and aligned with OpenSea platform standards. Tero Carbon publishes the main public information about the projects on IPFS, ensuring the integrity and accessibility of the data over time. In this case, OpenSea is used only for publicizing the registration and does not enable the sale.

5. INFORMATION ABOUT SMART CONTRACTS

The table below provides detailed information about the smart contracts utilized on the Polygon public blockchain by Tero Carbon.

Table 1. Tero Carbon's Smart Contracts.

SMART CONTRACT	DESCRIPTION	ADDRESS
Carteira Gerenciadora	Smart Contract Owner	https://polygonscan.com/txs?a=0x8d023ae5024709c02b5d49785b65e2f1bf324357&p=2
Buid Tero	Smart Contract de Cunhagem	https://polygonscan.com/address/0x1dd267c6ad01f3ea898149e3ccf1d8c2d204c07e
Safe Transfer From	Smart Contract de Transferência	https://polygonscan.com/token/0x8e40adf83910792348327a85c07ab3fc2cb31bae
Retire	Smart Contract de Aposentadoria	https://polygonscan.com/address/0x41bae0eb22d7f2971afa151e7ce03dfba310e276

6. PROCESS REVISIONS

Tero Carbon's Tokenization Process is continuously reviewed to ensure the evolution and effectiveness of the adopted methods. These reviews involve a thorough analysis of all aspects of the process, from the definition of tokenization criteria to practical execution and the results obtained. During these reviews, responsible parties assess the process's performance against international best practices and market standards, identify opportunities for improvement, and adjust strategies as needed. The goal is to ensure that the tokenization process remains aligned with the expectations of participants and stakeholders, fostering excellence and relevance in the dynamic environmental asset market. These updates are essential for strengthening credibility and trust in Tero Carbon, ensuring the continuous effectiveness and integrity of the tokenization process.

VERSION HISTORY

VERSION	DATE	NOTES
2.0	04/01/2025	Layout update and text adjustments for alignment with new documentation standards, as well as publication as an integral part of the Assets Program.
1.0	08/23/2024	Initial version approved by Management.