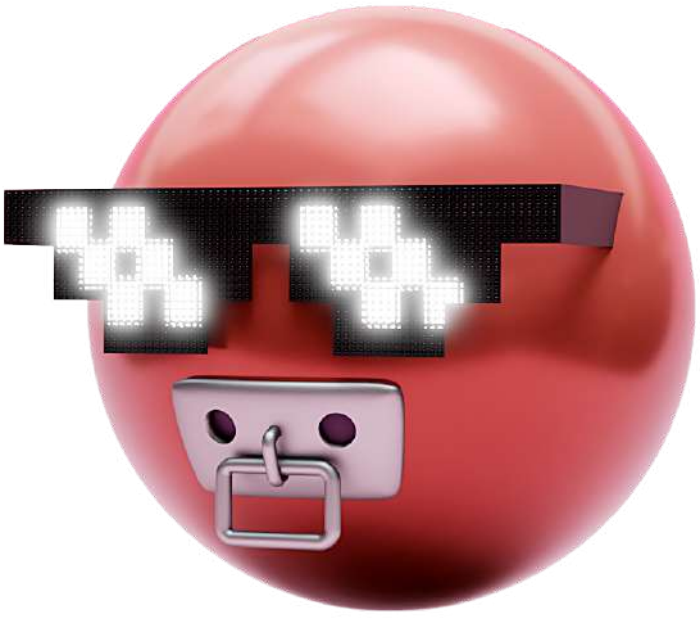
Plasticchain Whitepaper

Let's live in a cleaner environment!

"I was born as a physical decorative object during some shitty events going on in Planet Earth. And my creators put me in a jail, they call it 'storage'.

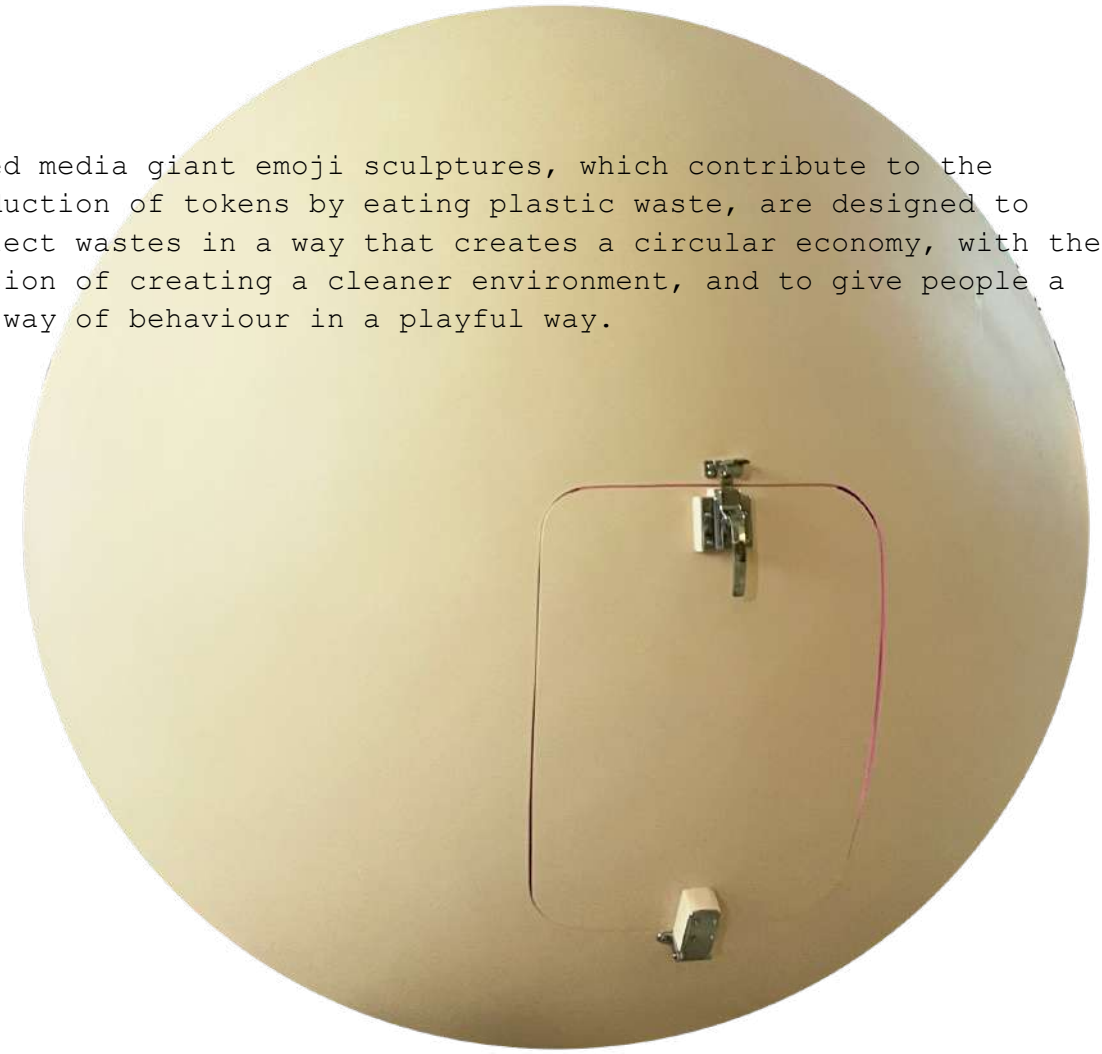
SEVINCY realized that I was a giant piece of waste myself which threatened Planet Earth just like all the other decorative products people consume and turn into waste. She devoted her attention and time to me. As a recycled emoji sculpture I showcased on a boat by the Bosphorus and resisted in the Kaz Mountains. Then she taught me to feed on plastic waste and help create a cleaner environment. Then I felt happy like a baby again.



Children grow up with plastic toys. Babies take milk and nutrients into their bodies from plastic bottles with plastic pacifiers. The diapers are plastic. Balloons are plastic, containers are plastic, strollers are plastic. As children grow, the plastic environment grows and diversifies with them. And from

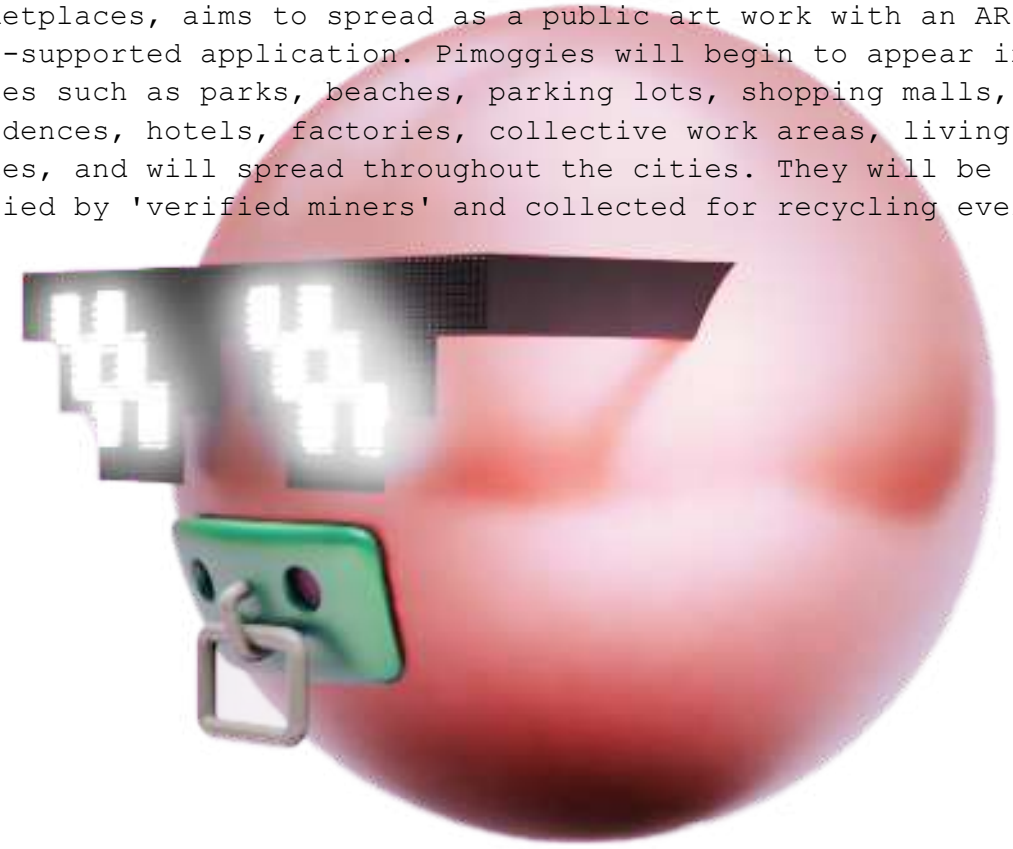
that plastic, continents form in the ocean. Then the plastic algae introduces the plastic into the chain of life. Some living things now have cells mixed with plastic. Today, there is no geographical region left unaffected by environmental disasters. Extreme rains, floods, extreme temperatures, drought, fires… Authorised institutions and boards of the world claim that these conditions were created by man. Unfortunately, humanity does not want to believe that these things are caused by the climate crisis. The point we have reached is such a point that we must achieve everything we need to do with lightning speed. Industries contain important stakeholders making efforts in this regard. I strongly believe that this accelerating effect can be achieved with "art".

Now as a big baby, I have a responsibility for this planet: My job is to clean up the plastic waste that humans constantly create. The more I eat, the better it will be for the Earth." -Pimoggy



Mixed media giant emoji sculptures, which contribute to the production of tokens by eating plastic waste, are designed to collect wastes in a way that creates a circular economy, with the mission of creating a cleaner environment, and to give people a new way of behaviour in a playful way.

These 180x180 cm sized PIMOGGY Plastic Miners will be placed in public or private spaces and become a piggy bank for plastic waste as living figures eating plastic. Miners that will serve Plasticchain will be a new age technology and will be equipped with functions that will combine art with technology (AI-AR). The project, which will be self-financing with the sale of NFTs in the marketplaces, aims to spread as a public art work with an AR game-supported application. Pimoggies will begin to appear in places such as parks, beaches, parking lots, shopping malls, residences, hotels, factories, collective work areas, living spaces, and will spread throughout the cities. They will be emptied by 'verified miners' and collected for recycling every day.



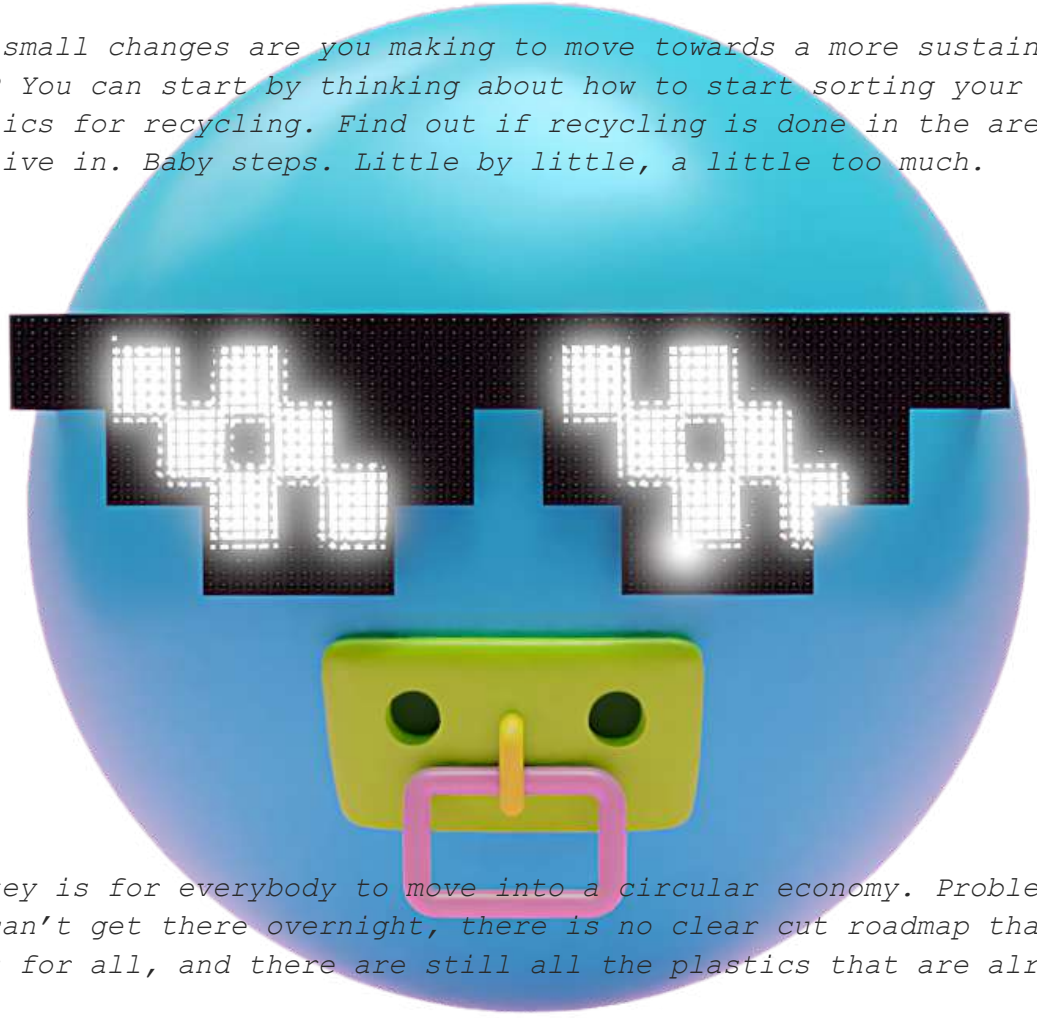
Plastic packs everything a person needs from birth to death. A new continent has emerged in the world from these wastes. For example, there is an organic recycling system in Turkey. There are people on the streets who make a living from recycling. We respect them. We will reach them out and involve them into the system as ‘verified miners’. They will collect ‘clean plastic wastes’ in an easy way through from Plastic Miner Emojis and sell them to plastic recycle centres. So they can get daily income more easily. Here are some articles and news about the subject:

Plastic, Plastic, everywhere

In the last quarter century, advances in technology and living standards have lifted more than a billion people out of poverty. While economic growth reduces poverty, it also increases the consumption of everyday items, from toothbrushes to building materials. Cheap plastics have been key to raising living standards,

making products from lateral flow tests for COVID-19 to cars cheaply accessible to more people. Bio-based and sustainable plastics are currently expensive compared to those made from fossil fuels. To accelerate the transition to a truly circular plastics economy, a sustainable recycling solution for end-of-life plastic products, as well as a market for them, needs to be developed.

What small changes are you making to move towards a more sustainable life? You can start by thinking about how to start sorting your plastics for recycling. Find out if recycling is done in the area you live in. Baby steps. Little by little, a little too much.



The key is for everybody to move into a circular economy. Problem is you can't get there overnight, there is no clear cut roadmap that works for all, and there are still all the plastics that are already here.

In some circles, it is argued that the plastic problem is even more widespread than the carbon problem the world has been tackling. At least, it is said, there were some regions in the world that were not producing any carbon if they didn't have the utilities and technology. Plastics are there in the hands of the poorest of the countries and villagers, to the most affluent presidents and royalty. It's found in the deepest point of the ocean, the highest point on the planet, in the Sahara desert, and everywhere in between. It is definitely both an item with purpose and a problem that globally connects every single one of us.

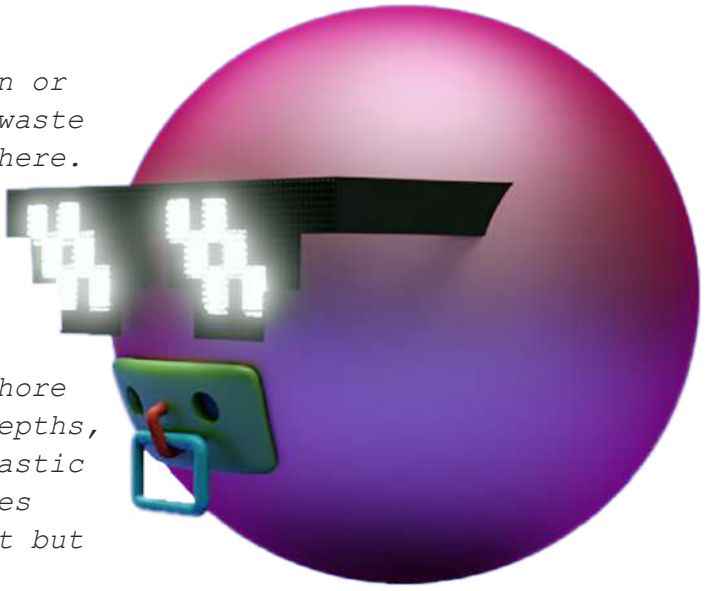
Measure & Report

Measuring is a category of its own. It applies to all players across the board. It's not a solution but a necessary first-step to making a difference. "You can change what you measure." There is an electric meter - why not a waste meter?

Between 1950 and 2015 the world went from producing 8Million Metric Tons (MMT) to 380 mmts and topped off 2018 at 415mmts. The total production rate in 1950 is now equal to just the annual leakage into the ocean - that's equal to the weight of two Empire State Buildings per month, 24 per year. The number is so large and the million metric ton unit is so foreign to 99.9% of the population that nobody can really comprehend what this means. Everybody has the idea that "somebody has an eye on it." In reality, they don't.

Invest in Local Recycling Infrastructure Globally. As understood in the last Cop26, countries DO NOT have the capacity and ability to recycle their own recyclables! Developed countries still do not know how to deal with it.

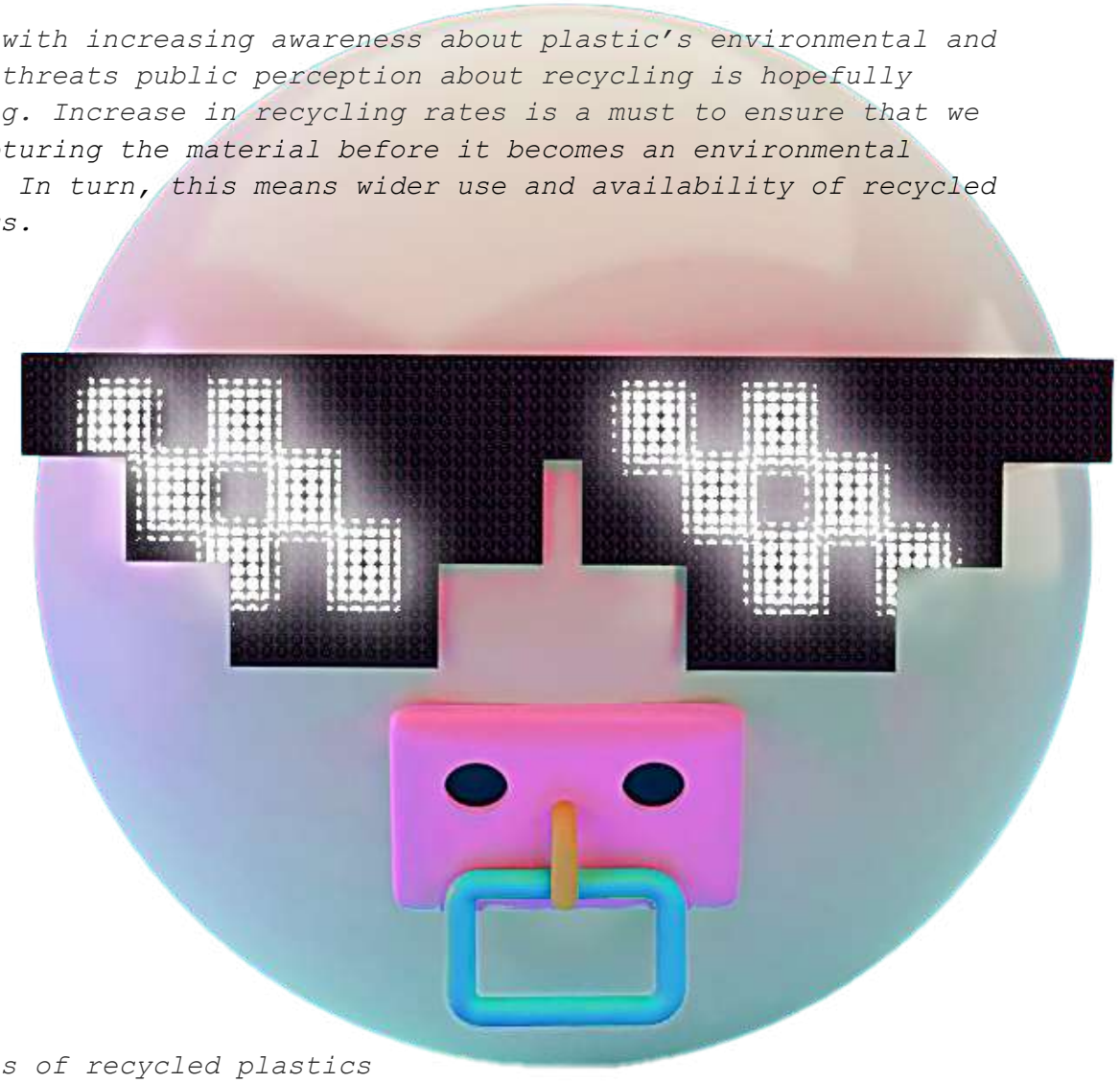
Invest in waste capture technologies



Whether on land, near shore, open ocean or seabed the world has a LOT of plastic waste it needs to deal with that is already here. Given this situation, there is much room to develop technologies to capture plastics and turn them into a resource while cleaning up the environment. From mining landfills to beach-cleanups, and investing in nearshore solutions to picking up the waste at depths, all are important. Every bit of the plastic that is left in the environment releases toxins into our air and water. And last but not least - create collaborations!

Given the technologies developed over the years the cost of producing new plastic is minimal. For recycled plastics — the cost of collections, cleaning, sorting, and manufacturing itself is added to the equation. Labor costs, machinery, taxes etc. all add up to increase the cost of recycled plastics.

Lately with increasing awareness about plastic's environmental and health threats public perception about recycling is hopefully changing. Increase in recycling rates is a must to ensure that we are capturing the material before it becomes an environmental hazard. In turn, this means wider use and availability of recycled plastics.



Benefits of recycled plastics

- *Creates jobs in waste management, recycling, municipalities (creating programs to improve collections and processing etc.) and manufacturing.*
- *Reduces the environmental cost of using plastics by reducing the amount of new/raw petroleum required and by reusing a toxic resource already created.*
- *Keeps plastics away from landfills, environment, and oceans.Captures a valuable resource (oil/petroleum).*

One con that is always highlighted, by the plastics industry, is the carbon footprint and energy consumption of recycling plastic is higher than creating new plastic. In a one on one comparison this might be true — and still a short sighted argument. The

environmental footprint of discarded, non-recycled plastic is higher than any other consumer product. There is a missing component in recognizing the life-cycle of any plastic product- they assume there is an "end" to the harm discarded plastics cause. They do not disappear and they pose too many risks and cause environmental damage.

Now with rising awareness about plastic challenges the world and planet are facing, more and more consumer goods companies are looking to incorporate recycled plastics into their supply chain, products, and processes. Pilot projects that use innovative data collection to encourage recycling and responsible waste management are underway in Argentina, India and the U.S.

For the rest of the articles: BeNatural

Even Garbage Is Using Blockchain Now

Pilot projects that use innovative data collection to encourage recycling and responsible waste management are underway in Argentina, India and the U.S.

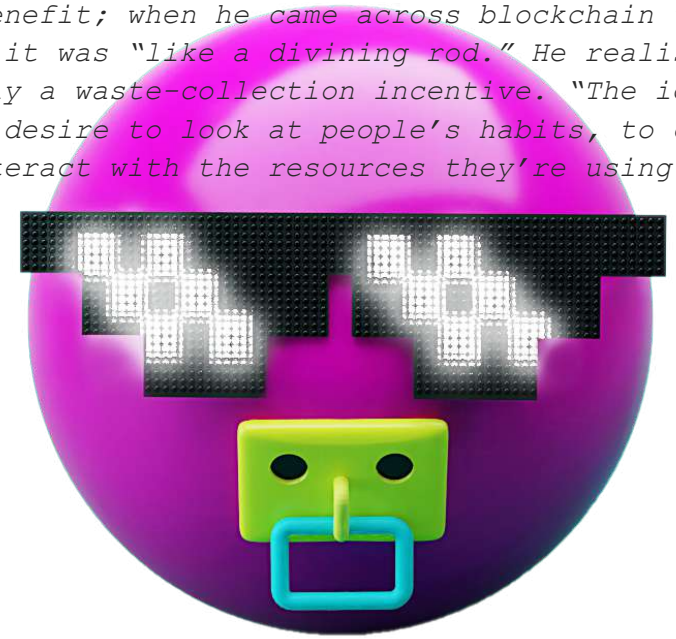
Where does our trash go after it leaves the curb?
There's no easy answer. Most plastics and other waste aren't recycled; instead, they end up in landfills — or worse. But their journey is often difficult to track. There are

billions of moving parts along the chain, including collectors, processing centers and even many types of refuse. Pilot projects in the U.S. and abroad are trying to add accountability to this process with the adoption of blockchain technology that will allow both waste managers and citizens to peer into garbage collection with a more all-seeing eye. Blockchain, a decentralised ledger for linking information, can handle vast amounts of data and is often deemed immutable, as it is very difficult to alter completed digital entries. It underpins various cryptocurrencies, including the now-surging Bitcoin, and has become the cornerstone of Web 3.0 — the next, post-Big Tech phase in the evolution of the internet. Though many of its applications are in early developmental stages, blockchain is being used to innovate fields from banking and real estate to art and now, waste management.

Crypto for Trash

In Campo Viera, a town in northeastern Argentina, an entrepreneur named Ivan Zubilewicz has created a cryptocurrency that he hopes will improve local waste collection. Like Bitcoin and other leading cryptocurrencies, JellyCoin — scheduled to be released locally this month — is built on a blockchain.

Zubilewicz says he has long sought ways to shift human behaviour for the planet's benefit; when he came across blockchain technology in 2015, he says, it was "like a divining rod." He realised what was possible, namely a waste-collection incentive. "The idea sort of came from this desire to look at people's habits, to change the way that people interact with the resources they're using," Zubilewic says..



developed. Still, Campo Viera will soon be adopting JellyCoin in a limited capacity, one that will facilitate waste collection.

Some waste collection in the country is done by cartoneros — people who sort garbage, including cardboard and plastic for recycling, which they bring to centers. JellyCoin, soon to be issued to collectors though an app, would provide compensation for this citizen waste collection, including for how far collectors have traveled. Zubilewicz says that JellyCoin would be used at first to make certain payments to the city, such as for real estate taxes, and potentially for a wider spread of transactions in the future.

QR Code Cleanup

Other blockchain-driven waste projects are looking to have a broader reach. RecycleGO, a five-person startup based in New York, is targeting communities around the world. The company aims to integrate software and technology into recycling, evolving it beyond what Chief Executive Officer Stan Chen calls a "very antiquated industry." Chen nos a disparity: The world produces 400 million tons of plastic a year but can only recycle a small fraction. As a second-generation recycling professional, he believes change must be systemic and sweeping.

"What the world needs is scalable solutions, broad scalable solutions in terms of tracking, in terms of attaching data to human activity, in terms of really allowing social impact behavior to be monitored, measured and credited," Chen says.

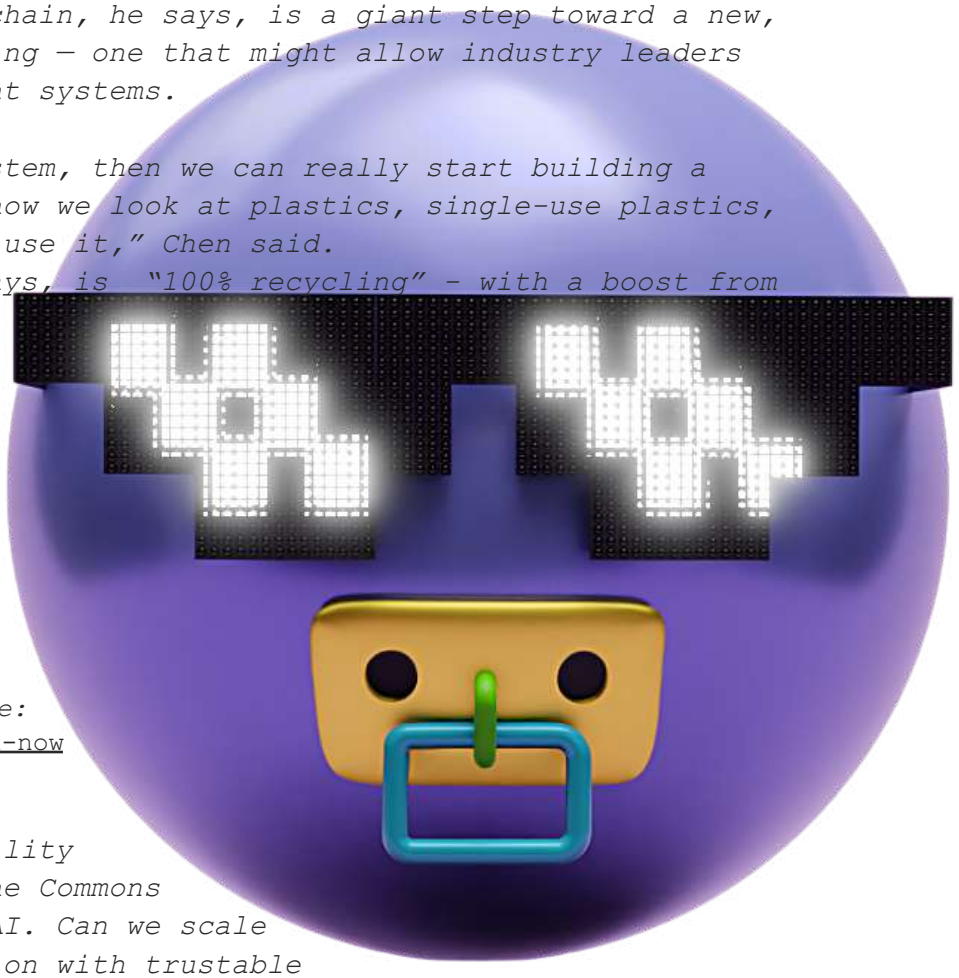
This month, RecycleGO will be gauging, through a series of projects, what might be broadly possible with blockchain. In Miami, the company has plans to oversee a beach cleanup. QR codes on plastic bottles will be scanned, and bottles will be added to and tracked on a blockchain as they are broken down into raw materials and turned into merchandise.

RecycleGO also plans to roll out a similar, larger effort in Nigeria. Plastic bottles and the bales into which they are bundled will receive QR codes. When scanned, these codes will disclose the chain of custody as the materials move through recycling. In Ghana, blockchain will be used to track fishing nets lost in the ocean,

called ghost nets, as they are collected, baled, and turned back into nylon nets.

Like Zubilewicz in Argentina, Chen hopes to change human behavior. Like Reddy in India, he believes that more data — linked, organized, and protected via blockchain — can streamline waste collection. Putting recyclables on-chain, he says, is a giant step toward a new, better system of recycling — one that might allow industry leaders to imagine more efficient systems.

"Once we build an ecosystem, then we can really start building a community that changes how we look at plastics, single-use plastics, and what we do after we use it," Chen said.
The ultimate goal, he says, is "100% recycling" - with a boost from blockchain.



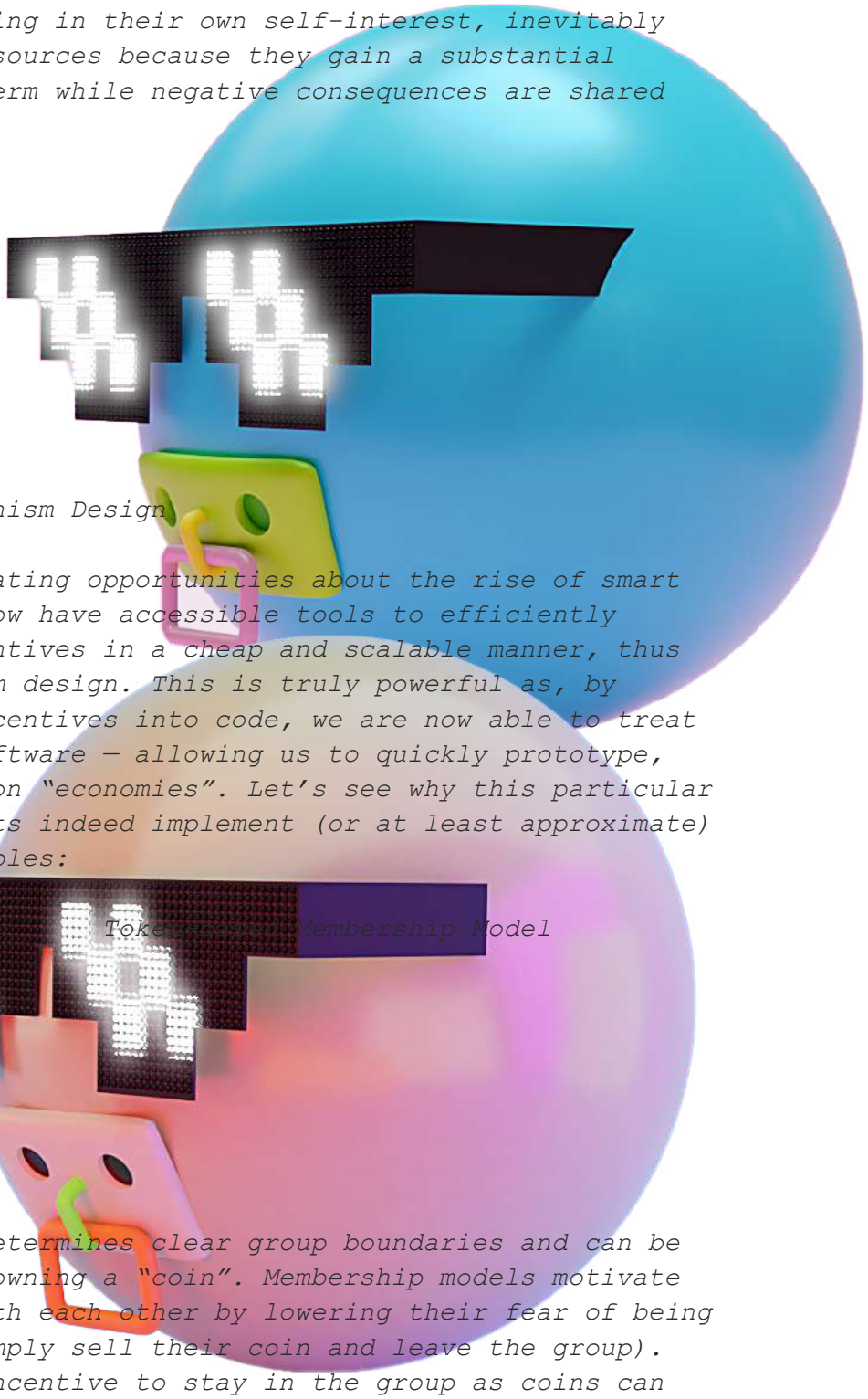
For the rest of the article:
garbage-is-using-blockchain-now

Decentralized Sustainability
Beyond the Tragedy of the Commons
with Smart Contracts + AI. Can we scale human economic cooperation with trustable machines?The advent of cryptocurrencies allowed us to implement incentives in the highest level of granularity imaginable — up to a single bit. This paradigm shift allows us to think outside the box, scaling and connecting incentives with data in ways never seen before.
AI smart contracts leverage this new kind of programming. They are machine learning algorithms with blockchain-based business logic - or in other words, an analytical machine that can guide human behaviour via designed incentives.

The Tragedy
Deforestation, overfishing, wildlife extinction. Why do we treat common resources with such ruthlessness that not only leaves us and everyone else but also future generations to suffer from the consequences?

"Therein is the tragedy. Each man is locked into a system that compels him to increase his herd without limit — in a world that is limited. Ruin is the destination toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons" (Hardin 1968, p. 1,244)

Hardin explains in his, now famous, article "The Tragedy of the Commons" that men, acting in their own self-interest, inevitably will deplete shared resources because they gain a substantial benefit in the short-term while negative consequences are shared among the whole group.



Blockchain-based Mechanism Design

One of the most fascinating opportunities about the rise of smart contracts is that we now have accessible tools to efficiently engineer economic incentives in a cheap and scalable manner, thus democratizing mechanism design. This is truly powerful as, by distilling (crypto) incentives into code, we are now able to treat economics simply as software — allowing us to quickly prototype, beta test and iterate on "economies". Let's see why this particular class of smart contracts indeed implement (or at least approximate) Ostrom's design principles:

Token-Curated Membership Model

A digital membership determines clear group boundaries and can be implemented by simply owning a "coin". Membership models motivate people to cooperate with each other by lowering their fear of being exploited (they can simply sell their coin and leave the group). However, there is an incentive to stay in the group as coins can provide you with access to either a natural common resource or/and

valuable group benefits (e.g. a shared and easy-to-access marketplace, more decision power, additional income, etc.).

Decision Making with Blockchain Governance …
Smart contracts enable fast decision making with low overhead. Members of the group can interactively propose guidelines and actions and vote on all proposals, thus determining their own rules and adapting them in a quick manner. Blockchain governance is in itself a groundbreaking topic. Besides a classical majority vote, there are some really cool and exciting new decision-making methods, enabled by smart contracts, that might be worth a shot:

… via Quadratic (Coin Lock) Voting
*Quadratic coin lock voting (QCLV), proposed by Vitalik, is a token-based variant of quadratic voting. In QCLV, participants voting power are determined via N * k, where N is the number of coins and k² the time they are "locked" (not usable for anything else). So if you really want something, you can stake your coins for a long time, therefore aligning incentives over time. In other words, if you want more voting power, you need to live with your decisions for longer, hence providing incentives to stay loyal to your community.*

… via Prediction Markets
In futarchy, society defines its values and then prediction markets are used to decide what actions will maximize those values. Thus to impact a decision, you literally have to put your money where your mouth is. It was originally proposed in 2000 by Robin Hanson.

For the rest of the article
decentralized-sustainability

We have quoted some parts of the works of esteemed authors who have wonderfully expressed their valuable experience and research. The news including the initiatives in this field on earth helped us to highlight Platicchain better.

Thank **you**

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