

Confidential

Prepared by AIQUANT Technologies based on inputs from Plastiks

Plastic Credit ReFi Protocol with USDM

A mechanism for regenerative finance projects with a use case for a Plastik's ReFi protocol, providing funding the recovery entities.

About Plastiks:

Plastic waste in the environment is a 350 million ton per year problem and downstream collection systems and recycling infrastructure needs to be improved and, in many countries, built out.

Plastiks.io provides is a plastic waste recovery tracking platform that includes (currently the solution is built & working on the CELO blockchain):

- Verifies the recovery and recycling of plastic from the environment.
- Traces plastic waste from recovery to recycling.
- Converts the waste recovery data into PLASTIC CREDITS that ensure transparency.
- Offers companies and individuals the opportunity to sponsor plastic waste recovery.

Plastiks certifies Plastic Recovery Entities in 20 locations around the world (**Brazil, Chile, Costa Rica, Dominican Republic, Egypt, Greece, India, Ivory Coast, Kenya, Mexico, Peru, Spain, Sri Lanka, Tanzania, and Thailand**), enabling them to issue PLASTIC CREDITS on the platform.

These entities recover and/or prevent plastic from reaching the environment. Once the plastic is recovered, they sell it to recyclers for its reintroduction in the industry or they use different solutions to give it a second life.

Mission and Objectives

Plastiks' mission is to include plastic recovery in every economic transaction taking place during everyday life and business.

For more info please refer to our website <https://www.plastiks.io/>

Currently, Plastiks is manually conducting the recovery entity payments in Plastiks tokens. Specifically, building on CARDANO the Plastiks ReFi protocol to ensure survivability of the Plastic Credits.

The Plastiks' ReFi protocol provides Plastic Recovery Entities and Holders opportunities to ensure revenue and contribute to market stability.

The challenges faced by the Plastic Recovery Entities:

Plastic Recovery Entities, having sold their PLASTIC CREDITS and received payment in PLASTIK tokens, have found that the volatility of the crypto market affects their ability to secure funds in USD to execute their roadmaps.

The social and environmental impact that Plastic Recovery Entities aim to achieve through its roadmap is at risk. Challenges faced by the Token Holders:

Since the PLASTIK token is a utility token, not a security token, Token Holders are unable to determine whether the underlying economic activity related to the buying and selling of the PLASTIC CREDIT is increasing or decreasing, other than the token's price.

Background:

Employ the CARDANO stable coin USDM as a store of value to combine the benefits of cryptocurrencies, including fast transactions and decentralization, with stability that mitigates the price volatility seen with cryptocurrencies like Bitcoin or Ethereum.

How the solution should work:

Each time a PLASTIC CREDIT is sold on the Plastiks platform:

- Twenty percent (20%) is sent to Nozama Tech Ltd, owner of the Plastiks platform and technology.
- Eighty percent (80%) is sent to the Plastic Recovery Entity, issuer of the PLASTIC CREDIT.

The ReFi Protocol establishes a payment mechanism of 80% of the PLASTIC CREDIT sale value to the Recovery Entities. The steps to activate it are the following:

1. A transaction for PLASTIC CREDITS is made on the Plastiks platform.
2. A holder of CARDANO STABLE COIN (USDM) lends seventy-two percent (72%) of the sale value to the Smart Contract, expecting to earn interest.

3. A holder of the PLASTIK token lends seventy-eight percent (78%) of the sale value to the Smart Contract, expecting to position their tokens for a sale at a specific price and to earn an interest.

4. The Plastiks ReFi Smart Contract uses the lent CARDANO STABLE COIN (USDM) from holders to purchase two percent (2%) of PLASTIK tokens in the market.

In summary, the payment of eighty percent (80%) received by the Plastic Recovery Entity in PLASTIK Tokens at the moment of selling its Plastic Credit comprises:

- Seventy-eight percent (78%) from PLASTIK holders who lent their tokens.
- Two percent (2%) of PLASTIK Tokens purchased in the market with the lent CARDANO STABLE COIN (USDM).

Eighty percent (80%) of the PLASTIC CREDIT sale value is transferred to the Plastiks ReFi Smart Contract, which converts the PLASTIK tokens into CARDANO STABLE COIN (USDM) and locks them for forty-five days (45).

Over a 45-day period, the Recovery Entities, after receiving PLASTIK tokens from the sale of their PLASTIC CREDITS, have the option to trade all their PLASTIK tokens and secure a guaranteed seventy percent (70%) in CARDANO STABLE COIN (USDM). Alternatively, they can sell their PLASTIK tokens on any of the exchanges where it is traded, such as Lbank, Bitmart, Coinstore, Uniswap, and Ubeswap.

This ensures the execution of the roadmap and the achievement of social and environmental goals, independent of the price and market conditions of the PLASTIK token.

SCENARIO 1

If the Plastic Recovery Entity returns the tokens before 45 days to the Smart Contract:

1. Eighty percent (80%) of the sale value in PLASTIK tokens is returned by the Recovery Entity to the Plastiks ReFi Smart Contract.
2. Seventy percent (70%) of the sale value is paid to the Recovery Entity in CARDANO STABLE COIN (USDM) from the locked funds in the Smart Contract.
3. Seventy-two percent (72%) of the sale value in CARDANO STABLE COIN (USDM) is returned to the CARDANO STABLE COIN (USDM) Holder from the locked funds in the Smart Contract
4. Half a percent (0.50%) of the sale value is paid in CARDANO STABLE COIN (USDM) as an interest to the CARDANO STABLE COIN (USDM) Holder from the locked funds in the Smart Contract.
5. Seventy-eight percent (78%) of the sale value is returned to the PLASTIK Holder who lent their tokens to the Plastic Recovery Entity
6. Five percent (5%) of the sale value is paid in CARDANO STABLE COIN (USDM) as an interest to the PLASTIK Holder from the locked funds in the Smart Contract
7. Half a percent (0.50%) of the sale value is sent in CARDANO STABLE COIN (USDM) to Nozama Tech Ltd. as a license fee from the locked funds in the Smart Contract

8. Two percent (2%) of the sale value is used to purchase PLASTIK tokens on the market through tradeable exchanges (Lbank, Bitmart, Coinstore, Uniswap, and Ubeswap) using the locked CARDANO STABLE COIN (USDM) in the Smart Contract.

This additional market purchase of PLASTIK tokens complements the earlier two percent (2%) purchase, made when the eighty percent (80%) of the sale value in PLASTIK tokens is sent to the Smart Contract for conversion and locking in CARDANO STABLE COIN (USDM).

SCENARIO 2

If the Plastic Recovery Entity chooses not to return its PLASTIK tokens to the Smart Contract during the 45-day period, and instead sell them on the market through tradeable exchanges:

1. Eighty percent (80%) of the sale value in PLASTIK tokens is sold by the Plastic Recovery Entity on the market through tradeable exchanges (Lbank, Bitmart, Coinstore, Uniswap, and Ubeswap).
2. Seventy-two percent (72%) of the sale value in CARDANO STABLE COIN (USDM) is returned to the cUSD Holder from the locked funds in the Smart Contract.

The CARDANO STABLE COIN (USDM) Holder earns an interest based on how much PLASTIK tokens the ReFi Smart Contract has from all the two percent (2%) of tokens when the Plastic Recovery Entities return the tokens.

3. The PLASTIK Holder has sold its tokens at the desired price and obtains seventy-eight percent (78%) of the sale value in CARDANO STABLE COIN (USDM).

WHO USES THE REFI PROTOCOL?

The Plastiks' ReFi Protocol is to be used by Plastic Recovery Entities to guarantee their income from the sale of their PLASTIC CREDITS whilst ensuring the traceability and transparency of payment for the activity of plastic waste recovery.

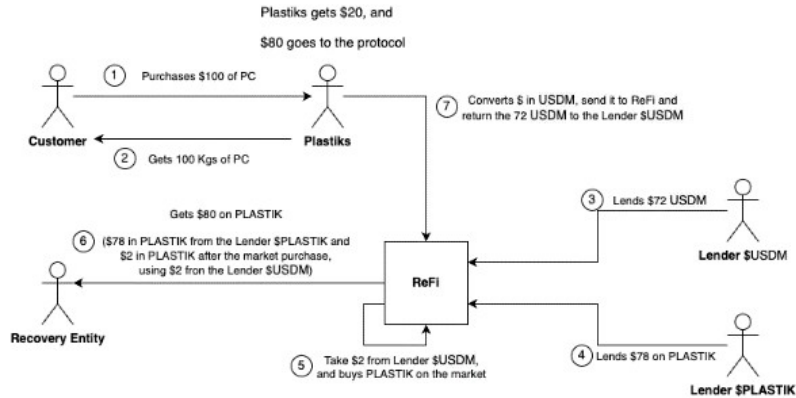
Plastiks' ReFi Protocol is to be used by holders of PLASTIK tokens to earn an interest and put their tokens for sale at specific prices.

Plasti credit purchase

On each purchase, there is always a buyback of the 2% of the total amount

Stakeholders

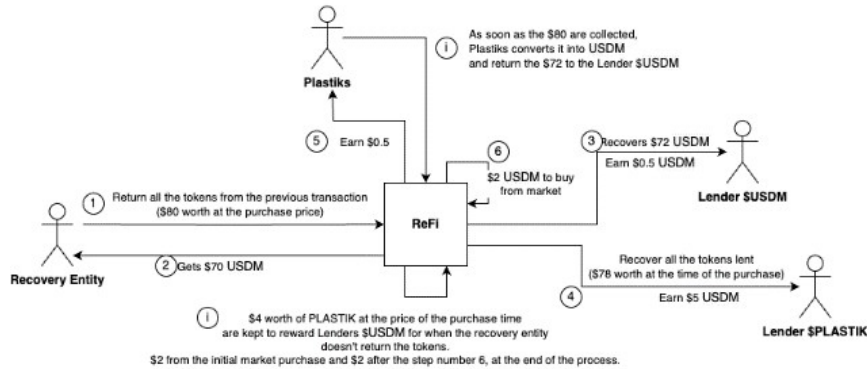
- **Customer:** Pays \$100 and gets Plastic Credits (PC) for 100 kgs
- **Plastiks:** Earn \$20, convert \$80 in USD and place it into the ReFi
- **Recovery Entity:** Sells 100 kgs on PC and gets the equivalent of \$80 in PLASTIK token
- **Lender \$USD:** Lends \$72 in USD, the platform owes \$72 in USD
- **Lender \$PLASTIK:** Lends \$78 in PLASTIK token
- **ReFi Protocol:** keep the \$70 in USD in case the Recovery Entity want to exchange before
Plastiks places the \$80 in USD into the platform, and uses 2 USD to purchase tokens on the market



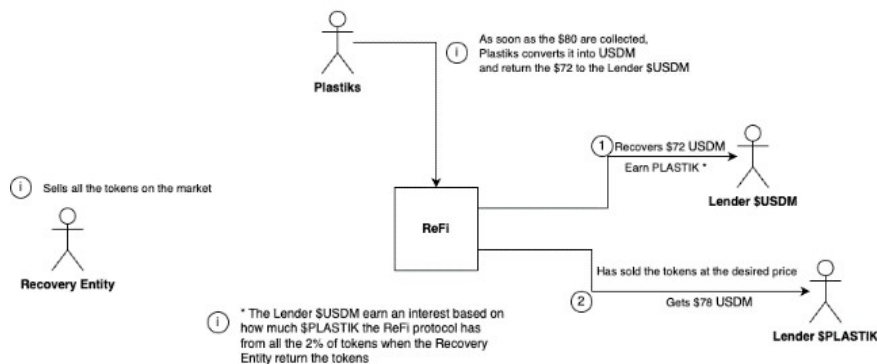
2 Scenarios after the purchase

- Recovery entity return the tokens before 45 days
- Recovery entity doesn't return the tokens after 45 days

Recovery entity return the tokens before 45 days



Recovery entity doesn't return the tokens before 45 days



BENEFITS OF THE REFI PROTOCOL

For Plastic Recovery Entities

Guaranteeing seventy percent (70%) of the PLASTIC CREDIT's sale value over a period of forty-five days, regardless of crypto market conditions, thereby hedging their revenues against market volatility.

This ensures that the Plastic Recovery Entities can collect the necessary funds in CARDANO STABLE COIN (USDM) to execute their roadmaps and to provide social and environmental impact.

For PLASTIK token holders

The ability to earn interest in CARDANO STABLE COIN (USDM) without risking their token capital.

They can set their desired selling price for their tokens without impacting the market price. Their tokens are staked in the smart contract, ready to be paid out to the Plastic Recovery Entities at the Holder's chosen lending or selling price.

With the Smart Contract central to the payment process for Plastic Recovery Entities, Holders can monitor the underlying economic activity associated with the buying and selling of PLASTIC CREDIT. This access to transparent information enables them to make informed decisions about whether to hold or sell their tokens.

For the market and crypto traders

To have access to information, found on the Smart Contract, which shows the growth of the adoption rate of the PLASTIK token' through the amount of CARDANO STABLE COIN (USDM) locked in it.

The publicly available data on the adoption rate will offer insight into the overall footprint of the token, thereby revealing its true value.

Milestone 1: **Smart contract development and implementation in test environment.**

Due Date: 19 March 2025

Smart contract development and implementation in test environment, Policy script definition for liquidity pool, GitHub repository setup and initial code upload.

- The Smart Contract will:
- Register the value of the roadmap and the wallet address linked to the roadmap.
- Track plastic credits related to roadmap and reflect a progress.

- When a plastic credit is sold, transfer tokens corresponding to plastic credit sales to allow the transfer of plastic credits from issuer to buyer.
- Account for the plastic credits sold as they relate to a roadmap.
- Account for the funds corresponding to the plastic credits sold.
- Provide a progress for roadmaps.
- When the plastic credits required to fund the roadmaps are sold, release the USDM to the creator and lender.
- Create automated tests for policy scripts
- Policy scripts automations for deployment

Milestone 2: **UI for lenders and backend development**

Due Date: 30 April 2025

- Create the UI integration for the lender, that interacts with the smart contracts, where the user can lend the money and get the profit once the resource has been bought
- Backend integration with smart contracts

Acceptance Criteria

- UI for lenders working with Cardano wallets
- Backend to handle the connectivity between the smart contracts and the UI, and deploy in the test environment
- The UI and Backend will allow for the user to:
 - Register the value of the roadmap and the wallet address linked to the roadmap.
 - Track plastic credits related to roadmap and Showcase a progress bar.
 - View that when a plastic credit is sold, transfer tokens corresponding to plastic credit sales to allow the transfer of plastic credits from issuer to buyer.
 - View that the amount plastic credits sold as they relate to a roadmap.
 - View the funds corresponding to the plastic credits sold.
 - View the progress bar for roadmaps.
 - View and interact so that when the plastic credits required to fund the roadmaps are sold, the tokens can be returned from roadmap wallet to release the USDM for the recovery entity.
 - View the balance of the lender and how much they earned

Milestone 3 :**Transparent transaction UI**

Due Date: 30 May 2025

- Create a dashboard to see the activity of the protocol where everybody can see what is going on.
- ETL process to Extract, Transform and Load information from the web3 to the platform
- Design of the dashboard
- **Testnet integration of the dashboard / user interface**
- Dashboard will allow user to view the plastic credit sales, roadmap completion, token return and USDM release.

Acceptance criteria

- Full design with interaction description
- Dashboard in production
 - Full design with interaction description
 - The goal of this milestone is to produce a fully functioning PUBLIC dashboard that will allow any user to view the plastic credit sales, roadmap completion, token return and USDM released.
 - User can connect their wallet and see the stats regarding how much plastic it was sold if it is a recovery entity and the amount earned if it is a lender

Milestone 4: **Production deployment for Plastiks use case**

Due Date: 30 June 2025

- Documentation and support for the onboarding of the platform
- Adding monitoring and alerts
- Documentation for the Plastiks use case and general information about how the platform works for another cases
- Fixing and maintenance after the platform has run for a bit

Acceptance Criteria

- Policy scripts deployed and configured for the Plastiks use case
- Onboarding of stakeholders, lenders, and recovery entities
- Initial real-world testing and optimization breakdown
- Full technical documentation

- Closing video that explains what the application is and how to use it with a tutorial.
- Video made for recovery entities.
- Video made for buyers of plastic credits
- Video made for Web3 community.
- Final adjustments and bug fixes breakdown