Disclaimer:

This material has been prepared for limited distribution and is for information only. Under no circumstances may this document or the information contained herein be reproduced or copied or made available to others. The distribution of this document may be restricted in certain jurisdictions, and accordingly, persons into whose possession this document comes are required to inform themselves about, and to observe, such restrictions. Circularr, Ltd is referred to throughout this document as "Circularr". $CIRP is the name of Circularr's first crypto asset for recycled plastic.

This communication has been issued in the United Kingdom by Circularr. In the United Kingdom, it is made to and directed solely at: (i) potential investors into $CIRP or of Circularr; and/or (ii) persons who would be classified as a professional client or eligible counterparty under the FCA Handbook of Rules and Guidance if taken on as customers by Circularr; and/or (iii) persons who would come within Article 19 (investment professionals) or Article 49 of the Financial Services and Markets Act 2000 (Financial Promotions). This document is not for distribution in the United States of America.

While the information contained herein is from sources Circularr, in good faith, believes to be reliable, Circularr does not guarantee its accuracy, completeness or fairness and has relied upon and assumed without independent verification, the accuracy and completeness of all information available from public sources. Actual results and developments may be materially different from any forecast, opinion or expectation expressed in this communication. Nothing in this document should be interpreted to, or imply that, past results are an indication of future performance. Any opinions expressed are current opinions only. Circularr shall not be responsible for amending, correcting, or updating any information or opinions contained herein, and it accepts no liability for loss arising from the use of this material. This document is not meant as a general guide to investing, does not constitute investment research, and is not, nor is it intended to be construed as, specific investment recommendations or advice to any person. It does not take into account your individual circumstances or your financial situation or needs. Investments can be volatile and entail risk and investments presented may not be suitable for you. Actual yields on the investment and opportunity described in this document could be materially lower than those intended, modelled or expressed as being anticipated or expected. There is no capital guarantee.

Circularr, Ltd makes no representation as to the suitability of any investment for any investor.

Any investment decision should be made in conjunction with your financial, legal and tax advisers.

Circularr Limited is a company registered in England and Wales.
Registration No: 13484514
Registered Office: 35 Lonsdale Road, Queens Park, London, NW6 6RA.

Table of contents

Introduction:

Circularr is a sustainable blockchain ecosystem. Focused on the incubation and development of sustainable crypto assets backed by sustainable commodities. The first asset will be backed by plastic recycling and the value of rPET plastic called $CIRP.

Project strategies

Circularr's first crypto asset revolves around the development and launch of a decentralised recycling ecosystem that aims to streamline interactions between consumers, organisations, and recyclers, by simplifying the recycling process, and decreasing pollution levels. It's tokenomics model includes reverse vending machines (RVMs), users, recyclers, partners, and brands. The RVMs will also be used as an advertising network for the promotion of brands and to act as a wallet for the native crypto asset. The Circularr network will run on the XRPL* blockchain.

*www.xrpl.org

High-level token economics development.

Ecosystem participants:
- **Users.** Users deposit plastic bottles into the reverse vending machine and get tokens into their wallets which they can sell, hold or exchange to receive discounts, vouchers and or donate to charities.
- **Corporations.** Corporations buy tokens from liquidity pools and centralised venues and give tokens to recyclers to retrieve bottles from RVMs, or collect plastic from them. They can also utilise the tokens to run nodes (networks of reverse vending machines) to sponsor and benefit from the collection and recycling of bottles within a network of RVMs by recycling partners.
- **Textile Mills & Manufacturers -** Textile Mills & Manufacturers buy rPET NFT's from our NFT marketplace in quantities of 1kg, 10kg, 100kg, 500kg, and 1 tonne allotments. Each NFT contains all traceability data for all plastic that has gone into make up an NFT. The plastic is then owned and can be delivered to the manufacturer for their production needs. In the case of the end product the authenticity of the rPET material being used can be fully traced back via the $CIRP token and our ecosystem. Allowing for transparency on all products produced by the Textile Mills and Manufactures.
- **Commodity Investors (Individuals and Institutional) -** Both individual and institutional investors / hedge funds can buy and hold NFT's of rPET plastic via $CIRP in 1kg, 10kg, 100kg, 500kg, and 1 metric tonne allotments. This allows the investors to be the owner of the rPET pellet which can then be sold or traded on our NFT marketplace. Allowing investors to purchase NFT's and speculate on

future value or due to traceability purchase limited edition rPET from key events such as major sporting events, concerts etc which could have a higher demand from manufacturers to produce limited edition merchandise and or textiles from the rPET. On top of this the ecosystem will allow for future contracts of future rPET pellet based on the recycling capacity of our ecosystem.

- **Recyclers.** Recyclers receive tokens from corporations or buy them from trading venues / marketplace to retrieve bottles from the network of RVMs or collect plastic from organisations participating in the Circularr ecosystem, with full traceability.

- **Partners.** Partners receive tokens from users that exchange their tokens for rewards, vouchers and experiences. Partners may pay in tokens for placement of their branding on prime located RVMs or within the native wallets (Android/iOS) and can instantly swap or exchange their tokens for cash pay-outs or trade their tokens on centralised (CEX) and decentralised (DEX) crypto exchanges for other crypto assets. As individuals redeem or exchange tokens for rewards and experiences on our native Android and iOS applications the environmental benefits (water savings, carbon savings, energy savings) which is also attached to each $CIRP token's traceability data transfers to the new owner. Thus partners not only earn $CIRP tokens which they can use for recycling, or future speculation they have the immediate ESG/CSR benefits from the $CIRP tokens.

- **Advertisers.** Advertisers will be able to place their advertisements on RVMs. They can either pay in their local currency or via $CIRP tokens (for a discounted rate).

- **Environmental organizations & Charities.** Environmental Organizations and Charities receive tokens and can swap them for fiat (traditional currency) at liquidity pools. This process can be automated for their convenience within the network and our native wallets (Android, iOS). Alternatively the organisations can also choose to hold on to the $CIRP tokens or acquire rPET NFT"s to sell to organisations and manufactures if they wish for future speculation.

- **The Circularr Foundation.** The Foundation is an independent non-commercial body, consisting of plastic-waste producers and recyclers. The Circularr foundation is governed by a council. The council is elected by the members of the Circularr foundation to add a decentralised democratic voting process to govern the Circularr ecosystem.

Tokenomics Concept:

- Each reverse vending machine is a wallet, initially preloaded with tokens by Circularr, the owner of the machine or network of machines (if leased or bought from Circularr), or users who have staked $CIRP on an RVM to run a node on the Circularr ecosystem.
- Users receive tokens from RVMs into their mobile wallets.
- Users can either swap their tokens for vouchers, rewards and experiences or simply hold or trade the token for fiat currency ($USD, £GBP etc) or trade it for other crypto assets. Users can also redeem and use their tokens at participating merchant partners without the need to convert or exchange the asset to another currency.
- Users can also request and send the asset to one another on a P2P system without the need to go through a central party.
- Users can sell their token through liquidity pools and either receive funds via an online transfer or donate the proceeds to a charity from a list.
- Users can stake their $CIRP tokens to earn rPET NFT's.
- Users can stake their $CIRP tokens into an RVM or RVM network to run a node and help power the Circularr ecosystem and earn a % of all revenue paid out in $CIRP back to the user while the tokens are staked.
- Recyclers use wallets to transact with RVMs and organisations to retrieve bottles.
- Recyclers buy tokens from liquidity pools and use centralized wallets for multiple collection vehicles.
- Corporations buy tokens from liquidity pools and use centralized wallets for multiple collection vehicles and give them to recyclers.
- Corporations, manufacturers and textile mills buy and use $CIRP tokens to provideThe Circularr Foundation controls the token supply.

$CIRP token Diagram
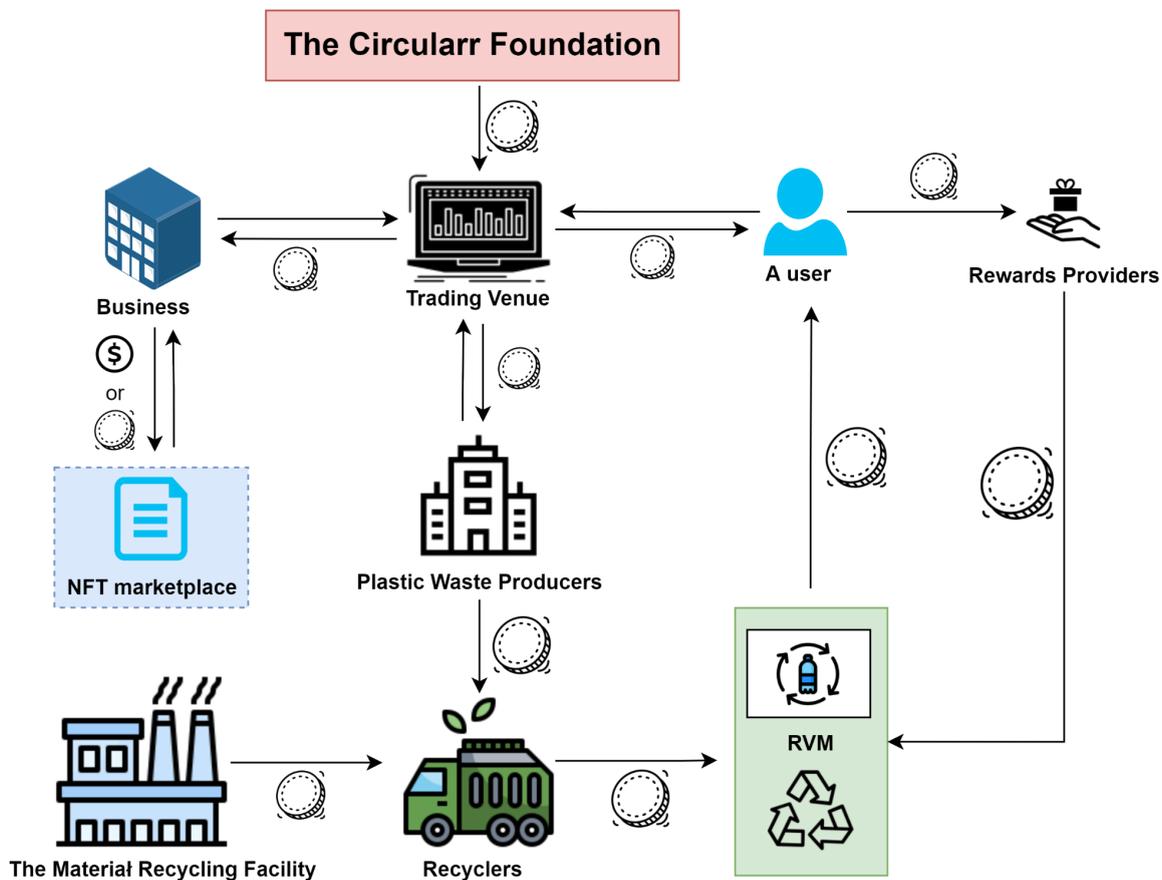
$CIRP token Flow

- The Circularr Foundation lists $CIRP utility tokens on Trading venues
- Users receive $CIRP from RVMs
- Users can use $CIRP utility tokens to receive discounts on goods and services from partners, or to hold for future speculation or to buy rPET NFT's.
- Parties can use $CIRP utility tokens to advertise on RVMs
- Users can trade $CIRP on Trading Venue
- $CIRP utility token can be purchased or traded on Trading venues by companies
- $CIRP utility token can be used for buying or minting NFTs
- Plastic Waste Producers can buy $CIRP on Trading Venue
- Plastic Waste Producers pay $CIRP to Recyclers to utilize and onboard their own plastic
- The Material Recycling Facility pays $CIRP to Recyclers for plastics delivery
- Recyclers fill RVMs with $CIRP to retrieve plastic

NFT Flow Diagram
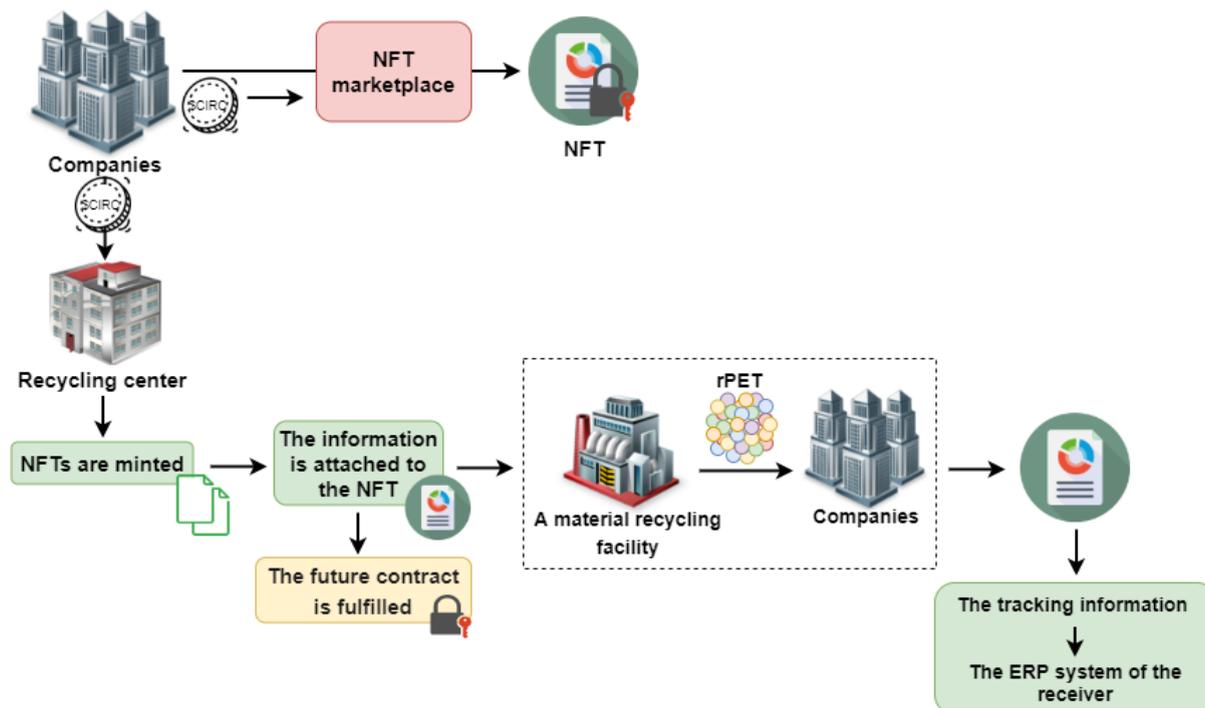
NFT Flow

- NFTs representing existing commoditized plastic are purchased for $CIRP at the global marketplace
- NFTs representing future commoditized plastic are minted, and await tracking information
- Once the information is attached to the NFT, and the future contract is fulfilled, the physical plastic can be shipped or stored
- Storage fees are charged by the facility, storing the physical plastic
- Logistics can be arranged to deliver the plastic
- At the point of delivery, the NFT changes its status and the tracking information it contains can be integrated into the ERP system of the receiver

6

Consumer / Recycler / Advertiser: During the initial release of the Circularr network we will have a primary focus on the deployment and integration of our reverse vending machines (RVM's) and expanding this network this will be followed by the roll out of our track and trace applications with our selected partners.

The initial process from a consumer and advertisers' perspective will function as follows:

1. A user deposits a plastic bottle into one of the Reverse Vending Machines (RVM's) and receives tokens into their wallet.
2. The user can then either hold on to the tokens, exchange them via our participating exchange partners for other crypto or fiat assets or redeem the tokens in our native wallet to receive rewards & exclusive vouchers from our partners. Or later exchange in our app for $USD, £GBP, EUR, etc.
3. Participating partners may pay in either $USD, £GBP, EUR (Fiat currency) or in our native tokens for placement of their advertisements in our RVM's and to sponsor or run additional promotions in our native wallet to make vouchers and rewards available to users.
4. Our recycling partners use or buy tokens with traditional fiat currency to retrieve bottles from the RVM's.
5. The plastic is then collected, recycled, tracked and traced on the open ledger with the offset and benefits going to the selected recycling partners, and the consumers getting $CIRP tokens and virtual for their plastic, water, electric and carbon savings.

Recyclers, advertisers and token traders will be able to trade tokens at centralised and decentralised trading venues. In the first iteration of the system trading facility can be provided by the platform itself using our native wallet and mobile applications (Android & iOS) until liquidity pools are created, and the token is listed on a Centralised Exchange (CEX).

Recycler – Plastic-waste & Corporate relationships: From a B2B perspective the ecosystem will form relationships with major corporations and recycling partners of the united by one common goal – decreasing the level of plastic pollution and providing transparency and traceability for the ethical and sustainable recycling and manufacturing of materials from rPET pellet. With brands and organisations participating in the ecosystem it will further increase customers' loyalty to the brand.

Businesses can purchase Circularr's native asset and pay a small transaction fee for having full traceability of the recycling of their plastic waste broken down per:
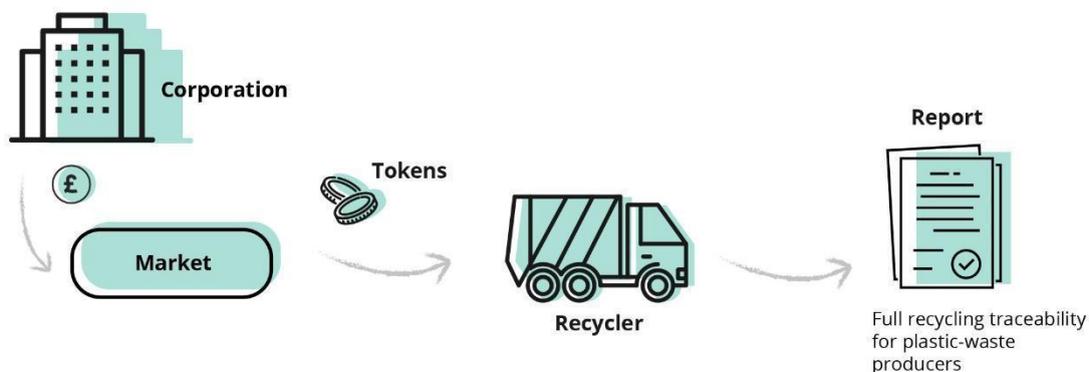
Bottle

KG

or Metric ton of plastic waste.

This allows plastic-waste producers to choose to become part of the Circularr Network and allow consumers to have confidence in how the organisation handles their plastic waste.

The Recycler-Plastic-waste producers interaction Flow is described below:

1. A plastic-waste producer (Corporation) joins the Circularr network;
2. The plastic-waste producer buys tokens on the market;
3. The Recycler receives a precise number of tokens from plastic-waste producers and retrieves bottles from vending machines based on the total plastic needing to be collected and recycled within the network or collected from the organisation's premises or RVM's.
4. The organization or brand receives a record on the blockchain including a full ledger, and transparent report about produced and recycled number of plastic and where it has ended up in merchandise, rPET pellet, etc.

Starting with the initial release of our traceability system on the Circularr blockchain, businesses and recyclers will be able to provide full recycling traceability. Allowing organisations to abide by various government and UN initiatives.

How does the traceability system function? While Circularr will be developing the initial network in a closed loop with [Reborn](#) and [Naeco, Ltd](#) allowing the ecosystem to be thoroughly tested before branching out to other third parties, RVM's and waste off takers the premise of how the traceability side of the ecosystem will function is as follows from the point of depositing a bottle into one of the RVM's.

Step 1: A user deposits a bottle in the machine. The machine then scans and records the bottle by scanning the barcode and its sensors weighing the bottle to determine the weight, etc.

Step 2: The bottle is then crushed and punctured in the machine to flatten it out and at this point another sensor captures the bottle being crushed and punctured and sends this data back to the blockchain with a timestamp, location etc, brand/bottle type etc.

Step 3: The bottles are then deposited into the bottom tray where they are collected until the machine needs to be emptied. It is at this point where we use digital scales to weigh the weight of the plastic collected to ensure it matches that of the weight at the time the bottle was crushed. Any abnormalities (which there shouldn't be) would flag to ledger and be tied to the individual machine so our team can investigate. The machine keeps collecting and processing the bottles, plastic etc until it is full at which point as it nears it's capacity it alerts our team that it is nearing full and needs to be emptied.

Step 4: Our team or our recycling partners will come and empty the machine at which point a sensor flags that the machine has been opened for collection on a time and date along with a photo of the inside of the bottles (pending the machine some will have cameras others just sensors based on the clients requests), these are then removed at which point the weight is captured from the full tray and then matched against the weight at the time the bottles are put on our vehicles via digital scales and sensors.

Step 5: Once in the vehicle the weight is measured, and the fleet tracking software / GPS kicks in to show that the vehicle completed its normal route and has not deviated or removed any of the weight/plastic from the vehicle until it has arrived at our recycling facility.

Step 6: Once the vehicle is at our recycling facility again the plastic is scanned in via sensors/cameras to show it has arrived and it is placed on to a digital scale to confirm the weight to ensure it has not been tampered with.

Step 7: The plastic is then stored in our shelving/racking units by section and type until it is ready to be recycled in our machinery.

Step 8: At the point of the plastic being ready to be recycled in the machinery it passes through sensors and cameras along the way to show the plastic being:

- Cleaned
- Shredded
- Extruded
- Pelletised.

To the point of the rPET pellet being collected, weighed and tagged to the blockchain to trace it all the way down to being recycled pallet (rPET).

At this point the 1/2 ton to 1-ton bags of rPET are stored so they are then used for the manufacturing of garments, merchandise or sold to other manufacturers via the rPET NFT marketplace, providing full traceability of all rPET plastics.

Circularr will look to open our API's and blockchain to third parties in the future so other waste off-takers, and manufacturers can plug and play into this ecosystem. In the meantime, with our partners at Reborn and Naeco, when they produce garments or merchandise all the steps of producing them from the rPET is tracked and tagged so the garments can have verifiable and un-disputable proof that they are in fact authentic and fully sustainable, all of which can be verified via our asset.

Demand points for Circularr token

To create a thriving token economy system, it is essential to map out the token demand points within the system and answer two main questions, "What do I need it for, and how can I utilise it?". To achieve long-lasting success, the potential for token speculation should not be the ecosystem's main feature but an additional driver behind it.

The following system operations could serve as initial token demand points:

- **Retrieving bottles from RVMs.** The maximum capacity of the current reverse vending machines is 800 bottles. To collect bottles from RVMs, a recycler will have to make payment in $USD, £GBP, EUR etc which will automatically utilise our native tokens into the ecosystem based on the transactional fee/value of the bottles being retrieved.
- **rPET NFT Marketplace.** Where individuals, manufacturers, organisations and institutions can buy and sell rPET plastic by 1kg, 10kg, 50kg, 100kg, 500kg or 1 metric tonne with full traceability. All transactions will take place in $CIRP.
- **Advertising Network.** All of the RVM's within our ecosystem will be part of a wider advertising network that brand and organisations can utilise to place static and display advertisements on vending machines. The cost of running the ads on the network will be translated to tokens so brands and organisations contributions will put further demand on the use of the tokens. Furthermore, via our native wallet and application brands and organisations can run promotions/vouchers and rewards which will utilise tokens to pay out.
- **RVM leasing.** Circularr RVMs will be available for hire. A brand organisation or even an individual can hire RVMs for which the use will be paid in tokens automatically at the point of rental. (Even if the lessor pays in $USD, £GBP, EUR etc). Allow the ecosystem to track and trace all bottles within the ecosystem.
- **RVM purchase and use.** RVMs can also be purchased by organisations In this case, the partner chooses which ads will be placed on the RVM and obtains the advertising revenue from this. Circularr can open up a private advertising network to the purchaser to utilise in return for a small monthly fee (in comparison with fees paid to advertise on Google/Facebook etc).
- **Access to digital services.** When a user deposits a plastic bottle into a vending machine and receives tokens into their wallet, they will have a choice to either: automatically donate the proceeds to a charity from a predefined list of charities or save tokens for future redemption or trading. When a user accumulates a certain number of tokens, they will also gain points to unlock certain rewards and experiences.
- **Issue tokens.** One of the functions of the Circularr Foundation is to regulate the supply of the Circularr tokens. If necessary, The Circularr Foundation can issue, burn or lock the Circularr tokens.

Supply points for Circularr token

To satisfy the demand for the token, an adequate supply mechanism is required. In order to develop a stable / sustainable economy within the ecosystem. The system's actors that need the token for their operations should obtain it with minimal friction, and vice versa, the actors who earned tokens, should be able to trade, hold or sell it with

ease and realise their gains with minimal friction. During the initial release we envision several key ways for users to obtain tokens.

- **Bottle deposits.** When users deposit plastic bottles into any of the RVM's they receive tokens.

- **Promotional Programmes.** Received tokens can be used in partners' promotional programmes and within the Circularr network as discounts, air drops, referral bonuses or or vouchers.

- **Trading venues.** Recyclers, advertisers, companies that want to rent RVMs and traders will be able to buy tokens at centralised and decentralised trading venues.

- **Exchanges.** Circularr will aim to list the native asset on at least one top 15 centralised exchange and via Xumm.app (making it further accessible and tradeable to their 150,000+ users).

Financials & Exchange Listings:

The company is launching one private round of tokens sales. During the private round, $CIRP will be issued and distributed via the Ethereum network as an ERC-20 asset. After that we will swap all $CIRP (ERC-20 tokens) to the XRPL. These are for private early-stage adopters and accredited investors requiring KYC/AML. Later the company is planning to launch the asset on at least one top 15 centralised exchange (CEX) for trading as well as for trading, storage and swapping on www.Xumm.app with a further 150,000+ active users.

Revenue is generated from 5 main areas. The first being private token sales, Public token sales, rPET NFT marketplace sales, traceability fees, and Ad revenue sales. There are also Negligible transaction costs for plastic waste off-takers (REBORN) and organisations who pay to collect and track plastics using our network.

Development approach and strategic planning.

Stage 1 Development – MVP

1. Advertising network & platform.
2. Wallet for RVMs, mobile wallets for users.
3. Exchange platform for internal trading. The Exchange platform will provide internal circulation of tokens within the Circularr ecosystem.
4. Token design. To empower the Circularr blockchain with its own-backed Plastic token, this is where we will further develop the tokens characteristics and functions on the network.

Stage 2 Development

1. Liquidity pools and DeFi
2. Charity integration. Development of an open API for charity organizations in order to allow users to send their tokens to environmental and charitable organizations directly from our native wallet/app (Android/iOS) or directly from our RVM network.
3. Admin panel for organisations and businesses to have further customisation of reporting and tools for RVM's within their network. This will also allow users who are staking $CIRP on an RVM access to view their rewards and payouts.
4. Advertising system blockchain integration. Brands and organisations will be able to place their materials on RVMs and within our native wallet/app. Static posters will be placed on panels on the sides of RVMs. Dynamic content will be served on touchscreens on the front of the machine.

Stage 3 Development

1. Track and Trace system.
2. Gamification. A game development for Users, where the main objective will be collecting tokens. Users will be awarded a certain status depending on the number of tokens collected. This can further integrate into the open banking API to be connected to organisations such as NatWest, Barclays etc and go hand in hand with their apps such as https://cogo.co/ to allow users to track their environmental impact by being a part of the network.
3. Preparation for centralized exchange listing on at least one top 15 exchange IE). https://coinmarketcap.com/rankings/exchanges/

4. MVP of the Circularr NFT marketplace for users to buy and sell rPET plastic using $CIRP, this will also allow for the sale of tracked and traced rPET fabrics/yarn, and textiles.

Stage 4 Further Development and Expansion of The Ecosystem
1. Recyclers' wallets with centralized controls (with control interface for organizations) for integration and expansion to 3rd party recyclers.
2. Wallet for partners, with API access to further expand 3rd party wallet and exchange integrations.

High-level business strategy

Circularr will concentrate its efforts on the development of the aspects of the ecosystem that will enable rapid growth. With this principle in mind, introduction of the advertising component of the system should be a priority, because it will allow the RVMs to be placed at partner's sites free of charge as the advertising revenue can offset the lease, rental or purchase price of the machines. Developing a network of RVM's should be the initial strategy of the larger roll out of the Circularr ecosystem. The DeFi and centralised exchange trading mechanisms will take time to implement, as this is still in development on the XRPL framework: there are no existing liquidity pools, and no $USD, £GBP, EUR XRPL stable coins currently. These features are likely to take some time to be developed. Listing at a centralised cryptocurrency exchange in most cases is possible only when a token is already in circulation and its real utility is fully functional. Therefore, the initial MVP version of the Circularr ecosystem should be concentrated on:

- The token circulation - depositing recycled materials into RVMs and their retrieval by recyclers. This is needed to create real utility for token listing at a centralised exchange (CEX).
- Advertising network, as it is needed for rapid growth of the network and deployment of RVM's.

Competition analysis

Direct competitors:

1. [Reward4Waste](#) (developed by CryptoCycle) (UK) - green blockchain-based recycling platform, provided by deposit return scheme (DRS) and user reward system. A startup went through a 4-month trial in Whitehead (Northern Ireland). Currently, the project is on an independent analysis stage carried out by Queen's University (to be released soon).

Pros:

- Diversity of accepted many types of bottles and other materials. During the trial a user could deposit bottles from most (but not all) soft drinks, milk, wine.
- It has a built-in reward system
- Given a choice to the user - charity donation or redemption for SPAR vouchers
- Provenance tracking
- Cooperation with charity organizations
- Active engagement with the Reward4Waste community
- Blockchain+AI technologies
- Total analysis of consumer behavior, brands, and recycling processes in public access.
- Wide recycling box placement in various locations - at the train stations, playing fields and Blackhead Path

Cons:

- Recycling of bottles that are bought only at SPAR supermarkets. So limited reach and exposure as bottles bought outside of SPAR will not function. Rewards limited to SPAR Vouches or charity donation only.
- Low capacity recycling bins in the SPAR stores.

Indirect competitors:

1. UNISAN - CafeCrush Reverse Vending Machines -a recycling system with a developed reward protocol for employees of participating companies. The reward system is based on the ticket incentive scheme (UK).

Pros:
- A wide range of rewards for the staff (from money off at the staff canteen to a donation to a charity of person's choice);
- The system works like a stimulation tool for employees;

Cons:
- Not blockchain-based;
- Business-oriented, it means that RVMs can be placed only in company's offices (incentive system) and work on a closed internal network.

2. Tomra Systems - Deposit Return Schemes - deposit return schemes for collecting drink containers for recycling (Norway). Standard government backed DRS scheme for the country of Norway.

Pros:
- The public has a financial incentive to recycle

Cons:
- There is no developed reward system, just return a deposit and get a paper ticket to redeem for fiat (local currency).

Market analysis

According to the trends experienced by many institutions, recycling is a growth industry. For example, the global market for plastic recycling should grow from $26.5 billion in 2020 to $34.4 billion by 2025, at a compound annual growth rate (CAGR) of 5.4% for the forecast period of 2020-2025.

At the moment the recycling rate of plastic packaging waste in the UK is 46,2%, which reflects quite a high level of development of the recycling industry in the UK and conscientiousness of citizens of the UK.

According to the Statista surveys, public opinions:

- Share of UK residents who feel not enough is being done about plastic pollution-76% (2019);
- Share of residents in Great Britain who are concerned about disposable/non recyclable products-86% (2019);

Recycling rate of waste from households in England from 2010/11 to 2019/20 (Statista):
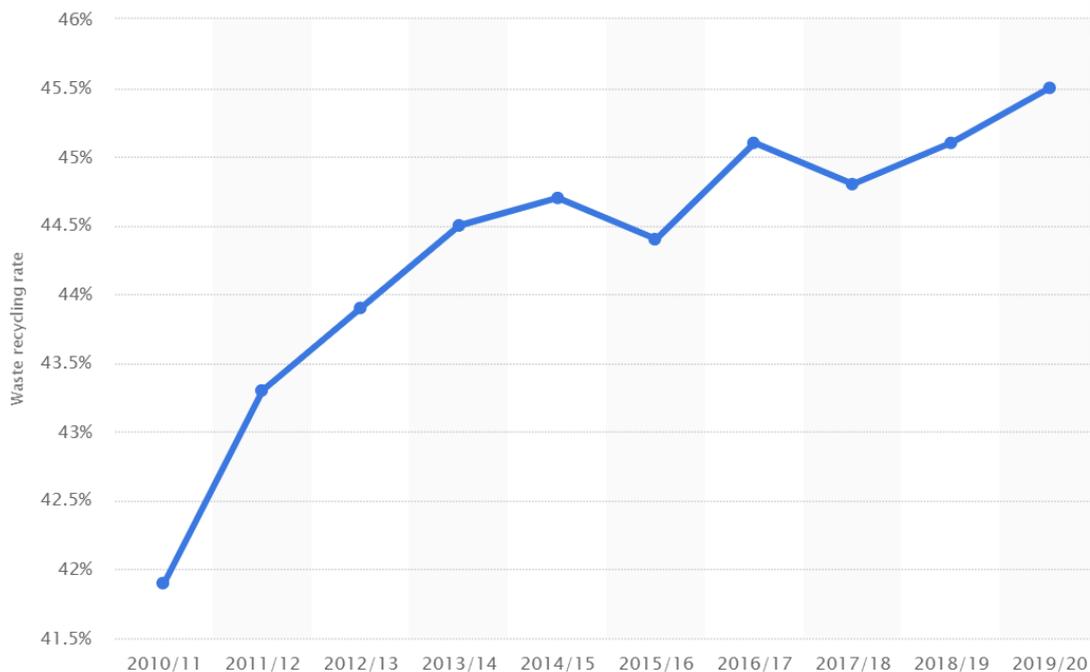
To sum up the surveys above, the UK's population is interested in the development of the recycling industry and feels responsible for their impact on the environment.

UK Government: Consultations on Deposit Return Schemes for England, Wales and Northern Ireland

Taking into account successful experience with DRS implementation in Germany and Scandinavia, in 2019 the UK government introduced a new DRS system for bringing recycling to a new level in the country only with launching the project in 2023-2024. According to the Government's survey, "UK consumers go through an estimated 14billion plastic drink bottles, nine billion drink cans and five billion glass bottles a year".

As a result of recent consultations, It was offered to include cartons to recycle and spread DRS vending machines across four nations of the UK.

Furthermore, Queen emphasized in her speech the need for DRS implementation and suggested that "shoppers charged 20 pence extra for drinks in bottles or cans". The charge will be included in the price of particular products and it will be returned as soon as he or she brings back the packaging to be recycled