

RECEREUM



WHITEPAPER

INTRODUCTION

Every time you throw away a piece of garbage, think of where it will eventually end up. Whether it is a plastic cup, your broken cell phone or spent battery cells from your CD/MP3 player, it contributes in some way to environmental pollution and is also hazardous to life. Not only are these all non-biodegradable, but, in addition, their disposal poses inherent risks as they release harmful toxins into the air, surrounding soil and ground water.

Most of the world's countries are struggling to deal with their waste problems. Poor management of waste impacts the communal well-being of entire communities and cities; results in pollution of local water, air and land resources; contributes to climate change and ocean pollution; promotes climate warming and hastens the depletion of forests and mines.

Landfills such as Bordo Poniente in Mexico City, Mexico, Laogang in Shanghai, China, and Jardim Gramacho in Rio de Janeiro, Brazil, each receive more than 10,000 tonnes of waste per day. In China, expanding cities are adding on incinerators, which in turn contribute to air pollution.

The solution to this problem exists. We offer a new motivational ecosystem platform, based on modern blockchain technology – Recereum.

With the Recereum platform we want to involve citizens in the proper sorting of garbage to reduce the costs of waste disposal and increase the amounts of acceptable recyclables.

Recereum: a blockchain-based platform for turning waste and recyclables into real value

“Proper placement of your waste will be cheaper, simpler and much more profitable.”

Recereum Team

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BACKGROUND & PROBLEM

Recycling is playing a larger role in our economies, at least partly thanks to government incentives. The Bureau of International Recycling (BIR) has estimated that the recycling industry handles more than 500 million tonnes of waste and employs more than 1.5 million people, with an annual turnover of USD 560 billion.

Governments use a wide variety of measures to promote recycling, such as public collection schemes for waste paper, deposit-refund systems for used gas containers, take-back programmes for used batteries, or product standards imposing a minimum level of recycled content. And recycling is clearly on the rise.

Policy measures to encourage recycling, however, will only meet with limited success if the markets for recycled products are not functioning well. Governments are constantly asking for a greater proportion of goods and materials to be recycled, but the cost of meeting these targets is determined to a large extent by the marketplace.

Unfortunately, there is some evidence that markets for some recyclable materials are subject to important failures and barriers, and this can be costly. For one thing, inefficient markets are frequently subject to price volatility.

Five issues have been identified as potentially significant barriers and failures in markets for recyclable materials:

- search and transaction costs
- information failures
- consumer perceptions and risk aversion
- technological externalities
- market power

But what we can do to overcome the barriers to recycling markets, which in turn may help the markets function better and thus reduce price volatility?

SOLUTION

Most households that utilize waste sorting understand the benefits that this process brings. But many have no time or desire for this, or are just plain lazy. In this arrangement, weak social motivation is the problem.

Many countries have adopted special laws that call for the proper disposal of waste. But in all honesty, punishment for violating these laws is not the best motivation in this case.

We are confident that the current situation can be resolved by monetary motivation.

We propose to introduce a system of bonuses for the disposal of all garbage. Each household using waste sorting can make money from every single recycled bottle, battery, piece of old equipment or electronics. In addition to a clean nature, people will gain perks that can be used towards the achievement of a comfortable life.

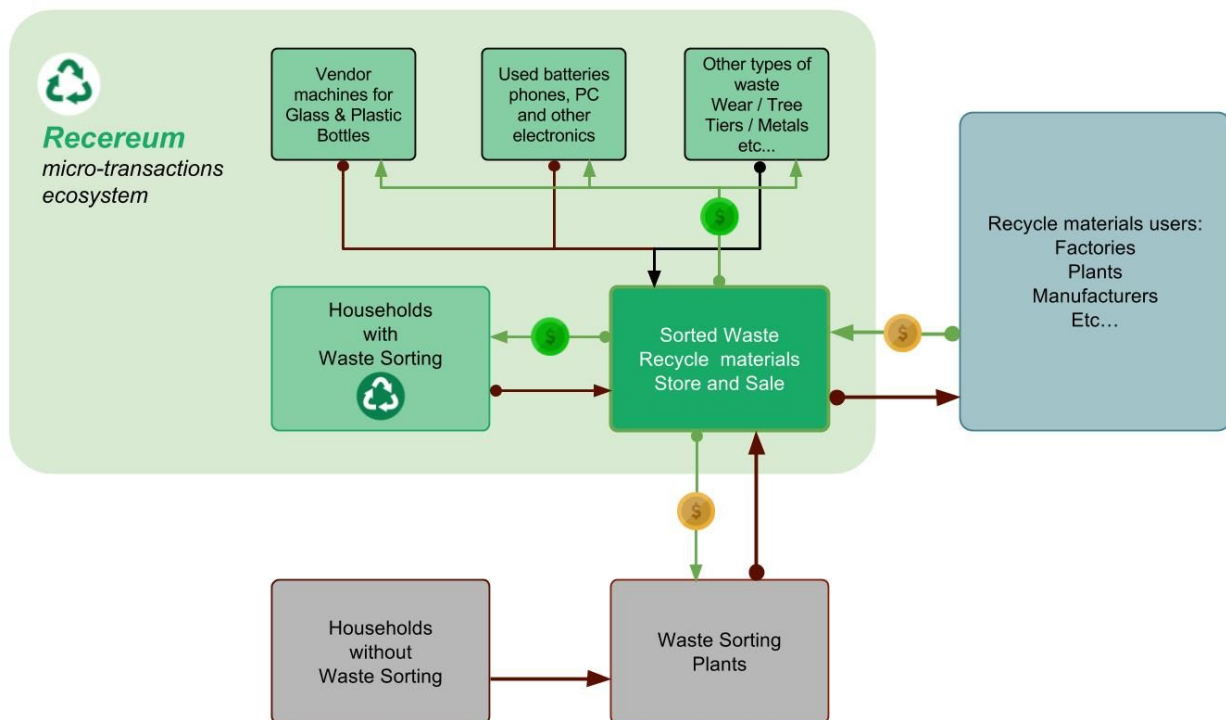
Viewing garbage as something foul and unwanted -- this is an antiquated attitude. Nowadays it is potential recyclable matter that can become a material used repeatedly to produce useful things.

Therefore, paying households and individuals for every piece of garbage received is right! And it will bring great benefits both to manufacturers and to our nature.

RECEREUM ECOSYSTEM

Recereum is a platform based on blockchain. It will help establish a direct connection between the waste receiving company and the individual user or household.

HOW RECEREUM WORK



One of the main costs of a garbage processing plant is waste sorting.

Proper sorting of waste allows the company's costs to be reduced. Part of the money saved is transferred to the Recereum's cryptocurrency account as coins.

These coins are awarded to each household, or to the user's personal wallet. In this way, coins can be credited from various places – including stations collecting recyclables, bottle vending machines, waste collection centers and others.

Accumulated bonuses can be used to pay for the services of an official partner of the ecosystem Recereum.

Thus, coins can be transferred to the waste reprocessing plant, and the plant can then re-award bonuses to users for accurate sorting of waste.

OUTSIDE OF THE PLATFORM

By employing Recereum for waste sorting, the following fields will increase their profitability and turnover:

1	Waste trading	Properly sorted garbage will improve count of recycling that can be imported and exported between countries
2	Agriculture market	Quality growth of Recycling compost and mineral additives
3	Energy	A waste-to-energy plant is a waste management facility that combusts wastes to produce electricity
4	Metals	Old sorted electronics can be separated to many useful materials such as Gold, Silver, Platinum, and other.
5	Plastics Industry	The count of markets that use plastic in manufacture is huge. And is most re-useful material.
6	Vending machines	Reverse vending machines can be placed in every mall and accept many types of waste.
7	Aluminium	Aluminium is most used metal in the world. So vending machines for aluminium bottles will help to reuse much more metal and be sure that will benefit and not harm.

RECEREUM USE CASES

Reverse vending machine



reversevending.co.uk

Machines for receiving bottles do exist in some countries like Germany, France, and Holland. But the problem with such machines is that they issue a check for a meager sum, or a heap of coins. This is not a very convenient solution. If Recereum is connected to such a device, you can receive coins directly into your phone's electronic wallet. No coins in your pocket, no checks; instead, easy gathering and trouble-free spending. As for owners of the machines – one need not load a huge number of different types of coins, but only connect the terminal to the web and simply collect bottles.

Battery collection

Old batteries are one of the greatest environmental problems. They decompose for decades, and inflict tremendous damage. Many places have special boxes for receiving used batteries, but countless people find it easier to throw everything into the trash bin.

"If I had a dollar for every tyme I throw out used battery ..." – this is now a reality.

By hooking up such locations to the platform, one can buy up all of people's old batteries, which is significantly cheaper than dealing with environmental disasters in rivers and lakes.



More than 50 types of business can be started based on waste sorting idea.

This is an excellent opportunity to make a business in any city.

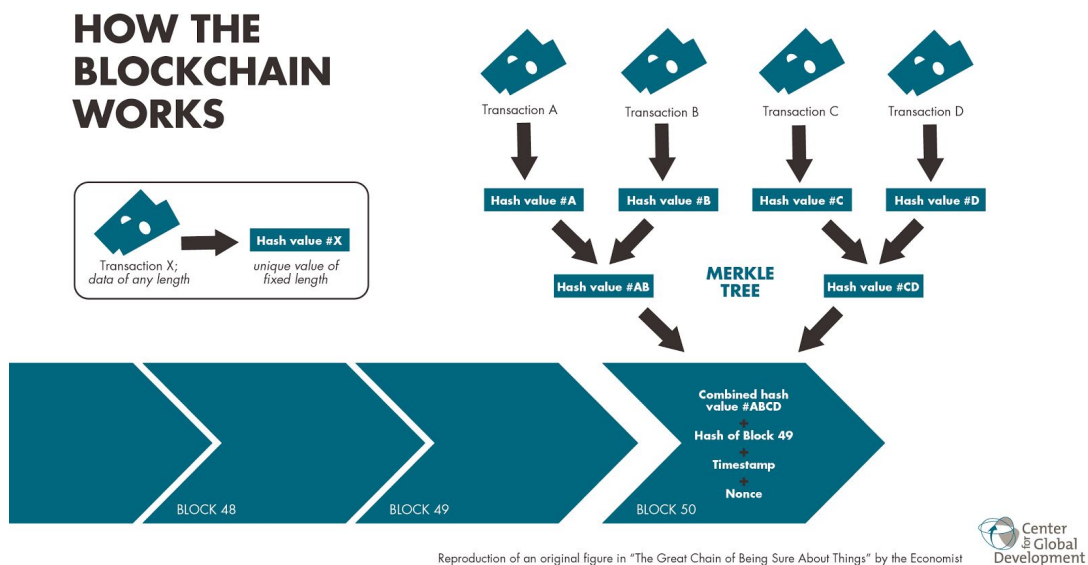
<https://www.profitableventure.com/recycling-business-ideas/>

WHY BLOCKCHAIN?

Using blockchain ensures security of financial transactions between Recereum users, and also regulates this next-generation financial ecosystem. Recereum Ecosystem will operate on the first and largest Ethereum-based blockchain platform for smart contracts. At this time, Ethereum (ETH) blockchain technology is most suitable for Recereum's needs; however, the use of other platforms is possible in the future, as new options become available on the market (with consequent progression to new blockchains). Blockchain security is assured by data records of all Recereum token transfers from one account to another, with the mandatory and automatic hash recording into the Blockchain. The flow-of-funds record is open to the public. However, private registration information is unchangeable and anonymous.

Recereum (RCR) is designed as an extremely high-workload system. The market for RCR Ecosystem can potentially consist of billions of users. The main focus is on performance, in which we emphasize smart contracts, support, predictability, stability, and ease of use. We intend to use the most proven and scalable open source technologies and keep ourselves informed of alternative technical implementations.

The state of the RCR blockchain will be regularly recorded in the most prevalent smart contract ledgers (at least ETH) so that proof-of-stake and proofs of transaction (within RCR) can be verified by Ethereum smart contracts. Common optimization techniques will be also implemented.



BLOCKCHAIN APPLICATIONS IN RCR

- Smart contracts
- Payments
- Supply chain management

APPS & INTERFACES

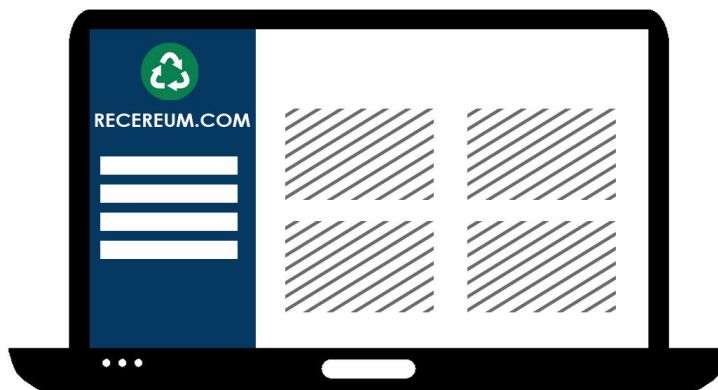
User App & Web site



Each user can install a free application, which will allow the user to accumulate coins, read QR codes, and keep records of funds; as well as studying information about recyclable materials and locations of recyclables reception centers.

The website offers the same information, as well as additional data for users.

Panel for company & business



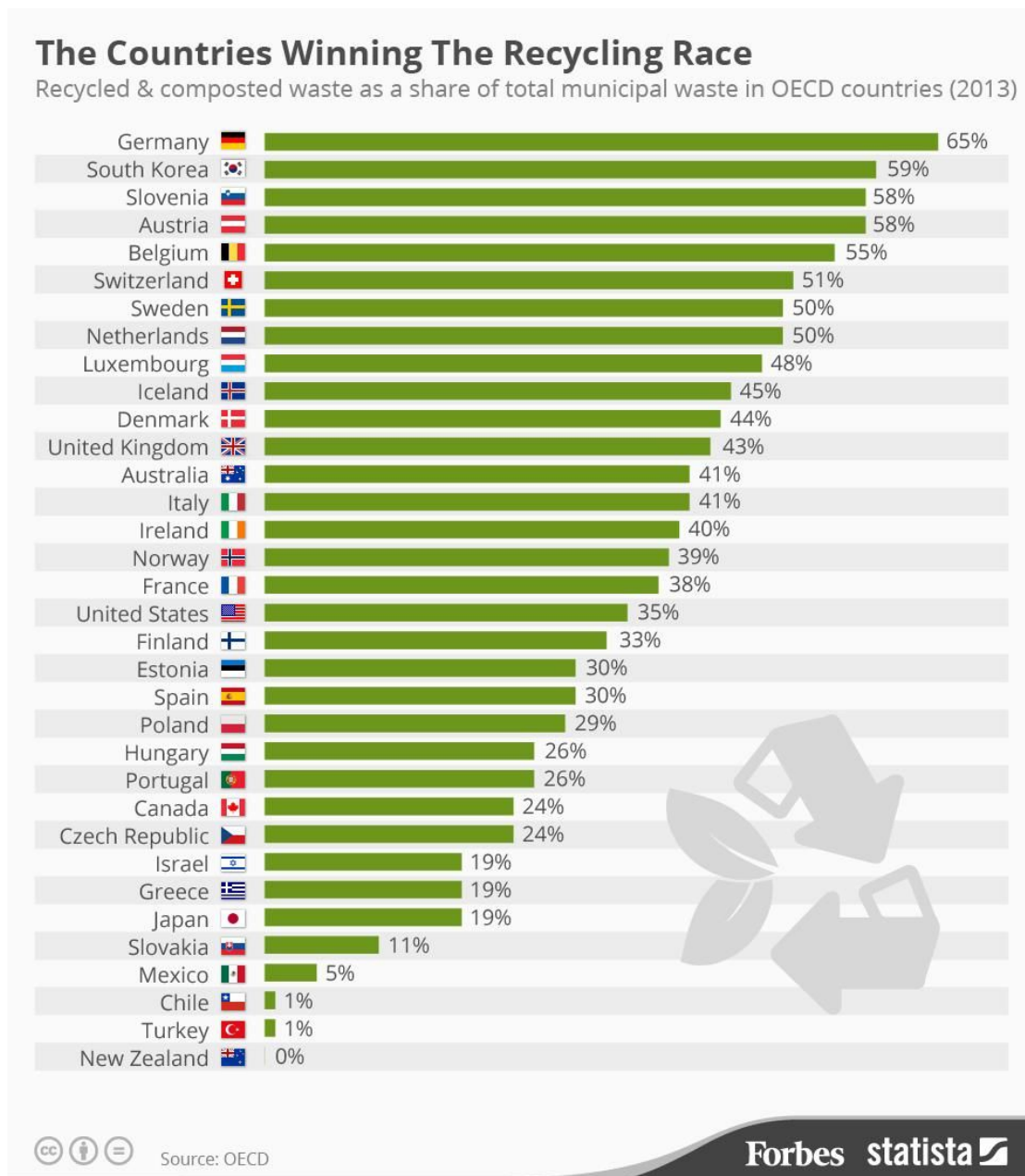
A web service for companies and businesses is launched in a browser, and allows one to take all actions necessary for functional operation. These include setting up payments, sending notifications, connecting equipment, and other actions. This allows for fully valuable interaction with all of the company's users.

WASTE MARKET

The Bureau of International Recycling (BIR) has estimated that the recycling industry handles more than 500 million tonnes of waste and employs more than 1.5 million people, with an annual turnover of USD 160 billion.

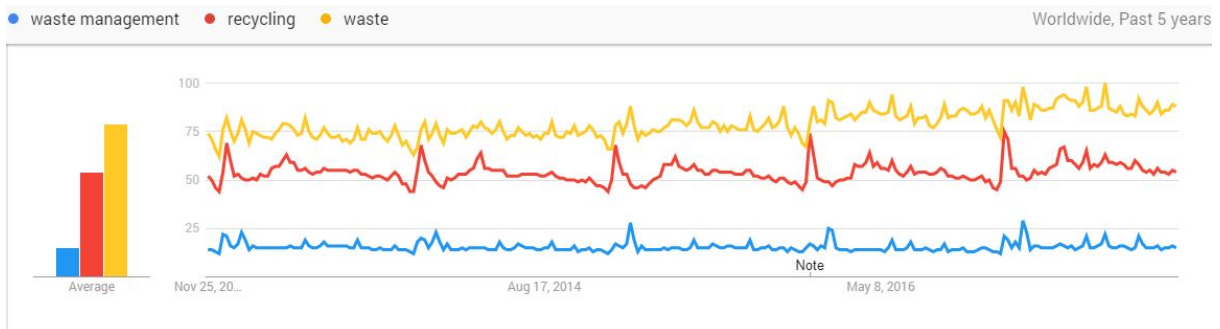
MARKET OVERVIEW

Competition in a waste market leads to a different result from competition in a conventional goods market. To begin with, let's consider countries which are winning in waste disposal race or have a good waste market.

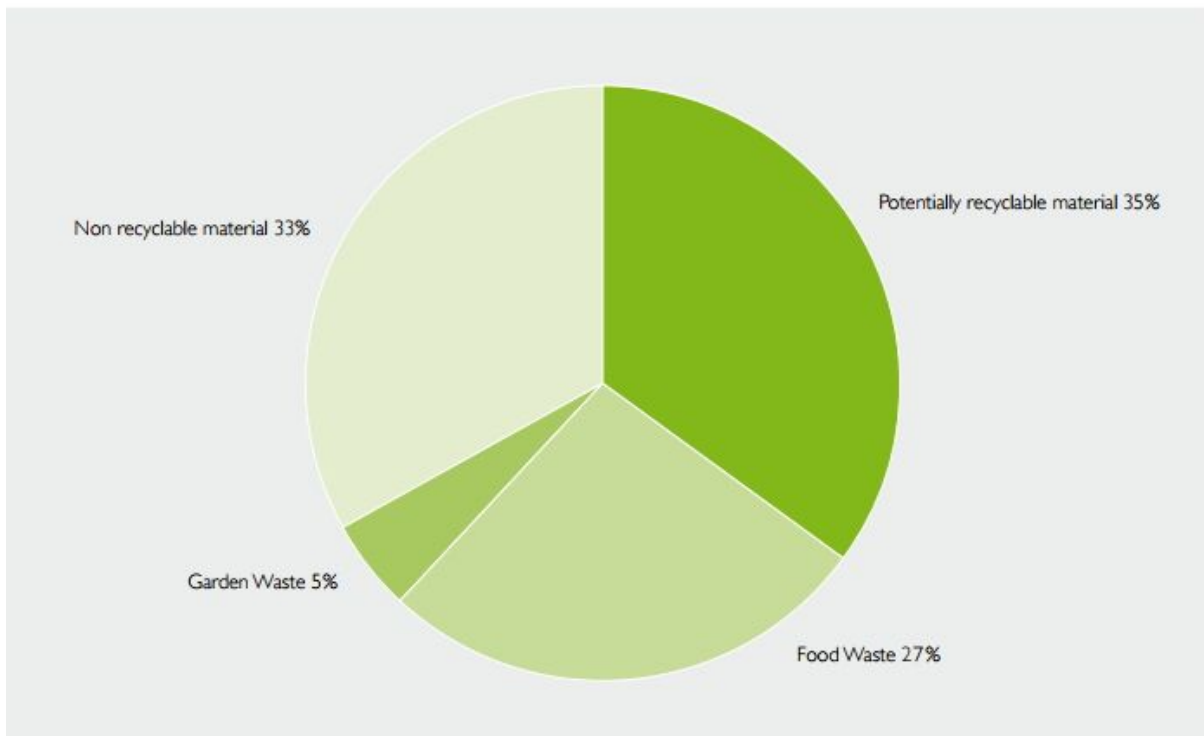


GLOBAL TRENDS

As a global trend, waste reprocessing is very important all year long; it is not limited by seasonality.



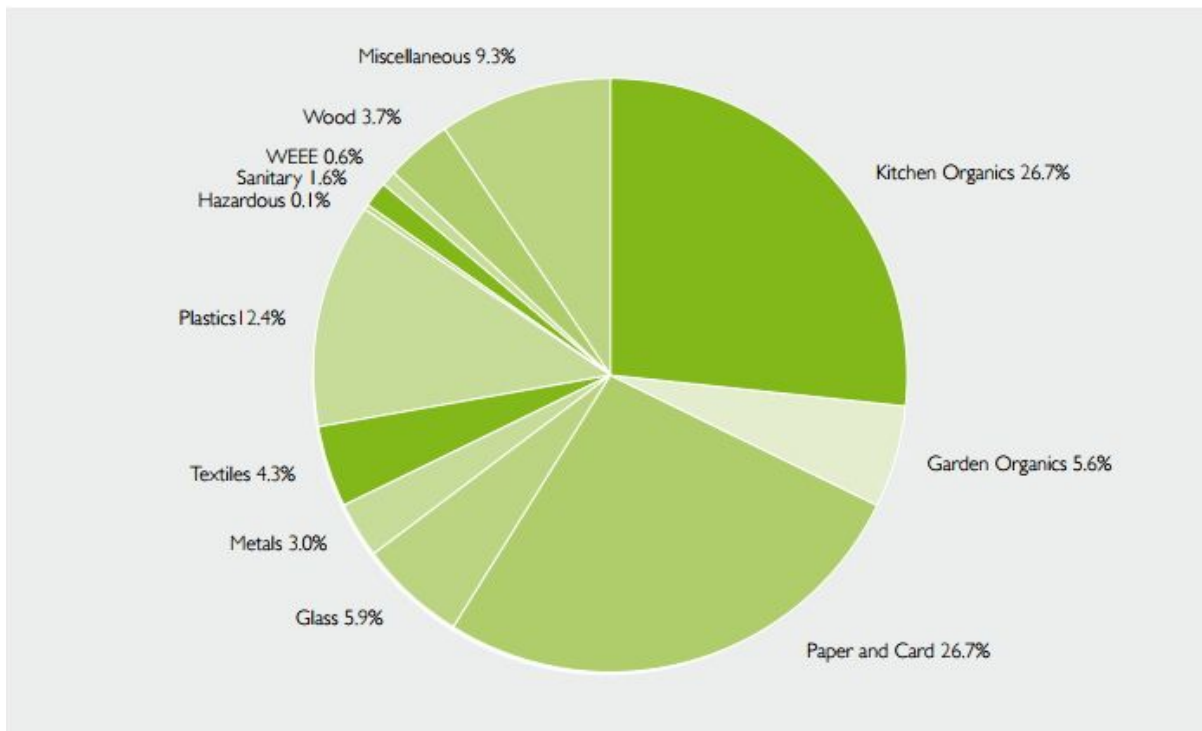
35% of all waste is made up of materials which is suited to further processing and can be recyclable.



COMPETITIVE ADVANTAGES

What exactly can we recycle and make money from?

- Glass bottles and jars – recycle lids/caps separately
- Paper (newspapers, magazines, telephone books, office paper, junk mail, comics and light cardboard)
- Laminated or waxed papers like paper cups
- Drinks cartons (for milk, juice etc.)
- Aluminium (soft drink and beer cans, foil)
- Plastic bottles and cartons
- Food tins (fruit, vegetables, pet food)
- Plastic bottle tops, metal and aluminium lids
- Textiles (clean clothes, bed linen, towels, coats and jackets)
- White goods (washing machines, cookers, dryers, dishwashers, fridges)
- Batteries (also collected in shops and supermarkets)



BUSINESS MODEL

Free for users

The app and web-interface are gratuitous for users. A user can track account balance, receive coins, scan QR codes, and obtain updated information.

Subscription plans for business

Every kind of waste management business has its own work specifications. Companies can select necessary additions and modules to their specific type of business and its needs. A monthly fee will allow for support and development of the platform and keeping it up-to-date.

Franchising business model

Ready-to-use solutions are under Recereum's brand name. Using this model, anybody can start a personal business in any city, or establish a recycling center accepting several types of garbage.

ICO

Our goal in carrying out ICO(Initial Coin Offering):

- fundraising for further work on the development of the ecosystem
- attracting the attention of potential investors and citizens concerned about the existing environmental issues
- providing the necessary volume of tokens, which will be converted into coin

We believe that attraction of investment through ICO is promising as it is profitable both for us and for investors.



TOKEN DETAILS

Token: RCR

Token exchange rate: 1 ETH = 300 RCR

Total supply: 7,999,000 RCR

Project protocol: ERC20

Payment method: Ethereum

Recereum will issue 7,999,000 RCR without any additional tokens. 5,199,410 RCR tokens (65%) will be sold to the public. 4,719,410 RCR will be sold during Token Sale and 480,000 RCR will be allocated to the Pre-sale

TOKEN DISTRIBUTION



USE OF FUNDS



Pre-SALE

Start date: 25.12.2017

End date: 25.01.2018

Distributed on Pre-sale: 480,000 RCR

Price: 1 ETH = 300 RCR + Bonus

Max goal (hard cap): 1,142 ETH

Period: 32 days

Minimum amount: 1.00 ETH

Bonus: 40%

480,000 RCR will be offered on the pre-sale at a 40% discount, i.e. for 1 ETH a buyer will get 420 RCR (300 + 120 as a bonus). The contributors will receive RCR in their Ethereum wallets immediately, but the tokens will remain non-transferable until the Token Sale. The maximum duration of Presale is two weeks. If hard cap of 1,142 ETH is reached earlier we will stop the sale. Funds raised on the Presale will be used for the Token Sale promotion and marketing (90%), legal issues and compliance (5%), and administration and HR (5%)

ICO TOKEN SALE

Start date:

End date:

Distributed on Token Sale: 4,719,410 RCR

Price: 1 ETH = 300 RCR

Min goal (soft cap): 1,800 ETH

Max goal (hard cap): 15,731 ETH

Period: 28 days (4 weeks)

Minimum amount: 0.01 ETH

Bonus First 48 hours : 40%

Bonus Week 1: 30%

Bonus Week 2: 20%

Bonus Week 3: 10%

Bonus Week 4: 5%

4,719,410 RCR will be offered during the Token Sale with 5% to 40% bonuses. A special bonus of 40% will be offered during the first 48 hours of the crowdsale. Then the bonuses will decrease every week. The maximum duration of Token Sale is four weeks. If hard cap of 15,731 ETH is reached earlier we will stop the sale. If we reach soft cap of 1,800 ETH and the period is over, unsold tokens will be burned. If we don't reach soft cap of 1,800 ETH we will refund payments to the Token Sale contributors.

DISCLAIMERS / RISK FACTORS

During the RCR Distribution Period, Recereum will provide specific procedures on how Buyer should purchase RCR Tokens through the RCR Crowdfunding Contract. By purchasing RCR Tokens, Buyer signifies that he/she comprehends and acknowledges these procedures and has no objection to such procedures and material specifications. Failure to use the RCR Crowdfunding Contract and follow such procedures may result in Buyer not receiving any RCR Tokens. Any buyer of RCR Tokens may lose some or all of the amount paid in exchange for RCR Tokens, regardless of the purchase date.

Due to SEC official policy in U.S., RCR Tokens are not currently offered to U.S. persons. U.S. persons are strictly prohibited and restricted from using the RCR Crowdfunding Contract; the Company is not soliciting purchases by U.S. persons in any way. Company is not bound by this Agreement if this Agreement has been entered into by a U.S. person as Buyer or Buyer has entered into this Agreement or has purchased RCR Tokens on behalf of a U.S. person, and Company may take all necessary and appropriate actions, at its sole discretion, to invalidate this Agreement, including referral of information to the appropriate authorities. Any U.S. person who uses the RCR Crowdfunding Contract or enters this Agreement on an unlawful, unauthorized or fraudulent basis shall be solely liable for, and shall indemnify, defend and hold harmless Recereum and Recereum's respective past, present and future employees, officers, directors, contractors, consultants, equity holders, suppliers, vendors, service providers, parent companies, subsidiaries, affiliates, agents, representatives, predecessors, successors and assigns (collectively, the "Recereum Parties") from any damages, losses, liabilities, costs or expenses of any kind, whether direct or indirect, consequential, compensatory, incidental, actual, exemplary, punitive or special and including, without limitation, any loss of business, revenues, profits, data, use, goodwill or other intangible losses (collectively, the "Damages") incurred by a Recereum Party that arises from or is a result of such U.S. person's unlawful, unauthorized or fraudulent use of the RCR Crowdfunding Contract.

You are purchasing Tokens solely for the purpose of receiving services, participating in the Ecosystem, and supporting the development, testing, deployment and operation of the Ecosystem, being aware of the commercial risks associated with the Company and the Ecosystem. You are not purchasing Tokens for any other purposes, including, but not limited to, any investment, speculative or financial purpose.

Full agreement documentation is available by link:

https://recereum.com/files/RCR_legal_token_sale.pdf

ROADMAP

This is the route we are currently taking.

May 2017

Initial Idea was Born

July 2017

Gathering team core,
Market Research,
idea evolution

December 2017

Token pre-sale

December 2017

ICO Token Sale

FUTURE PLANS

Depending on the amount of money raised, the following extent of development is planned for the platform:

\$1 500 000

Development of
the Recereum core,
fulfilment apps and
interfaces

\$2 500 000

Implementation of
Recereum project to
Municipalities or
city councils

\$ 5 000 000

Scaling model of
Recereum project.
Platform for glass and plastic
vending machines.
App for batteries,
and used electronics
accepting locations

TEAM CORE



Bohdan Yakubovych
co-Founder / Finances

Owner of US-based transportation company "UKR TRANS EXPRESS, INC"
More than 11 years experience on logistic market & cooperation with recycling industry



Grigory Shegeda
co-Founder / Development

Blockchain & Smart Contracts developer, independent contractor.
10 years work experience as a leading engineer of energy networks.
PHP, Python, Unix like systems



Alex Shatkowski
co-Founder / Research / PM

UX designer, Team lead in small teams up to 10 peoples.
Cross the way from web-developer to Project Manager.
Own SAAS websites, market and niche research, white hat SMM, SEO.



Ivan Chris
Design / Creative

Pixel-perfect designer, Video creator

See all project participants on our website <https://recereum.com/>

CONCLUSION

*In the world of people, the main value is not the Dollar or Bitcoin.
The main thing is relationship between people.*

Recereum ecosystem is not alternative waste recycling plant or a garbage collecting machine. Our mission is to motivate people to make this world cleaner!

Recereum makes it possible to do what we do anyways nearly every day, but, at the same time, to obtain bonuses for these beneficial activities.

It is a transparent system, with reliable storage of information on how well people are performing their civic duty.

Think about it!

What will remain for our descendants? Let's begin to change now!

JOIN RECEREUM



<https://recereum.com/>