Why a book on ImpactDAOs? Why now?
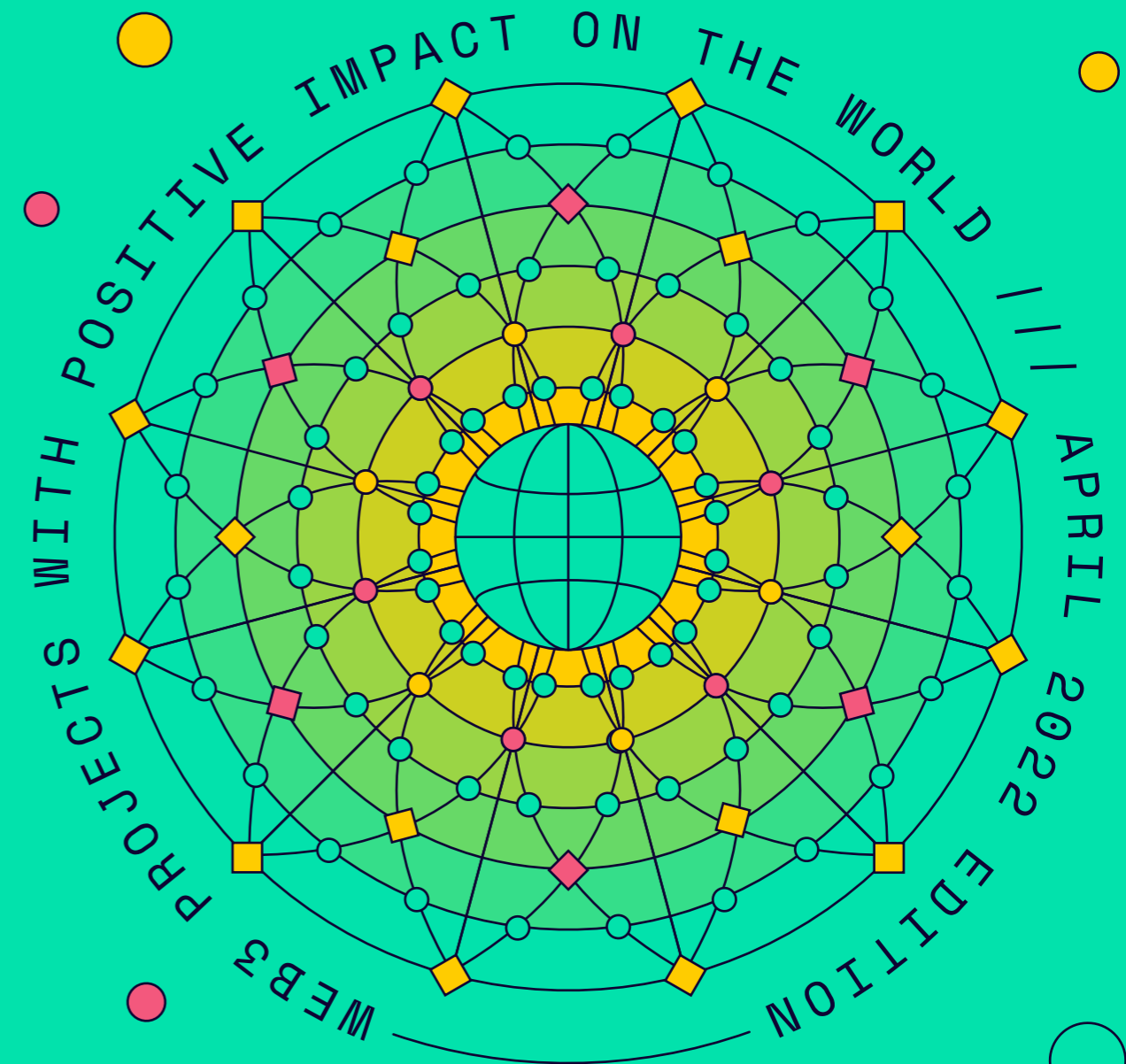
The community around the book *GreenPilled - How Crypto Can Regenerate the World* (available at https://greenpill.party) has envisioned that web3 has the potential to regenerate the world. With the GreenPilled book, we have established a digestible source of **a priori knowledge** (theoretical knowledge) of how we might use a transparent, immutable, global, and programmable financial system with $2 trillion worth of capital to regenerate the world. This capital could build a digital commons, create flourishing digital democracies, and support both local & global public goods. A priori knowledge is great, but what has been missing from the conversation thus far is **empirical knowledge** (knowledge obtained from observation) of how crypto can regenerate the world. That's where this book, and the projects within it, comes in.
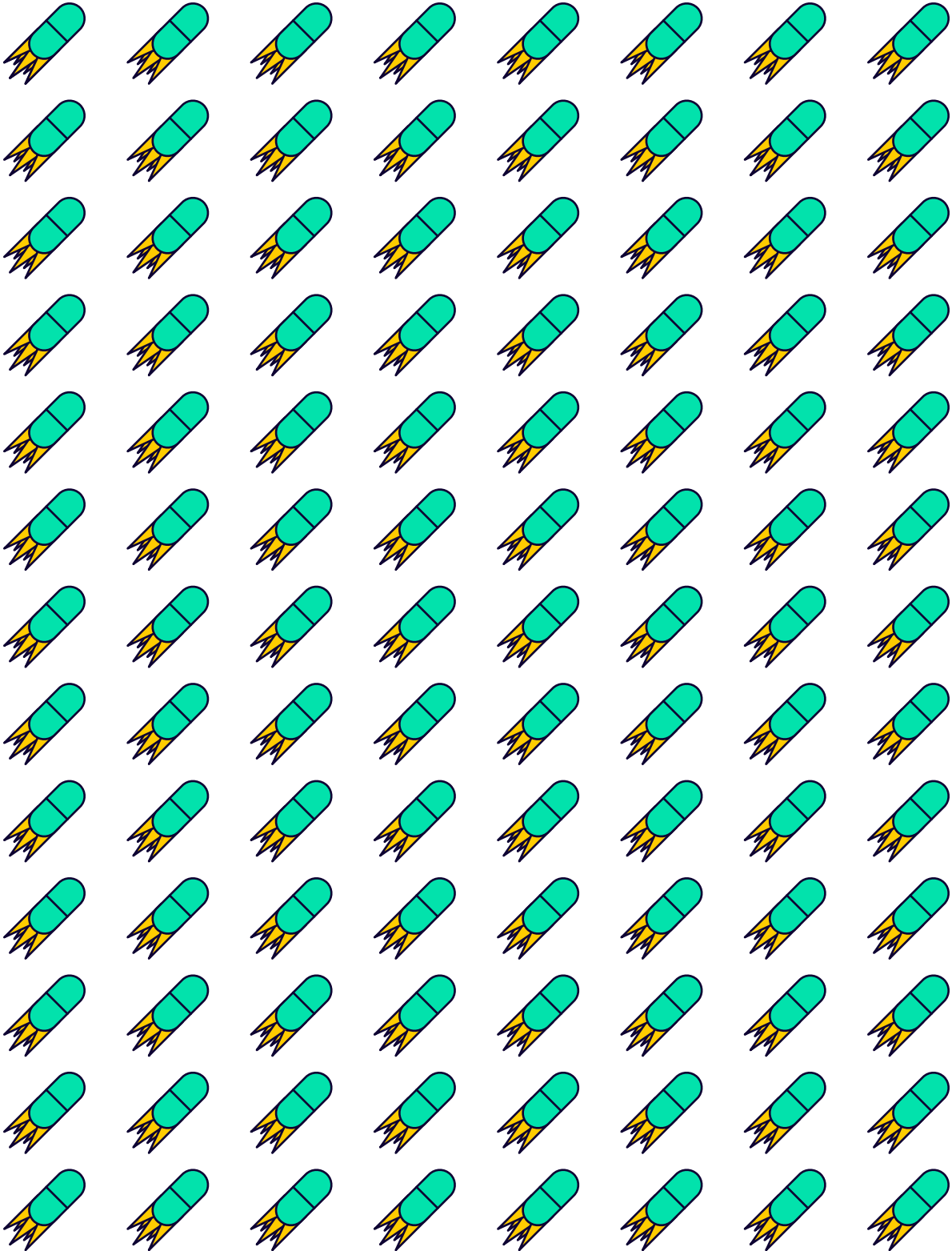
ImpactDAOs are any web3 project that is using crypto to create positive externalities for the world. This book is a cartography project, designed to map these ImpactDAOs & the territory between them. There are dozens of examples of successful ImpactDAOs in the world today, & hundreds more inchoate ImpactDAOs. We articulate their value propositions, techniques, and provide a map to help members of the web3 ecosystem who are working on regenerative crypto to find each other.
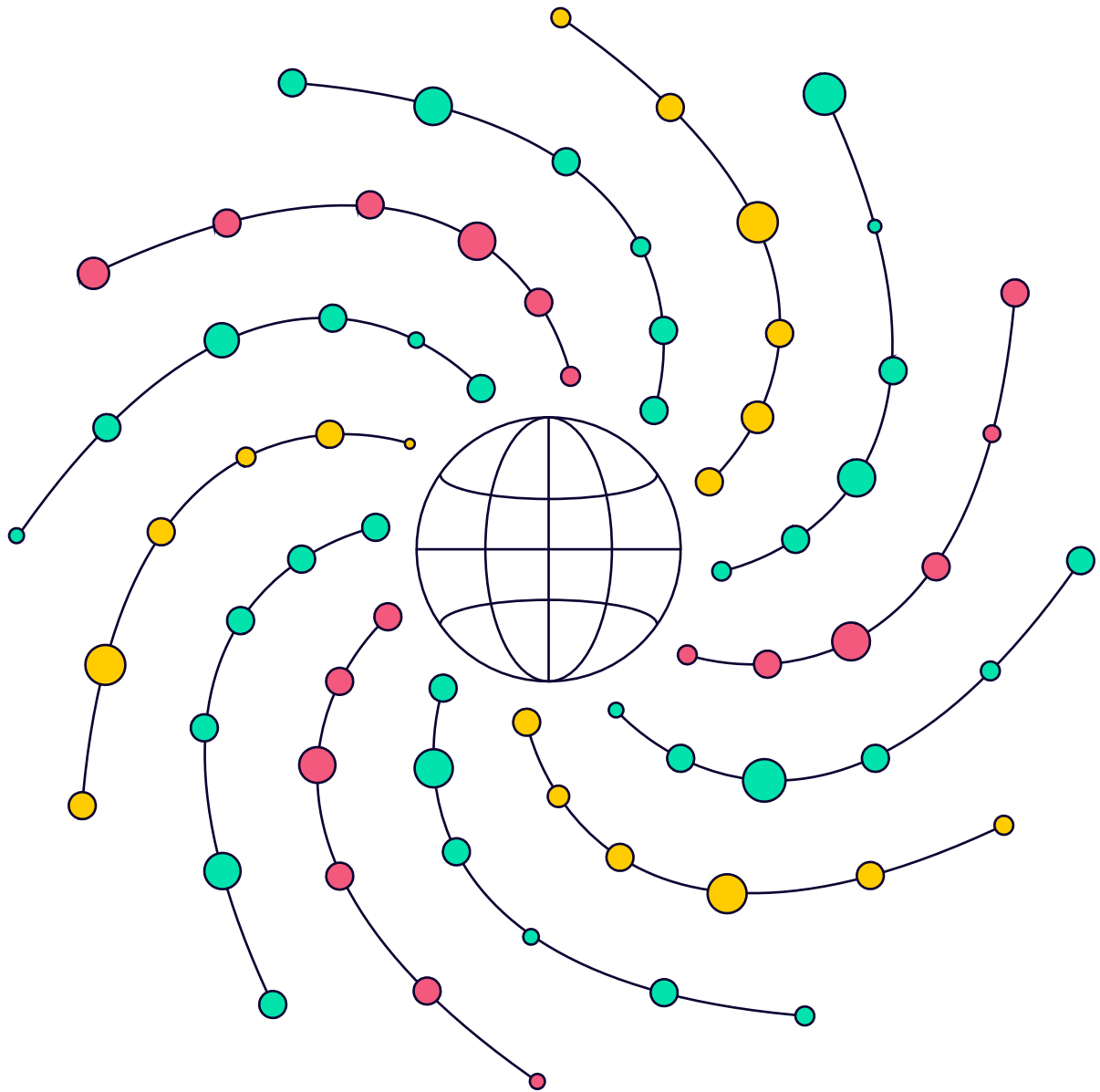
If the GreenPilled book is theory, this book is its complement - this book is about action. Theory without action is impotence. Action without theory is directionless. But together, theory and action present a powerful schelling point for web3 regenerating the world. We invite you to learn about the world of ImpactDAOs, the foundational atomic building block of an emergent, regenerative, peer to peer, pluralistic civilizational scale infrastructure for funding public goods. Public goods are good!

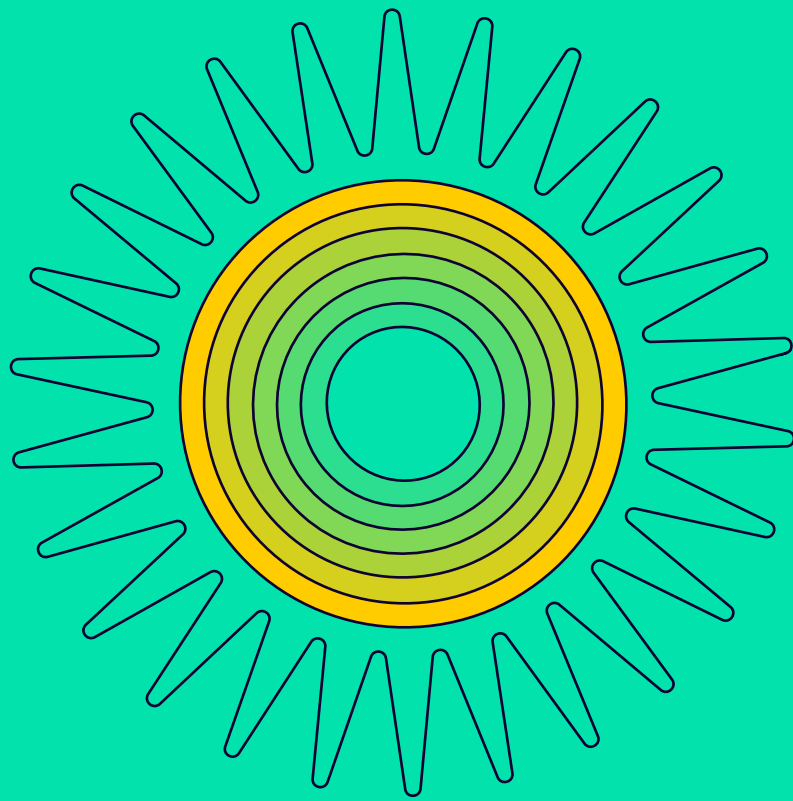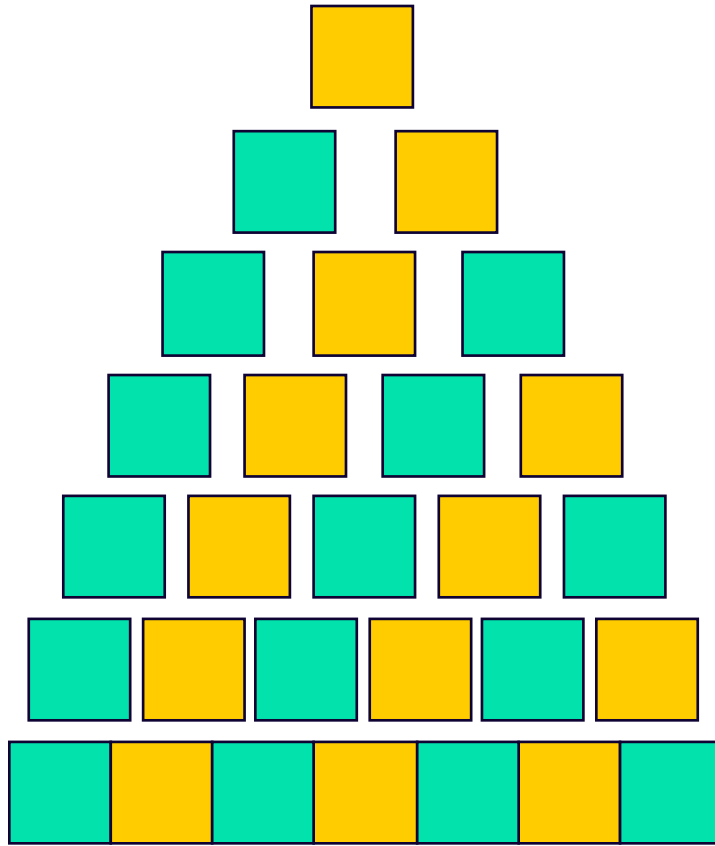**KEVIN OWOCKI, ALEJANDRA BORDA, GITCOINDAO PUBLIC GOODS FUNDING WORKSTREAM**

WEB3 PROJECTS WITH POSITIVE IMPACT ON THE WORLD /// APRIL 2022 EDITION

IMPACTDAOs

Introduction

ImpactDAOs are the atomic building blocks of regenerative cryptoeconomics.

ImpactDAOs - The Building Block

An **ImpactDAO** is defined as any DAO that creates net positive externalities to the ecosystem around it.

ImpactDAOs are the atomic building block of the Regenerative Cryptoeconomic movement. This book is about ImpactDAOs.

To learn more about the Regenerative Cyryptoeconomic movement, check out the Green Pill book & podcast at https://greenpill.party.

Regenerative CryptoEconomics


Resource Available — Time
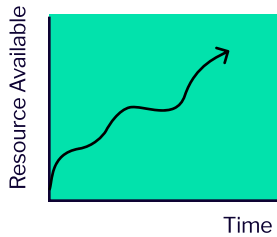
In a regenerative system, resources are increased over time. An antifragile regenerative system builds capacity sustainably, while being resilient to shocks.

Not just about Financial Resources

A regenerative Cryptoeconomic infrastructure is about more that just financial capital.

Gregory Landua and AppleSeed Permaculture have published a great resource on the 8 different forms of capital, of which financial capital is only one. Here is their taxonomy of types of capital:

Capital	Currency	Complexing to...
Social	Connections	Influence, Relationships
Material	Materials, Natural resources	Tools, Buildings, Infrastructure
Financial	Money	Financial Instruments & Securities
Living	Carbon, Nitrogen, Water	Soil, Living organisms, Land, Ecosystem
Intellectual	Ideas, Knowledge	Words, Images, Intelectual property
Experiential	Action	Embodied experience, Wisdom
Spiritual	Prayer, Intention, Faith, Karma	Spiritual attainment
Cultural	Song, Story, Ritual	Community
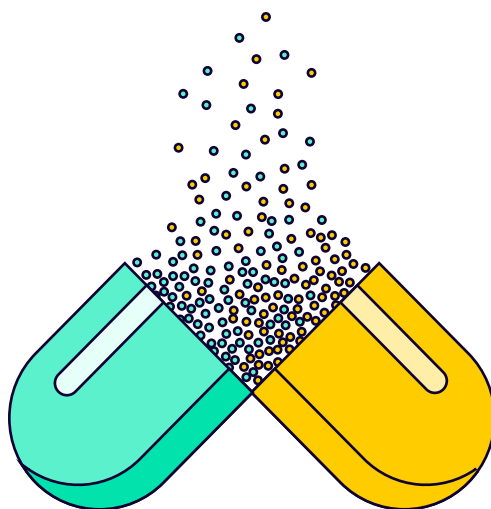
Why do we care about ImpactDAOs?

Web3 has the potential to scale our internal and collective ability for human and capital coordination. We can now redefine incentives towards actions that regenerate ourselves and the earth. But, are we tapping into that full potential?

We are only able to do so if we move past our present paradigms of how we experience and coordinate as human beings, and if we start focusing all our energies in building and leveraging these building blocks for real positive impact.

We see web3 as a tool within a broader shift in consciousness, away from command & control hierarchies into an abundant, agile, and positive-sum future Technology in all its forms -- science, communication, blockchain, meditation, networks, fasting, etc--should be used to enhance our human abilities to become better versions of ourselves.. Technology unlocks a realization that we are not tied to the systems of the past-- we have agency to design for human thriving.

The design space for ImpactDAOs is this: How do we leave the old ways behind to create new systems for human thriving?
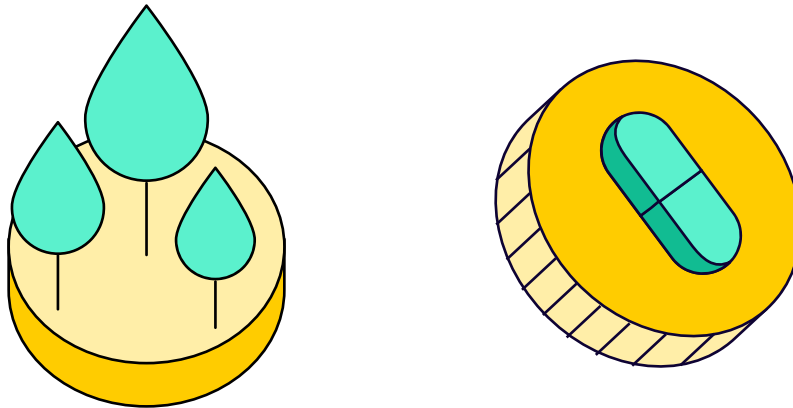
Design for Human Thriving

Digital tokens are more secure, convenient to store, and easier to transfer/ distribute. How we choose to transfer tokens is based on the conditions we choose. We can embed our values into digital assets, explore a plurality of ways to transact and share value, align individuals with collective incentives, and unlock the freedom to dedicate our time to meaningful work.

ImpactDAOS can consciously design our coordination mechanisms that drive our society, which means we can design our external reality. We have an open canvas, a new playground open to everyone. We hope to see designers use this canvas to ensure the health of our planet and people. We believe ideas should be at the core of our economic systems.

Tools can also do harm. Finance can serve to enrich human flourishing or to cripple it. Those creating should be conscious of the role we play to shape this technology. What we build will shape the future of the society we live in. ImpactDAOs can be a tool to shape web3 as a major driver for positive impact.
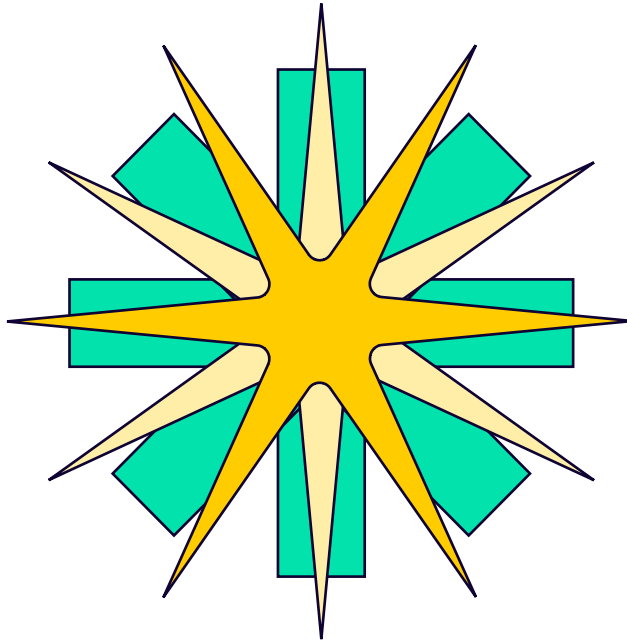
The Internet of Values (and Value)

Throwing more technology or money into broken systems will likely create no change unless we coordinate these networks to redefine how we operate as humans. Money magnifies. We have long been pushing money into the system, and it seems like the only thing growing is the amount of capital we need to solve these same problems.

ImpactDAOS can engineer better carbon removal methods, but we will endlessly continue to sequester carbon from the atmosphere unless we redesign our extractive monetary system that is fueling pollution, and unless we reorganize the economy to better align with the natural world.

We can move away from fixing systems into building new thriving systems primed for human flourishing. Although it would be great to solely focus on creating, we have pulled society so far away from balance that we might need to engage in parallel efforts: solving urgent problems while building the base infrastructure for new thriving systems that render the old obsolete. Once we fix current issues, energy can naturally transition to create value in regenerative systems.
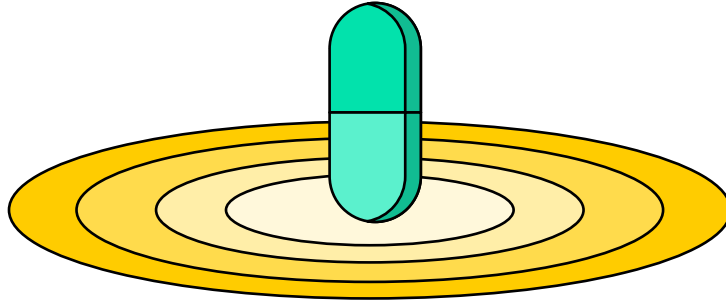
Ecosystem Awareness

With the arrival of web3, we are experiencing a fundamental shift in how we relate to each other on a global scale. We can move to an ecosystem awareness of all the moving factors across a system to identify patterns and connect seemingly unrelated dots.

ImpactDAOS that focus on the highest leverage points that we can shift act just like acupuncture points–creating rippling effects on the entire system.

In addition to seeking high leverage points, we can also analyze the tensions in the system. How do we navigate them?

We move beyond solving the most obvious symptoms and start tackling the underlying factors that create those symptoms in the first place. We can design primitives that leapfrog the "fixing" to redesign our connection with ourselves, each other and technology
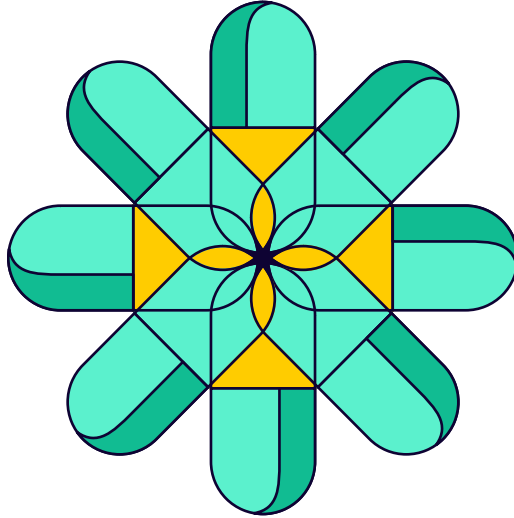
The Internet of Regeneration

ImpatDAOs are redefining what we value and how we share that value. The work here calls for regenerating our internal selves, our experience with others, our connection to nature, and our meaning of wealth to one where we focus our energy on that which fuels each person internallly to then improve the world.

Although boundaries allow us to study and understand the dynamics of interconnected systems, boundaries are, in reality, only in our minds. Everything is interconnected.

For example, our gut health affects our metabolic health, cognitive ability, and the risk of chronic disease. The microbiome diversity of the soil in which it's grown directly impacts our gut. Economic incentives enable or prevent farmers from implementing regenerative agriculture, which increases the CO_2 in the soil and hence it's microbiome diversity. The soil's miicrobiome affects the nutrients in our food and therefore our health.
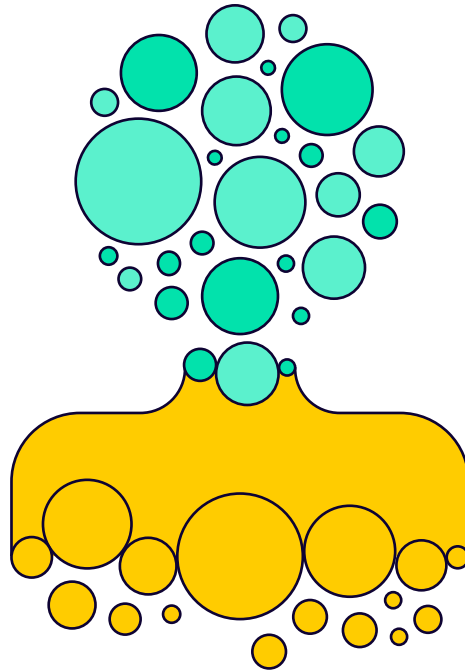
Shifting Approaches

In this book, we will showcase how ImpactDAOs emphasize collaboration, co-creation and sharing best approaches, learnings and insights others can leverage for a continously evolving ecosystem. We also move away from hierarchy, everybody should be at the table to imagine and discuss approaches as equal parties in the design of our futures.

Building with or enabling access and education for everyone to use new tools, we can decentralize the innovation process away from helping into empowering. It's not one organization or person's role or responsibility to drive change, each network can innovate using their expertise to change their circumstance.

We have an active role in designing, architecting, experimenting, and stewarding collective pieces of a powerful, but intentional, engine for change. ImpactDAOs are at the core of that change, leveraging web3 to create the regenerative society, and securing web3 as an enabling way for us to create a better future.
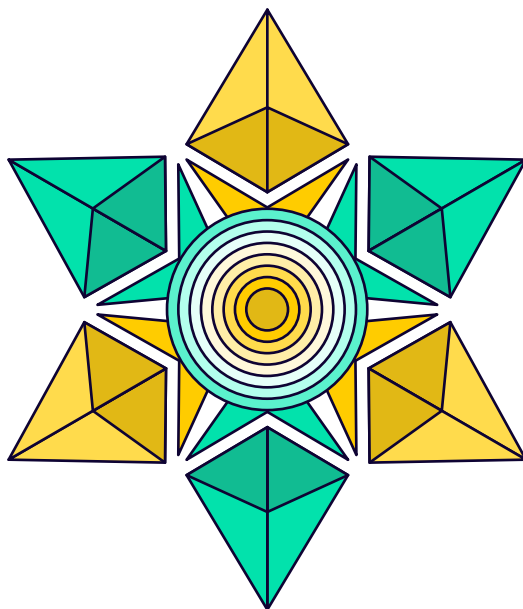
The current state of ImpactDAOs

The present reality might not reflect the vision we just shared, but ImpactDAOs are still emerging. We hope to help catalyze the energy and cultivate action that can take us there (or perhaps to a better future than what we were able to envision).

ImpactDAOs are still nascent with a lot more design space to explore. This book is a snapshot of the current state of ImpactDAOs, showcasing how organizations are using web3 for impact as of April 2022.

Hopefully, this acts as a schelling point (a game theoretic focal point) to rally the community to further explore how crypto can regenerate the world, and then to go put those discoveries into action. We hope to welcome new thinkers indigenous knowledge, entrepreneurs, philosophers, healers, scientists, so we can all make sense of the world. We want to capture more stories of how web3 (or other technology) has positively changed real lives in future book iterations.
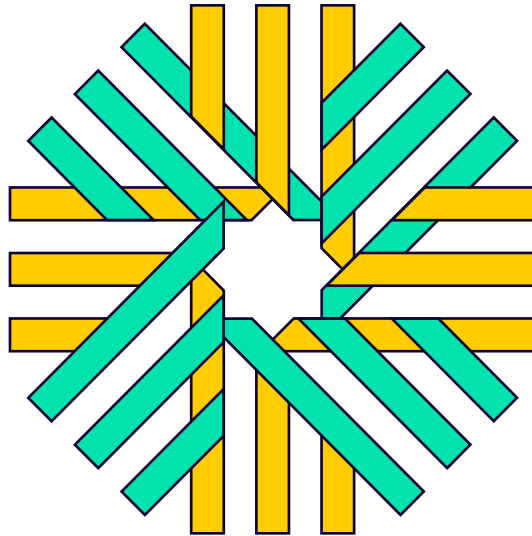
The ImpactDAO ecosystem

- **Symbiotic**— web3 is naturally interoperable as each effort unlocks greater value for other nodes in the network. We can modularly stack ImpactDAOs so talent, energy, and resources can fluidly move to where it is most needed.

- **Composable**—anyone can leverage and build on top of open-sourced building blocks for an evolving improving set of tools and strategies.

- **Collaborative**—we can align incentives for a multiplayer game. It is no longer about the winning strategy, but rather the health of the whole ecosystem, building our collective intelligence and capacity to do good.

- **Transparent**—although still nascent, we can leverage the on-chain, immutable records for accurate impact measurements to continue funding what works and leave behind what does not.

- **Emergent** - in the process of coming into being, driven by 1000s of actors across the ecosystem.

Methodology

ImpactDAO is the term we use for organizations leveraging web3 to create positive externalities in the world.

Most operate as a DAO or with web3 principles for open, transparent, verifiable impact and regenerating our earth. The ImpactDAOs presented in this book combine the survey form we shared during our writing process + Ale's Notion list that she has been compiling and categorizing since December + cross-comparing with many other great project lists out there. When possible, we've included verifiable on-chain data for the progress achieved by these.

How did we choose which projects to feature? We focused on ImpactDAOs who have achieved substantial positive impact or have proven their model has the potential to do so in a way we could verify. The featured ImpactDAOs in Chapter One are ImpactDAOs that we could objectively verify that their strategy has created tangible positive externalities.

Criteria:
1. **Positive externalities**: ImpactDAOs that demonstrate a sustainable long-term strategy to achieve positive outcomes on their primary impact area that would have otherwise not been possible without a novel use of web3.
2. **Ecosystem value**: ImpactDAOs that act as building blocks to enable other ImpactDAOs to leverage or build on top of them to achieve a greater impact (e.g. PoH Sybil-proof list of humans other ImpactDAOs can use for governance, proof of identity, etc).
3. **Leverage point**: ImpactDAOs that intervene at a critical place within the system and that cause rippling effects in the whole system by redesigning core mechanisms of society-causing-problems, not merely redistributing donations or band-aid solutions.

The 2nd set of ImpactDAOs is categorized by the role within the web3 ecosystem that each plays and further subdivided by the type of social capital they enable. These ImpactDAOs have also proven a robust web3 mechanism that works towards achieving positive externalities.

The 3rd set of ImpactDAOs are rallying up to achieve positive externalities but are nascent. We couldn't tangibly verify their approach has achieved positive outcomes. These have a "Not Launched"tag. Yet, we're excited to see them grow!

To explain the work and impact of each ImpactDAO, we combined self-reported data with information available through websites, articles, etc. Additionally, for many of these (around 30 of the projects), we interviewed core teams members and/or people who interact with their platforms (e.g. users who implemented Coordinape to their reward stack for DAO contributors).

Things to keep in mind as you read this book.

Feedback welcome - To give feedback on this methodology or propose changes, please see the "Git Involved" section at the end of this book.

Cross-pollination welcome - As we describe how ImpactDAOs leverage web3 to regenerate the earth + create human thriving, we encourage you to actively think about how each strategy can build upon the other, synergize, or collaborate.

Contributors welcome - We hope to see this book used as a resource to route talent to ImpactDAOS. Hopefully we see a feedback loop where people discover ImpactDAOs via this resource, which makes the ImpactDAOs have more momentum, allowing the cycle to repeat.
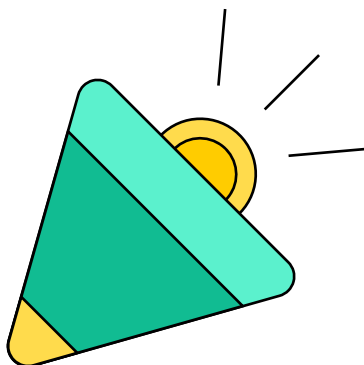
Intended Audience

This book is a breadth-first tour of ImpactDAOs - cryptoeconomic systems that have a positive impact on the world.

This first edition is designed for those who already understand at a high level what blockchains are, how smart contracts work, what DAOs are. If this book were a university course, it would be a 401 level course. If that is not for you, that's okay - Welcome to the weird, wonderful, & wild world of web3! Spend some time with the numerous & great resources about these fundamentals + come back to this resource after that. Perhaps a future edition will attempt to make this content more beginner friendly.

This edition is designed for
1. those who are entering the web3 space who want to find ImpactDAOs they could work with.
2. for those who work on ImpactDAOs. By seeing what techniques other ImpactDAOs are using, we hope that this book (and the resources surrounding it) faciltates the cross-pollination of relationships, knowledge, and other resources across DAOs.
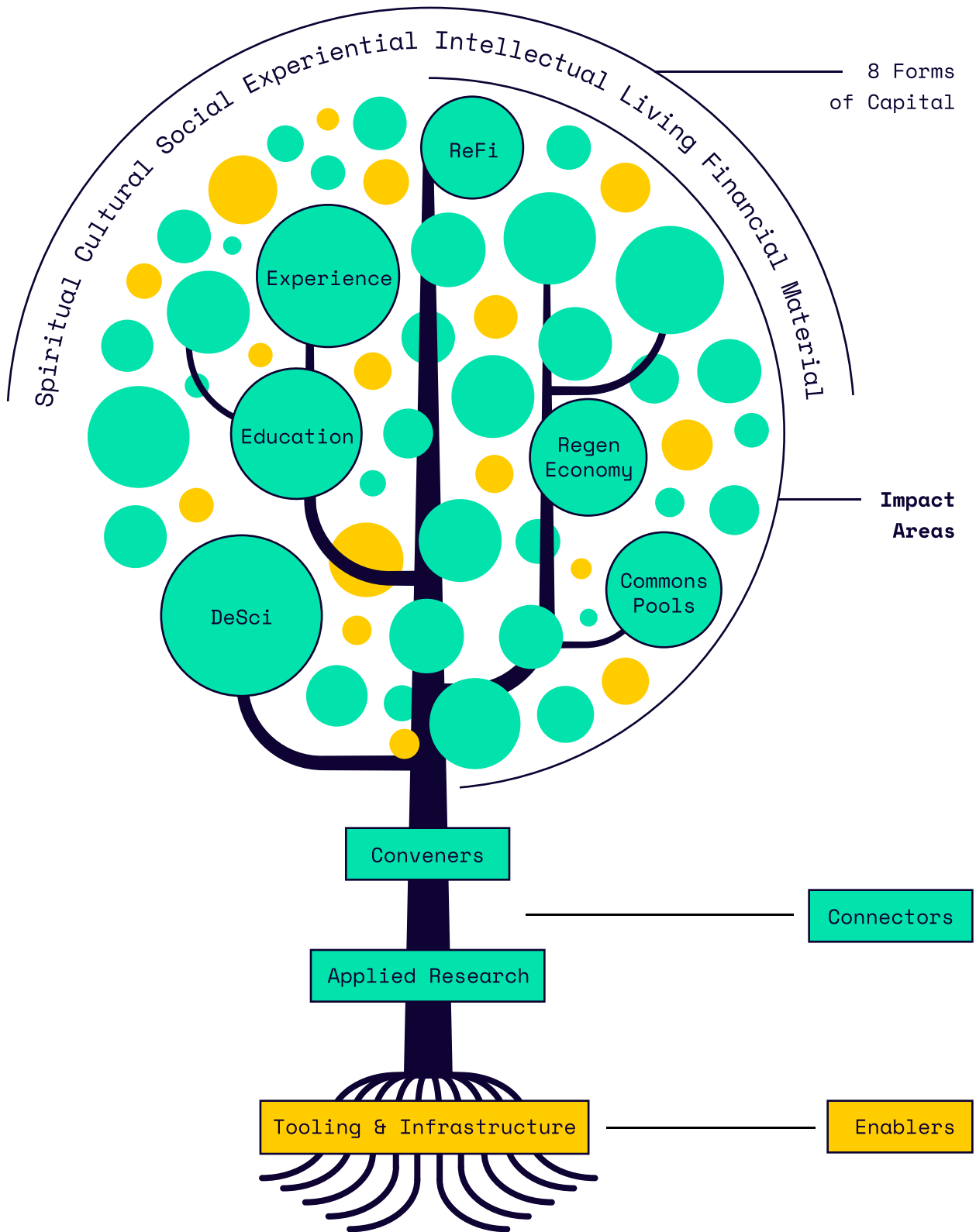
ImpactDAO Map 🗺️

On the next several pages, we have put together a couple visual overviews of how we view the ecosystem.

To understand the world of ImpactDAOs, we can classify these through: a) the role they play within the web3 ecosystem; and b) the form of capital they each impact in our living world.

The first map highlights the Impact DAOs play as enablers, connectors and those tackling specific impact areas. ImpactDAOs growing the roots act as enablers that engineer the infrastructure for other ImpactDAOs to build on top off. The trunk connects these building blocks to impact areas by researching and implementing tools and frameworks ImpactDAOs can apply to their strategy. ImpactDAOs which build primarily within one impact area represent each leaf of the tree. Although these explore different Impact areas, they are complementary and interdependent, therefore part of the same tree. Finally, all ImpactDAOs advance to various forms of capital, as represented above the tree.

The second map is like looking from above and peeking through this tree. We can now see the roots and trunk within the inner circle as the infrastructure and research layer that enables all other ImpactDAOs to operate, improve and achieve impact (e.g. providing tokenomics, governance, research on natural capital assets, infrastructure, etc).

The middle circle shows the impact areas previously shown as leaves. These are spread across the map to show the forms of capital they primarily influence. Although many projects impact multiple forms of capital, we tried to map the ImpactDAOS to show the two most prevalent areas of a living system they affect. E.g. regenerative finance involves both living and financial capital, but some ImpactDAOs like Regen Network are closer to living systems, while Toucan primarily focuses on the financial infrastructure.

8 Forms
of Capital

Spiritual Cultural Social Experiential Intellectual Living Financial Material

ReFi

Experience

Education

Regen
Economy

DeSci

Commons
Pools

Impact
Areas

Conveners

Connectors

Applied Research

Tooling & Infrastructure

Enablers

Living

ReFi

Climate Collective

Flow Carbon

Moss

Regen Network

Nori

Toucan

Vita DAO

Applied Research

Kolektivo

Molecule

Ocean Protocol

Curve Labs

Astral Protocol

Grassroots Econ

Opsci.eth

Other Internet

Celo

Bloom Network

Impact Markets

Foresight

RadicalxChange

Prime DAO

DeSci

GitcoinDAO

Regen Economies

Education

Block Science

Radicle & Drips

Unchained fund

Angel Protocol

Commons Stack

Orca

Proof of Humanity

TEC

Coordinape

Endaoment

Crypto, Culture & Society

Protocol Labs

DoinGud

Dream DAO

Tooling & Infrastructure

Giveth

TwoPlus

Common Pools

Kernel

Protein

Forefront

The DAOist

Verses

Cabin

Experience

Intellectual

Financial

Social

Experiential

Spiritual

Cultural

Material

Twitter Relationships
Between ImpactDAOs
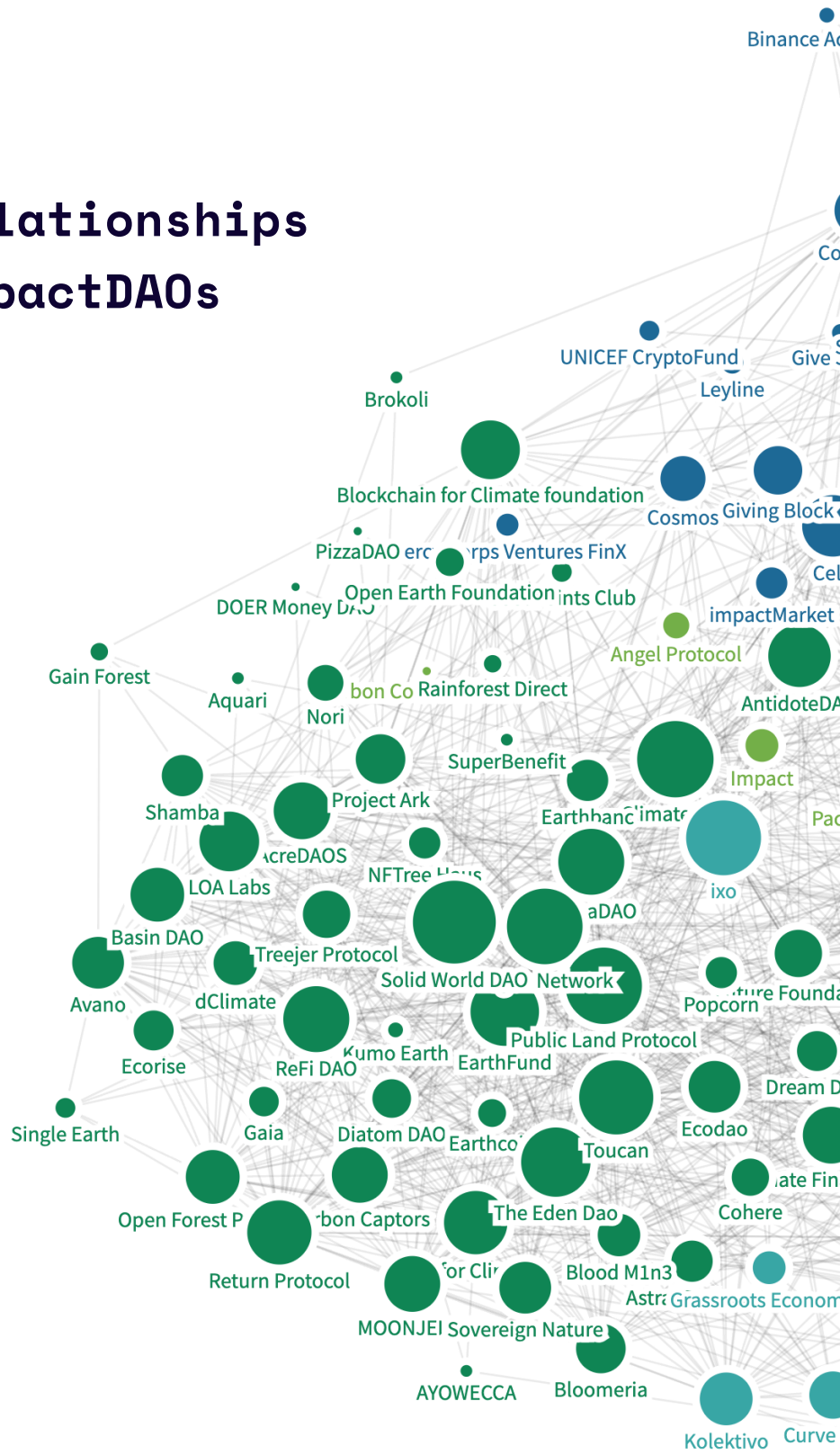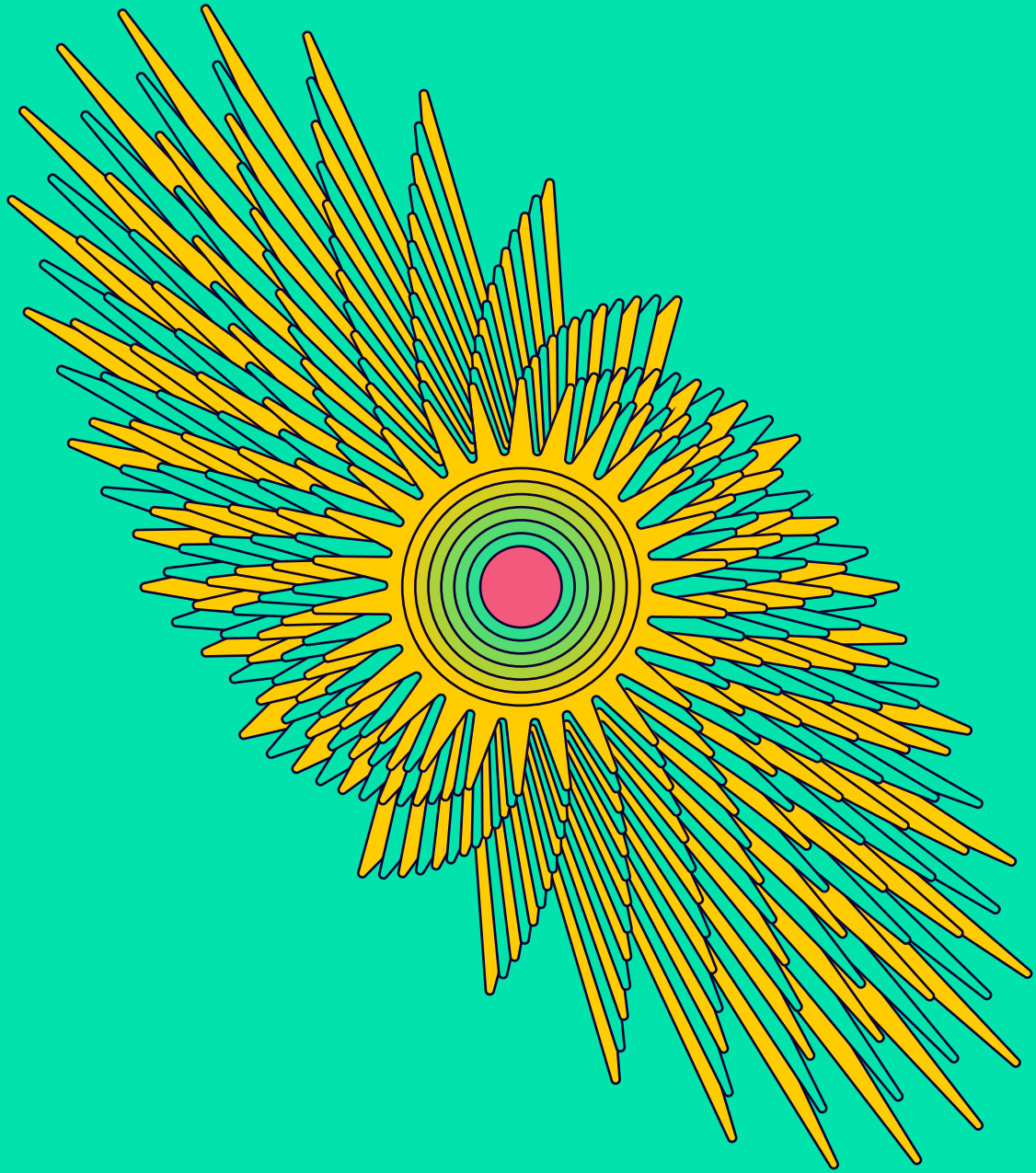
**Featured
ImpactDAOs**

We focused on ImpactDAOs that have achieved substantial positive impact or have a proven model to do so. These achieve positive externalities in their given impact area but, most importantly, act as essential building blocks for other ImpactDAOs to achieve more change.

Proof of Humanity

At its core, Proof of Humanity is a social identity layer system on Ethereum that essentially, by creating a web of trust, aims to identify everyone on the internet with proof of humanity through a Sybil-proof list of humans.
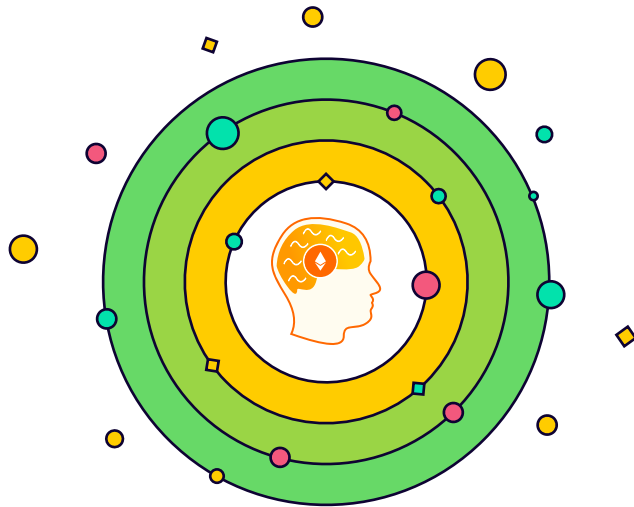
How does this bring us closer to a regenerative society?
Self-sovereign identity validation is the bedrock infrastructure to implement a Universal Basic Income (UBI) mechanism to reach everyone on Earth. This is important as each person should be entitled to one share of UBI distribution in the form of UBI tokens. People in Kenya or Ghana will have the same access to financial income as someone in London or New York.

You don't need a bank account or any crypto to be onboarded into PoH. The only condition to receive UBI is to register as a verified human. Today, 13,948 registered humans receive $UBI tokens every hour. $UBI is a necessary currency layer to put a value on time in an open, global market.

UBI streams can lift people out of poverty in that they can buy groceries, a place to live, and start businesses. If UBI achieves a meaningful value in the coming years, people could stop worrying about meeting basic needs and would no longer be tied to draining jobs to pay the bills. Proof of Humanity unlocks the capacity for all humans to focus their time and energy on work that positively moves humanity forward.

PoH's adoption has soared in areas like Latin America, where traditional finance systems and corrupt governments have impacted communities the most. For Argentineans dealing with hyperinflation, crypto is becoming a comparatively more stable source of income for everyday activities.

Stacking PoH's Impact. PoH's social identity layer can be used by other organizations as a trusted sybil-proof list of people. For example, DAOs can mint the same amount of tokens or airdrops for every human in the DAO to experiment with truly democratic voting systems (1 person = 1 vote) that account for every community members' voice.

One way that PoH is already creating impact is through Gitcoin's funding rounds. Gitcoin uses PoH as a donation multiplier for sybil resistant quadratic funding. One weakness of quadratic funding is that it is susceptible to sybil attacks as participants can try to split their funding across multiple accounts, which would lead to an unfair allocation from the matching pool. Integrating PoH helps mitigate the chances of this behaviour gaming the system.
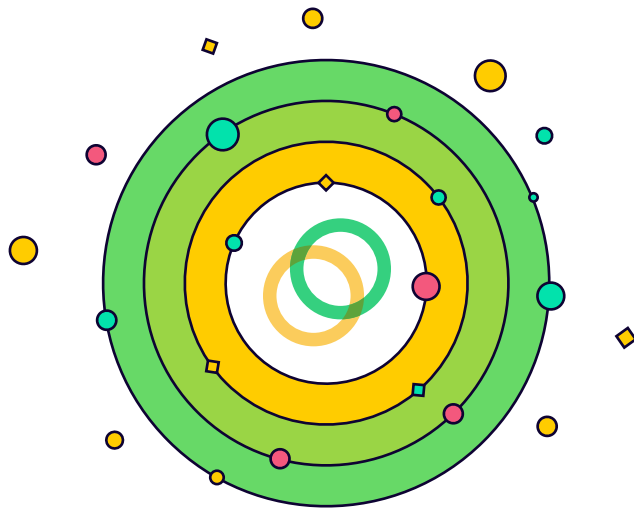
Celo

1.1 billion people worldwide are underbanked or only have access to banking at a prohibitively high price. As we design web3 tools, we need to include those who need accessible banking services the most: those excluded from the current monetary system. The simple ability to store and transact value has a transformative impact.

Celo is a blockchain designed for inclusion to allow anyone to transact value with local digital currencies and access previously inaccessible international markets without any further requirement other than access to a smartphone.

Celo is a layer 1, climate-positive blockchain designed for inclusion. Protocol stable coins are collateralized by crypto and natural capital assets as used as collateral for stable protocol coins. Celo allows anyone with a smartphone to interact with the blockchain without understanding its mechanisms. Authenticating users' phone numbers with their public keys through the Valora App enables a simple, mobile-first user experience.

For example, Women in the Nagbalacan Loom Weavers Cooperative used to earn $3-4 a day through weaving and selling their products in local fairs to tourists. This income was not enough to overcome poverty, and barely enough to buy food for a family. When COVID hit, the Philippine textile industry shut down, leaving women without their primary source of income.

Through Celo and Impact Markets the cooperative received UBI through a few smartphones some households had. The cooperative then re-distributed to others in the community. UBI kept them afloat for a few weeks, but the real unlock was accessing previously unreachable international markets.

They used the Valora wallet as a payment platform to connect and communicate with buyers in the USA, France, and Germany. The first pilot month generated $955 cUSD. They later set up an online marketplace in PayChant, a dApp built on Celo, where merchants can open online stores and accept crypto payments. Now women's livelihood is higher than their pre-pandemic income.

Roughly 5 million people worldwide use DeFi, but less than 10% live outside developed countries. DeFi for The People is an initiative to bring access to DeFi (or better yet ReFi) to 6 billion smartphone users globally. A deep DeFi liquidity is essential to design for inclusion. For a sustainable market, you need a strong demand and supply, but you also need a deep pool that enables an efficient transaction (minimum variation) between the two. With increasing access to a solid DeFi ecosystem, previously unbanked citizens can put liquidity to productive use, such as borrowing, to start small businesses.

Stable coins help mitigate the risk of price volatility. Celo stable coins like Celo dollar (cUSD), Celo euro (cEUR), and the Celo real (cREAL) are over-collateralized, algorithmic stable coins based on Mento stability protocol. Brazilians, for example, can trade cREAL, use it as payment for groceries, access rewards with Ubeswap, or lend through MoolaMarket.

Celo has low multicurrency gas fees. Users can pay transaction fees with stable coins, just like everyday money. Transfers happen almost instantly because there are no intermediaries. As a proof-of-stake network, transaction fees are much lower than relying on banks, which would be exceptionally high when transacting with emerging markets. Beyond a stable coin project, Celo is a Layer 1 others can build on top off. For example, the Kickstarter platform aims to become a decentralized protocol building its platform on the Celo blockchain.

As we design new financial systems, we should internalize pollution and resource extraction costs we now only perceive as externalities. In Sacred Economics, Charles Eisenstein explains how 'whatever backs the money, becomes sacred'. If we back currencies with nature we create direct incentives to care for our ecology. Natural Capital-backed currencies are a way to do that. We can use natural assets as collateral that we can verify are sustained for the long term, high quality and transparent so we can back currencies used in daily transactions.

The Climate Collective works to make Celo carbon-negative by tokenizing at least 40% of Celo's total reserve with carbon-sequestering natural assets. This acts as a carbon sink. The Celo Reserve holds around $850M worth of assets. Using 40% is sufficient to buy 135M rainforest trees and sequester about 43 megatons of CO_2 per year.

But, we can't simply plant trees and hope they will be cared for. Partnering with Curve Labs, Moss.Earth, Flow Carbon, and Toucan they are working on methodologies to restore, preserve, and represent the value of ecosystem health. Natural Capital Tokens can be an incentive to reward activities like animal conservation, urban food forests, etc. Celo Reserve currently holds Moss.erath's MCO2 carbon tokens and will soon accept Toucan's BCT and NCT to help support deep liquidity for a healthy environmental asset market on Celo. Celo builds tools for previously unbanked communities to transact value. The more people access these tools, the demand and circulation of these currencies increases, and hence the reserve grows and programmatically preserves more natural landscapes. Therefore, we align economic growth with ecological health.
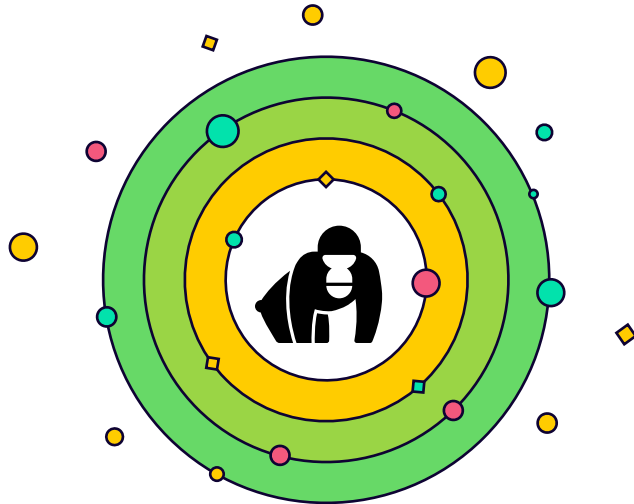
CoordinAPE

As we move towards increasing decentralization, and a larger number of DAO contributors coordinating towards shared goals, we need better mechanisms to compensate and recognize each other for the effort and passion we pour into DAOs. How do you properly incentivize and reward contributors?

Coordinape is a tool to understand how value moves through networks allowing DAOs to move decision making and resource allocation agency to the community. Contributors can directly recognize each other highlighting the intrinsic, often unmeasurable value that can't be captured in units of output but rather by peer recognition. In cycles, each member has a set amount of allocation points, to give to the contributors they have worked with based on what they think of the effort and value a fellow contributor provided. These inputs are built on sybil resistant social graphs where each line is an allocation from one member to the next.

A contributor graph is generated and weighted towards the members that have the most interactions and allocations. Without top-down management or HR we can build a cohesive community to make the experience of working and contributing to DAOs more human and fair.
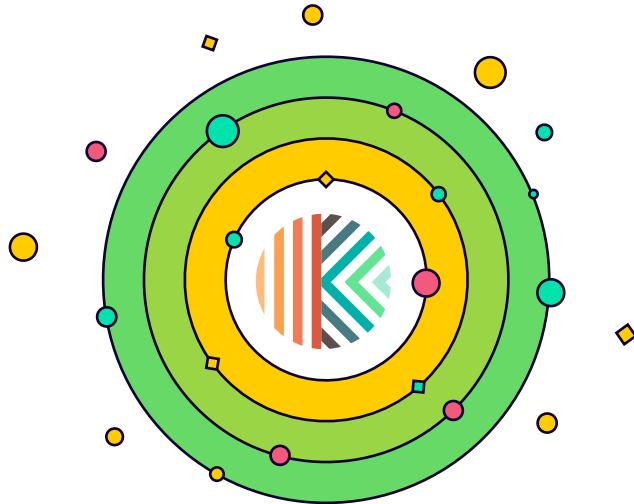
Kolektivo

Networked systems allow Local Regenerative Economies to leverage global, collective toolkits, frameworks and talent, and learnings to implement to their particular region. Although base infrastructure and frameworks are shared, details are particular to each region's values, culture, and local environment.

Kolektivo is enabling local impact economies for local communities to create and manage their own regenerative economies. While implementing their own framework for Kolektivo's first MVP was implemented in the Caribbean island of Curaçao, Kolektivo will translate their work on implementing these economies for other communities to fork and implement.

They have allocated over 40 grants ($50K in total) to local impact projects, all proposed and elected by Kolektivo's community members. Projects include planting 1500 M2 of Food Forest on the island as well as the launching of the CuraDAI pilot app on the Fuse network which empowers over 300 local community members to transact regenerative currencies.

Combining Astral protocol's location-based data protocol with Decentralized Storage solutions to measure and store data related to the state of Natural Assets to create Geo-special Impact NFTs (Regenerative Assets) helps redirect funding and attention to more effective management of ecosystem assets and corresponding ecosystem services as well as reward actions that positively transform the ecological state of a certain area. The currency is backed by the Regenerative Assets. Parametric insurance can be activated to funnel funds to restore an area as soon as the data in the GeoNFT records a verifiable state condition (e.g. wind speeds greater than x).

Kolektivo's economic system is driven by social impact – you do something for the community and get compensated within the same community economy. This currency operates on a blockchain to ensure transparency and accountability, to fairly distribute resources, and to set rules according to the objectives of its economy.

By taking "ownership" of their community services, a multitude of individuals, community projects, and organizations become self-sufficient and self-reliant. This offers an opportunity for (unemployed) individuals, social entrepreneurs, and organizations who currently participate in volunteer projects, to prosper and contribute to increased well-being on the island. Kolektivo does not measure its success by GDP, but by the collective impact created by and for its members, hence protected from the global economy.
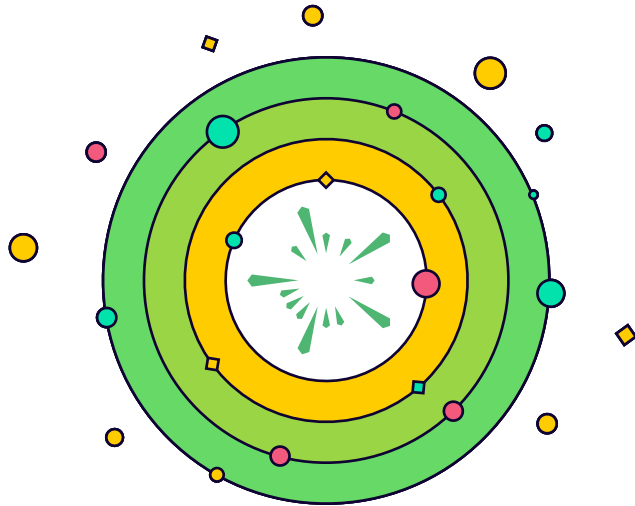
Regen Network

Earth cycles follow universal time, away from the speed of innovation in web3. It takes time for nature to grow and thrive again. Regen Network builds tools and knowledge so we can best exercise our agency to positively influence and preserve the biosphere. Regen Network explores how to tie the value of ecological health to economic value.

Regen is creating an opensource toolkit to measure, value, and improve the health of our natural world and to align our economy to regenerative ecological outcomes. Current registry programs are slow, expensive, and opaque. Project developers have to pay $20,000 to $100,000 and follow standard guidelines, and land stewards get 30% of the carbon credits they sell.

Regen's web3 native carbon and ecological asset registry is community driven, transparent, and dynamic. The methodologies that form the registry holistically value ecosystems. Rather than saying they will focus on carbon and add co-benefits to these credits, they are making it so everyone can invest directly in a multitude of ecological benefits which creates new nature-based markets.

Methodologies are frameworks of how to measure changes in an ecological state and an ecosystem's response to particular regenerative practices. This is key in developing accurate and transparent credits such as blue carbon, ocean conservation, soil carbon, agroforestry, reforestation, biodiversity, species protection. Social methodologies guide local community development, the integration and utilization of indigenous knowledge, and beyond. A reforestation methdology might answer how biodiversity and species return can be measured, or how groundwater quality and carbon sequestration are impacted.

Anyone can select a methodology within the Regen Network, register a project, begin framework implementation, and get financing through Regen Network's marketplace. With on-chain governance tools, credits can also be used as local currencies. Working alongside land stewards, biologists, data scientists, and others, Regen has developed over 40+ methodologies with 12 million hectares of ecological regeneration in the pipeline.

Although no credits have been created yet (we cannot speed up nature's cycles), data on current projects is being stored on-chain through censoring and satellite imaging. They have also introduced QF to understand how funding can be allocated towards open-source research, therefore greenpilling scientists, farmers, and ecological institutions and universities.

Toucan

As the blockchain ecosystem grows, let's build a regenerative financial system by design-- weaving climate action into the fabric of web3. Carbon markets are fragmented, opaque, and hard to access. Intermediaries extract much of the value from projects on the ground doing the work to stabilize the atmosphere.

Toucan provides Web3 building blocks for a regenerative economy by bridging carbon credits onto public blockchains. Removing intermediaries and replacing them with smart contracts enables a transparent and efficient flow of money to impact projects. Increasing credit's demand and price signals catalyzes new environmental project development.

The Toucan Carbon Bridge allows anyone to transfer carbon credits from legacy registries (1-1 to a carbon token) to Toucan's blockchain-based Meta-Registry. It is a one-way bridge to prevent double-counting as users retire the credits on the source registry before bringing them on-chain. When a carbon credit is tokenized, its on-chain version is a TCO2 "carbon token". Anyone with a wallet can hold, buy, sell, and retire carbon tokens. Often, buying a full carbon tonne is prohibitively expensive. Users can now buy small portions of credits with Toucan's native fractionalization.

High quality carbon credits can be very expensive; fractionalized tokens democratize access. Retiring carbon credits in legacy registries is often a manual process so retirement aggregators bundle retirements into one, resulting in opaque climate action that is not publicly verifiable.

TCO2 contracts store all attributes as credits are valued and traded at different prices depending on project location, year, co-benefits, verification methodology, vintage, etc. Toucan Carbon Pools are smart contract accounts with gating criteria that hold a set of carbon tokens that share a minimum set of attributes. E.g., the NCT pool only holds carbon-offsets from nature-based projects 2012 onwards with environmental co-benefits. When you deposit carbon tokens into a carbon pool, you receive a carbon reference token (TCO2) specific to that carbon pool, like a BCT token. TCO2 is useful across the decentralized ecosystem serves as a redeemable coupon for a carbon token in the pool. When users redeem an NCT or BCT for carbon tokens held in the pool they can receive a default or choose specific carbon credits with particular attributes. Redeemed TCO2 are retired and claimed as a carbon offset.

Toucan carbon is composable: developers can read data and write code interacting with smart contracts holding carbon tokens. This means builders can develop products on top of Toucan's infrastructure. Senken, for example, is an explorer for users to purchase carbon offsets with specific additional benefits to society. Senken's leverages Toucan's "read' access to query the on-chain registry and display it in an interface. KlimaDAO locks BCT in their treasury to create a carbon-backed currency increasing the carbon tokens demand. Return protocol automatically embeds carbon offsetting into any transaction. Finally, Toucan is launching on Celo users on Celo blockchain can access Toucan's full registry build applications that integrate climate positive action across Celo's use cases.

As of April 3rd, there are 18M CO2 tonnes bridged and 167 projects tokenized. With the enhanced utility of carbon credits, we can put verifiable climate action at the core of our everyday financial system– just by having, holding and using money, we can contribute to a regenerative economy.
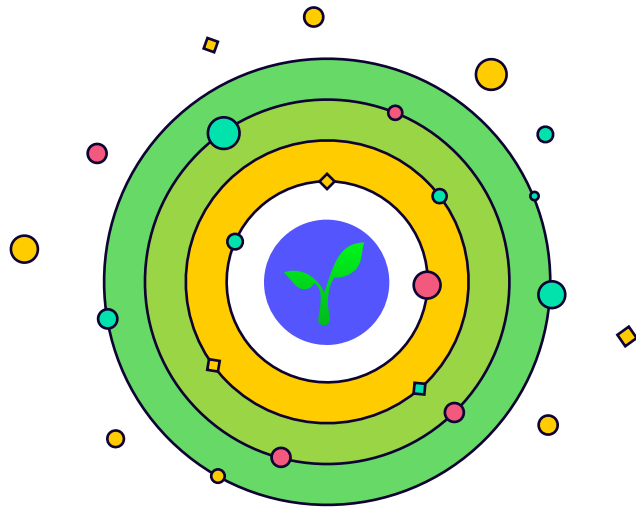
Radicle & Drips

Sharing code freely and publicly has made it drastically cheaper and easier to build software, yet corporation-hosted platforms for code collaboration are vulnerable to censorship and, the financial value that is unlocked by software is often distributed to shareholders and not to the communities that created it. Radicle is a web3 network for software collaboration – a peer-to-peer stack for developer communities to build software together. Teams can use Radicle Orgs to create sovereign and platform agnostic DAOs that host peer-to-peer repositories while maintaining an auditable, transparent history on Ethereum. What does this mean? The codebase is freely accessible to anyone in the world, is user-friendly and uncensorable, and has no single point of failure.

Let's focus on Radicle Drips. At it's core, Drips are used to create recurring funding streams from one address to another allowing creators to generate continuous income from their communities. The broader shift behind this functionality is to put redistribution at the center of the web3 ecosystem.

Any Eth address can automatically spread or "drip" a percentage of their funds to others. Use cases vary from setting recurring payments for DAO contributors to a sustainable creator economy where artists or developers receive recurring payments rather than hustling for the next NFT drop or grant application. Recipients can choose to involve their supporters with benefits or through Snapshot spaces to participate in decisions like future roadmaps. Using drips, anyone can fund and manage mutual support flow networks.

Splits automatically split a portion of incoming drips to others. With Splits, the value keeps flowing as the recipient chooses to pass along (re-distribute) a percentage of their drips to other communities, collaborators, or projects on platforms like Giveth and Gitcoin.

Sharing one's drip to others creates a positive-sum ecosystem that circulates value rather than locking it up. Open source software projects can receive drips and split these funds to other open source tools they depend on. Communities can direct Drips to public goods (or to ImpactDAOs) they care about and benefit from. These ImpactDAOs can split received drips to redistribute to projects in their ImpactDAO stack that has enabled them to achieve positive outcomes. Radicle Drips creates a circular and redistributive funding ecosystem.

radicle DRIPS
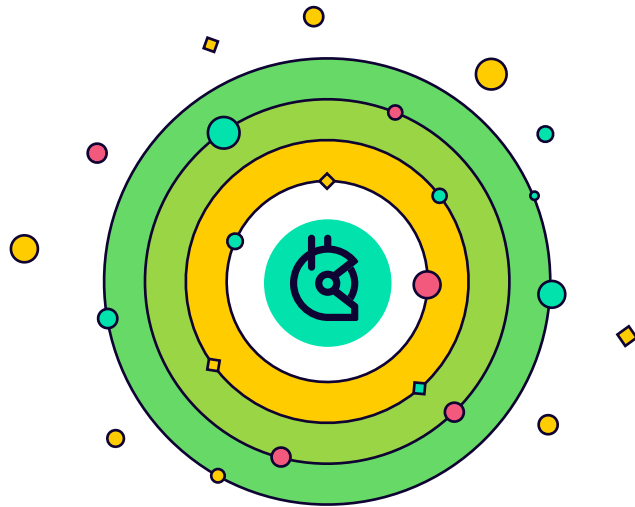
GitcoinDAO

GitcoinDAO builds for human thriving. Supporting digital public goods can make it easier for humans worldwide to coordinate and collaborate globally. Public goods failures are coordination failures. Open-source software, the environment, public education, and health are integral parts of society. Yet, governments and legacy institutions suffer coordination failures in providing for these public goods, and non-profits often fail at capturing value for the benefits that public goods create. Communities have little to no say on which public goods should be funded and maintained. Web3 is an opportunity to solve coordination failures and Gitcoin plays a role in sharing this vision with the rest of the world.

Gitcoin empowers communities to build and fund public goods. Open source software contributes $500B in yearly economic output, but creators and maintainers of digital public goods have no effective ways to monetize their work. Hence, Gitcoin's initial focus was to realign incentives between open-source software, those who use it, and those who create and maintain it. Gitcoin has distributed $58M through 13 Gitcoin Quadratic Funding Grants rounds. These rounds support a plurality of global public goods such as Longevity, Climate, and peace efforts in Ukraine. The most recent round, Grants Round 13, had 2415 active grants, which is a 20x over the initial round two years ago.

Grants act as a launchpad for builders to enter the web3 ecosystem. Projects started from Gitcoin Grants include, Uniswap, Yearn Finance, 1inch exchange, Prsymatic labs, walletconnect, Kernel, ReFiDAO, & more. Since its launch in 2017, Gitcoin has helped 72,912 funders reach 303,274 earners. With the help of Gitcoin, other organizations (even those outside of web3 like Open Collective) have ran QF rounds. Gitcoin's next aim is to scale through Grants 2.0, a decentralized, modular, forkable Quadratic Funding protocol for anyone to run a QF round in their community. Each round generates collective intelligence data on which public goods are perceived as most valuable. This data currently represent Ethereum's ecosystem preferences but, if QF scales, it could represent the world's preferences of what efforts are considered essential to support.

In a regenerative open internet, anyone can access resources in proportion to their value creation independent of geographic location, education, or background. Builders can connect, join the DAO's working groups, learn through Kernel, or build collaboratively through Hackathons and Bounties. There are 311,668 monthly active developers. Moonshot Collective brings developers together to create open-source software tools that enhance internal operations for GitcoinDAO. Other DAOs can leverage these toolkits for their operations. Tip.party, for example, is a toolkit to holistically reward contributors.

Perhaps the most important role of Gitcoin is that it is a Schelling Point for people who want to use wbe3 to create a better world. This translates into cultivating vibes & an internal culture that supports human thriving. This involves experimenting on governance systems, creating spaces for open conversations on public goods, and designing organizational frameworks for better contributor experiences. Grants have encouraged others to implement Retroactive Public Goods Funding or Aqueducts to commit a % of one's earnings to public goods. It has catalyzed the idea of a Solarpunk future and the meme of Regenerative Finance to the public. Schelling Point Conferences, memes, lore, Solarpunk art, and educational content, gather many to explore how web3 can solve coordination failures & regenerate the world.
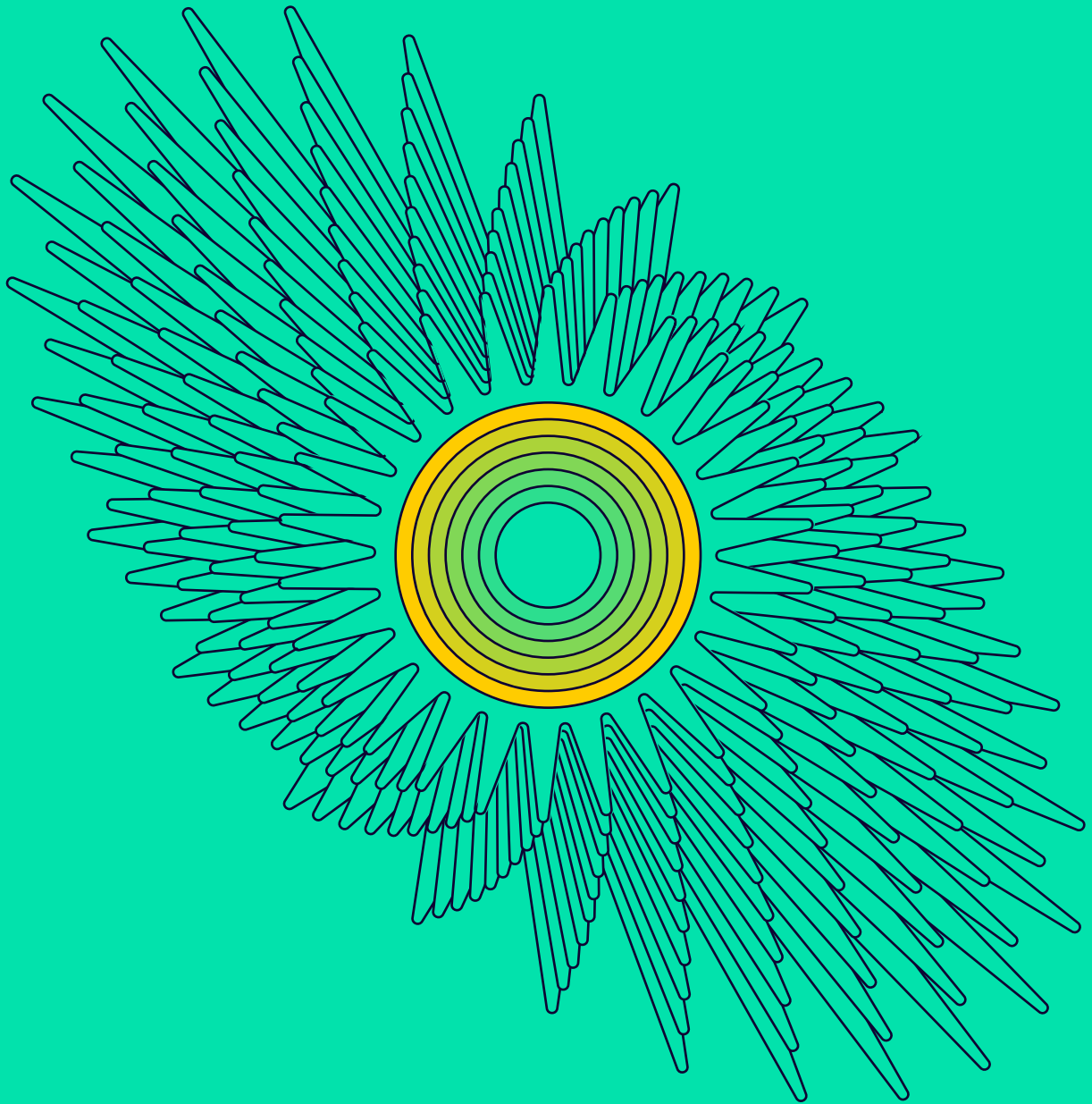
ImpactDAO Stacks

Each ImpactDAO, by definition, creates positive externalities, which enables value to the rest of the ecosystem. This creates a nascent equilibrium of give-first value creation.

Over time, organic collaboration between ImpactDAOs enables a emergent network of deeply positive sum behaviour.

Sketching an ImpactDAO stack

Let's explore how featured ImpactDAOs could, hypothetically, stack for a simplified framework of local, sovereign micro-economies that weave regeneration into their economic systems.
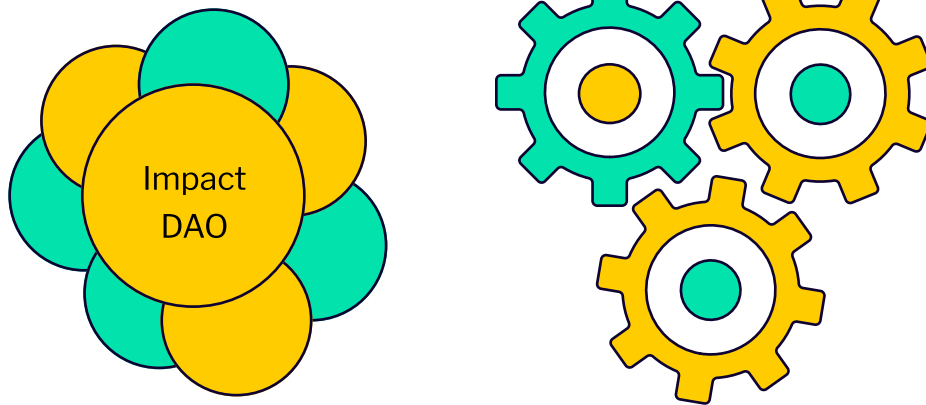
First, the community collectively decides on the values, goals, and actions they will coordinate around and fund.

Celo's blockchain can power the Valora App for members to transact value, containing value flow within their geographical sphere, regardless of the broader economic climate.

With **Proof of Humanity**, members have access to UBI to cover basic needs and each member is empowered to contribute their own expertise to uplift the community.

Members focusing on agriculture can better provide food for their community by applying Regen Network's use cases. Regen's research explores best methods to regenerate particular living species and how to assert monetary value to particular ecological transformations.

How do we verify that regeneration is actually happening? Geospatial and remote data sensors (what Astral Protocol is building) can trigger a reward behavior on smart contracts once the positive change occurs IRL.

We use **Proof of Humanity** again to verify that the person who worked on the soil is the same person who uploads the data and receives the rewards.
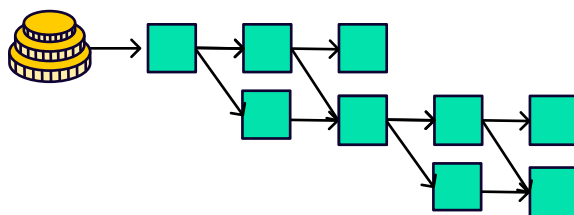
Currently, the value of credits is low, but **Toucan's** Bridge to transfer credits from off-chain legacy registries to on-chain increases liquidity and buyers' access to credit markets which increases demand for credits and value ultimately transfered to projects.

The more valuable the credits, the more profitable it becomes for communities to care for forests rather than extracting forests' resources. In this regenerative system, the health of the ecology improves as the economy grows.

We can apply Quadratic Funding as used by **Gitcoin** for the community to signal which projects resources should be funneled to. **Proof of Humanity**, once again, alllows us to verify that each human represents one vote in governance decisions.

Projects could bootstrap with Augmented Bonding Curves as designed by **Commons Stack**. Community members invest in projects they care about; the curve design ensures that a portion of the funds is always distributed to a shared pool, sustaining public goods even if the original investors exit the project.
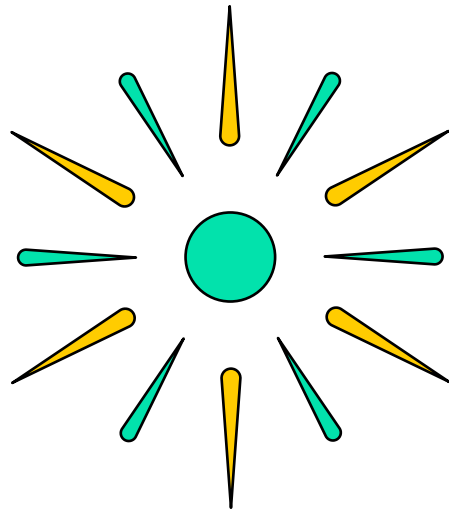
All of these tools can be built through **Radicle's** open-source software stack.

Beneficiaries of public goods, those who enjoy public roads, public schools, restored forests, an artist's music or a healer's meditation, can direct **Radicle Drips** to support the continuous value given. The receiving individual or organization can further split these drips to the individual or teams that are responsible for that work's creation. ImpactDAOs hence receive recurring **Drips** from those receiving positive externalities. ImpactDAOs further re-distribute **Drips** to those ImpactDAOs that enabled them to create positive externalities.
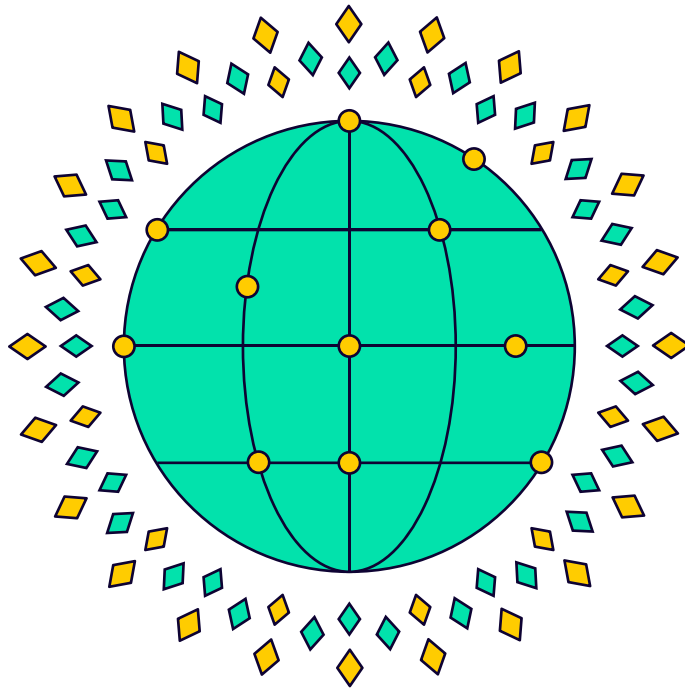
Networked ImpactDAO stacks

This example was just one snapshot within a single hypothetical community. As we build a new operating system for global coordination, we can incorporate all aspects of life and living species.

Networks can have a based on location proximity, or represent globally distributed communities with shared ideas and values. ImpactDAOs can be globally connected sharing value, talent, insights and resources while implementing solutions acorss distributed impact-networks with a distinct interdependent ImpactDAO stack. Simultaneous experiments iterating with close feedback loops back to a global network creates an ever evolving collective intelligence of better frameworks for positive change.

Each ImpactDAO by definition creates positive externalities, there is a compounding nature to them all working together. In sum, the positive externality is the ecosystem - an infinite garden

Innovative web3 primitives

- **Pods** — self-governed and emergent pods that move agency and excecution power to working groups increase growth and flexibility. Pods unlock cross-DAO collaboration and pods can bud, merge, and split with cross-DAO members. Pods by Orca Protocol do not bring prescriptive methods on how DAOs should be structured, but are rather dynamic and composable structures that DAOs can play with.

- **Recognition of value** — systems like Coordinape and SourceCred allow us to collectively and more accurately recognize and distribute immeasurable value. At a human layer, we can bring our whole selves to our work and humanize the otherwise top-down experience of sharing, and receiving value. The tech layer enables transparency, fairness, and distributed decision making.

- **DAO collaborations** — concepts like token swaps that enable shared stakes in each other's growth, funding shared ventures, and cross-DAO meta-governance to decide positive- sum approaches are key components of a synergistic ecosystem.

- **Science / IP-NFTs** — moving away from a monopolized pharma industry towards an open-source patient-centric one. DAOs can own, license, and transact IP-NFTs from projects they support. DAOs can launch patient-centric BioDAOs focused on areas such as Alzheimer's, cancer, or diabetes research with tight feedback loops and collaboration between patients and researchers.

- **UBI** — Proof of Humanity, Impact Markets, and GoodDollar are exploring diverse approaches on how everyone can be provided with the financial stability to cover basic needs.

- **Natural Capital Assets** — the ability to back currencies by Nature to tie ecologic regeneration to economic development.

- **Drips** — a continuous flow of value distribution instead of locking value up. Anyone can support causes they care about and those who receive can further redistribute to those who enabled them to create value. Without intermediaries we can collectively fund the action and work we value.

- **Augmented Bonding Curves —** a typical bonding curve with the addition of a shared funding pool, a token lock-up/vesting mechanism, and feedback loops that align idividual incentives to the collective funding of a shared commons.
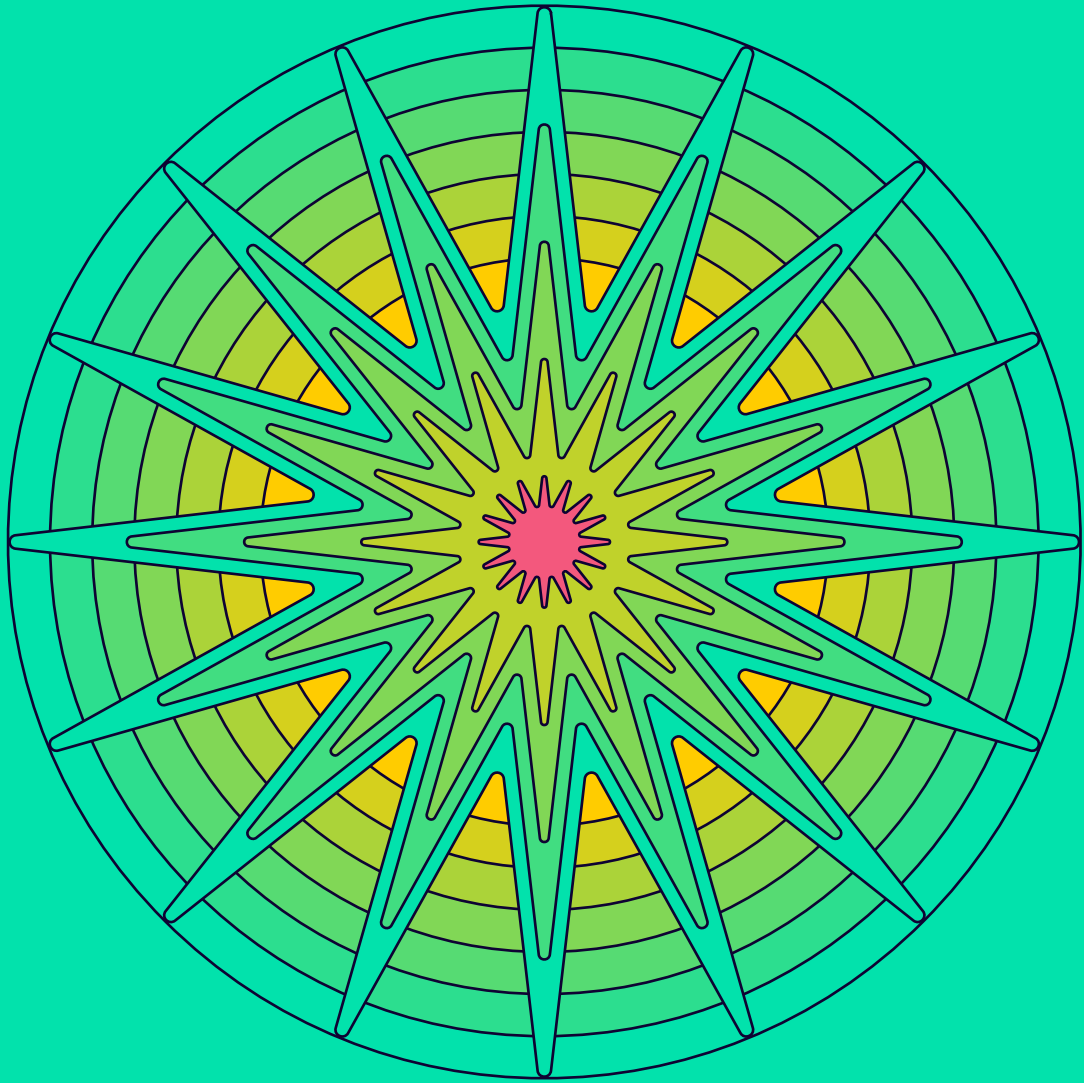
Regen
Economies

Our monetary system is very efficient, yet not diverse or regenerative. With web3, we can design a better economic system and embed our values in it. We can move away from a monoculture type of economy to ecology economies --experimenting on new ways to transact value: Praise systems to reward that which can't be measured, natural-capital currencies, universal basic income, local impact currencies, circular economies, mutual credit, location-sovereign currencies, etc.

These ImpactDAOs demonstrate that we can program our values into our money.

⟳ Impact Markets

Impact Markets' mission is to lift communities out of poverty. 38,150 beeficiaries spread across 33 countries and 208 communities are receiving daily UBI from their platform. UBI smart contracts have specific parameters based on each community's reality and all beneficiaries can claim cUSD on a regular basis. Currently, they rely on donations (from 4,973 backers) to redistribute funds to communities. A total of $2,277,254 has been distributed. On average beneficiaries receive ~$0.54 per day. The exact rate varies depending on the amount raised by each backer for each community, specific local economy circumstaces, living costs, and the value of a dollar against local currency.

Operating as a DAO, each community is represented by on-chain smart contracts so that community managers and donors influence the future of their protocol. Impact Markets is built on Celo, enabling users to transact through wallets attached to phone numbers. Current UBI rates might not be high enough to cover all basic expenses, however, positive externalities can multiply because the money that flows in as UBI is recirculated within the community to generate more value. Impact Markets is exploring how to complement UBI with new ways to generate income with pilot programs in Brazilian favelas where the protocol paid people for each kg of plastic collected and delivered to recycling.

As a donor, you can choose to support anyone in the world and transfer money with minimum fees knowing that most of the money will actually reach that person and make a difference. Recipients can not only cover their basic needs, but also start saving as they become comfortable with digital payments systems, borrowing, lending, and the other opportunities decentralized finance networks enable. Dashboard with on-chain data: www.impactmarket.com/global-dashboard

Bloom Network

Bloom Network is a peer-to-peer action network for regenerative cultures. Local chapters engaged in regenerative actions can share resources with each other to rapidly upskill each community. 30,000 people on the ground across 16 local chapters in 11 countries establish local economies focused on food sovereignty, transformative justice, arts gatherings, and regional autonomy.

Local Bloom DAOs form regional token economies focused on local impact projects around their bioregion or watersheds. Bloom Network acts as a connective tissue and knowledge sharing enabler for projects to fork initiatives in different locations. Bounties incentivize regenerative actions and direct a percentage of stacking rewards to local chapters. Although the official DAO is not yet formed, communities have been actively organizing and operating for years on grassroots efforts.

One example of a local Bloom DAO is a Rio de Janeiro network that runs on Muda currency to encourage cultural, educational, and socio-environmental actions that are often not covered by the traditional financial system. Members transact Muda for doing beach clean up, educating, sharing food, tokenizing forests, implementing organic food systems, and for creating networks of value. Similarly, other Bloom Chapters organize around collaboration of wisdom, knowledge, experience, innovation, and creativity -- important resources that don't capture much value in current, legacy extractive systems.

Grassroots Economics

Grassroots Economics uses web3 to create local, community-specific currencies that enable rural communities in Kenya to take charge of their own livelihoods and economic future. To date forty-five communities are creating and sharing value as members have started 60,000 small businesses since Grassroots Economics launched. The project is open-source and Grassroots is actively working with communities beyond Kenya to implement these strategies and to share insights on collaborating with other ImpactDAOs within the ecosystem to increase postive outcomes. For example, Grassroots collaborates with Kolektivo on the best regenerative agroforestry practices.

iXO

Not Launched

iXO aims to finance and verify positive changes in the state of the world to create an impact economy. The iXO protocol, which is still being developed, will enable users to create verifiable tokenized impact claims. Oracle services independently veriify claims, issue proofs of impact and certified digital credentials such as Renewable Energy Certificates.

Anyone can invest in project Alpha Bonds through an Impact Marketplace. Alphabonds are dynamic token bonding curves that adjust the pricing of shares and distribution of future returns in response to feeding real-world changes information into the bond. As the probability of a social outcome varies, pricing signals act as a feedback loop to direct investments to projects achieving successful change. This project is yet to launch and we have yet to verify the viability of these ideas.

SEEDs

Seeds is an ecosystem exploring how we can coordinate distributed regenerative communities. The project has focused on developing tools, frameworks, and methodologies to launch the "Minimum Viable Regenerative Economy". You can access their templates, and extensive guides on regenerative financial systems, and social and ecological practices. Communities can launch Decentralized Human Organizations (DHOs) and coordinate around local food economies. The SEEDs currency (not live yet) is allocated through contribution scores based on: a) Economic Contribution: stacking and transacting SEEDs with local organizations that support regenerative practices; b) a Social Contribution: community-building, organizing events, and sharing knowledge and services.

Citizens' contributions are multiplied through reputations of their expertise, time, and value. Organizations earn contribution scores which are affected by contribution to the local economy (e.g. volume and number of transactions), regenerative reputation (the extent to which the organization contributes or extracts from the environment), and collective opinion of how much value is offered by the organization.

Seeds is structured in complementary DHOs where resources, talent, and attention flow between DHOs wherever its most needed each season. Seeds Commons focuses on budgeting and coordination. The Explorers group facilitates research on new proposals to implement, the Tools group develops apps and smart contracts. Regenerative Civics Alliance is an incubator where 12 projects will implement local regenerative economies using Seeds' toolkit .
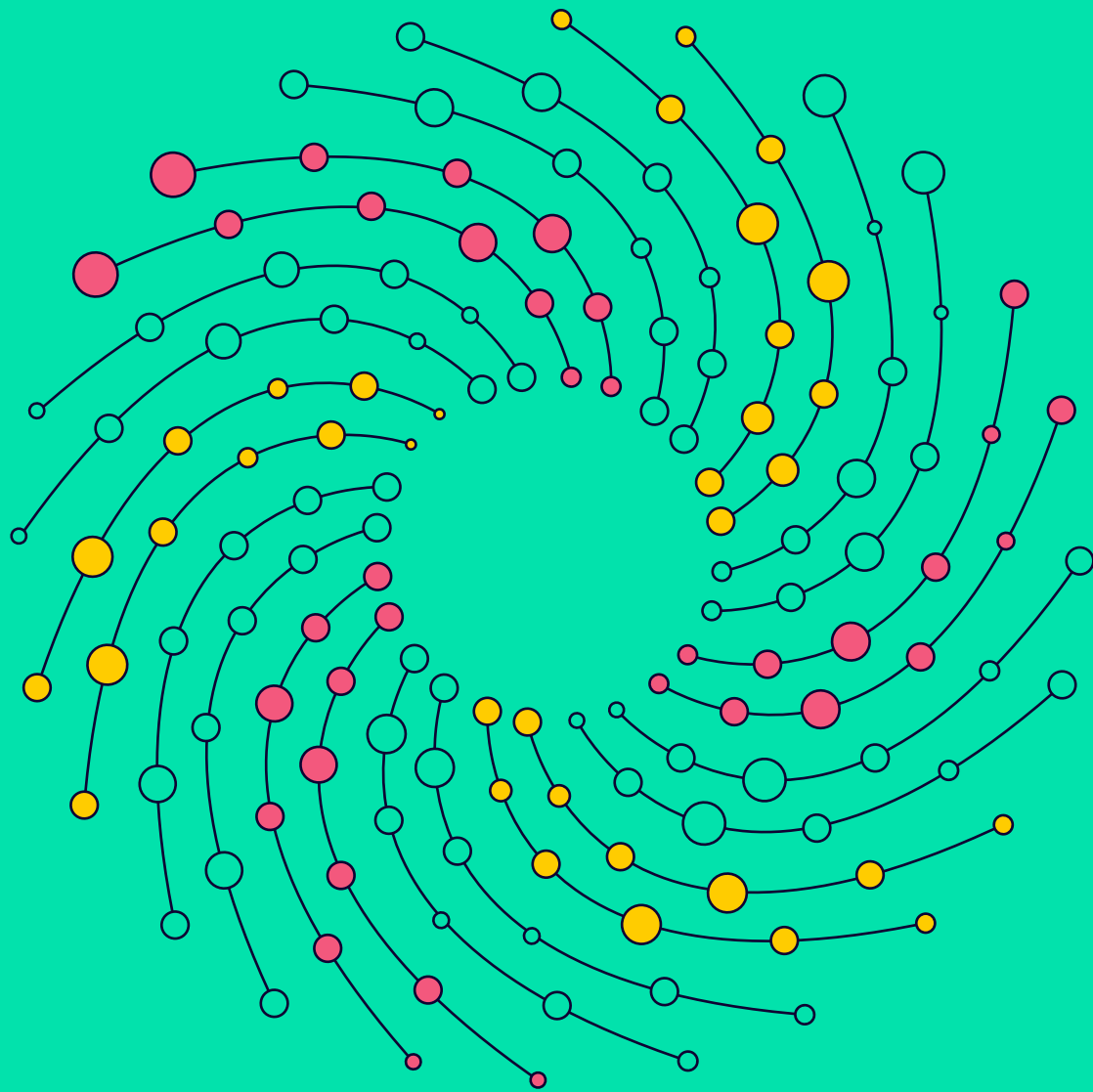
ReFi

To bring back the green to our planet by supporting material & living capital. These ImpactDAOs are building the tools for us to embed regeneration within the core of our financial system.

MO.SS   Moss.earth

Moss purchases and tokenizes the credits of reforestation and conservation projects in the Amazon Rainforest. Tokenizing credits increases traceability, transparency, and prevents the double counting. One MCO2 token is equal to one tonne of CO_2. Moss.earth also increases accessibility to the carbon credit markets which is important because as market participation increases so does financing for regenerative projects, diminishing incentives of extractive activities.

Families excluded from labor markets can obtain jobs that protect the rainforest. Projects are selected on threatened areas. Investments then commit to capture 20 years of satellite imaging, and on-the ground sampling of flora and biomass. E.g Ituxi is located in one of the most deforested areas of the Amazon that has been subject to illegal logging, cattle raising, and land grabbing. That area is now protected by local communities that recieve funding and education on forest management and sustainable resource management for agriculture such as acai and chestnut tree cultivation.

Moss has sent $30 million to Amazon preservation projects, preserved 301 million trees, and avoided 1.33 million tons of emissions. Separate from the MCO2tokens, anyone can purchase an Amazon Forest NFT representing the protection of a hectare of rainforest. Buyers can digitally monitor that hectare with remote sensing tools enabled by Descartes Labs. Moss committed to a 30-year protection fund to cover the costs of patrolling, satellite imagery, and any other demand necessary for the security of the areas. Moss works with more than 200 clients including Gol, Brazil's largest airline, to offset their emissions.

Nori

Nori is a marketplace connecting buyers and suppliers to carbon removal.
1 Nori Removal Tonne (NRT) warranties the buyer that CO2 will be sequestered for at least 10 years. If a buyer purchased NRT and natural events cause the carbon to be released, Nori will buy new NRTs to guarantee each NORI always represents 10 years. Through regenerative agriculture practices farmers increase CO2 sequestered in the soil. Carbon rich crops have more organic matter increasing crop yields, but improvements aren't seen until after ~7 years which is why farmers need upfront financing to transition to these practices.

The NORI token will allow for price discovery. People purchase 1 NRT receiving 1 NORI token that can be freely traded. The NORI price in dollars varies by supply and demand. However, each NORI only buys one NRT that is retired upon sale preventing double counting of carbon removal. Farmers on Nori spend ~90% less certifying and verifying their projects. Since 2019, Nori has sold (hence removed) ~76,000 tonnes of carbon, paid $1.41 million to farmers.

KlimaDAO

KlimaDAO has so far accumulated 16,374,289 tonnes of carbon via BCTs from Toucan. Their launch created initial high liquidity for the ReFi ecosystem with over $53,404,772 in protocol-owned liquidity. Their token KLIMA is an inflationary carbon-backed currency. They are on-boarding more carbon assets on-chain via SubDAOs such as with MCO2 & GNT tokens from Moss and GoddessDAO. On chain data: https://dune.xyz/Cujowolf/Klima-DAO

Astral Protocol

Astral Protocol bridges the physical and the digital through an ecosystem of location-based web3 applications and spatial contracts. Astral designs tools to for devs to easily build location-based dapps. Astral's on-chain map of the world interoperates with verifiable location claims. Tools include verifiable smart contract-based spatial data registries, location claims, and a Web3-native geospatial data storage system on IPFS for storing sensor data.

Astral will enable us to tie smart contract's behaviour to changes in an ecological state of a given ecosystem. This supports human assesments by combining data collected from sensors directly in the environment, with satellite or drone remote sensing data and human inference we can better understand ecological conditions. Now on-chain actions are tied directly to the real world reality. This is key to designing natural capital currencies as we need to transparently verify natural assets are protected or to retroactively reward communities for regenerating a dry crop of land.

We can adapt to changes in the ecosystem's health. Suppose we detect indicators of ecosystem degradation, E.g. "humidity reaches X range". In that case, we direct attention to the specific area for targeted, less extreme interventions to preserve ecological health. Sprout is another use case, a sustainability link bond that links loan terms to environmental metrics that farmers could leverage to finance activities. Local contracts (smart contracts that can use location as a condition in its control flow) could serve for tools of territorial sovereign governance with use cases like intelligent transport, supply chain and logistics. Eventually, we could use Astral's spatial data registry combined with a location-based filter for local-complementary currencies. Conditioning transactions through boundaries could enable local groups to continue to create and exchange value regardless of the global economic state.

Ethic Hub

Unbanked smallholder farmers who produce ⅓ of the food we consume in the world have no access to banks, registered identity, or collateral needed to access traditional finance loans.

Farmers can borrow capital at a 70% discount from current markets. Applying crowd-lending backed by crowd-collateral, lenders stake collateral on the farmer's behalf to secure the farmers' loans and insurance premiums to protect them in case of crop failure. EthicHub provides farmers with access to markets they can sell their products to. EthicHub has intermediated over $ 1.2M USD on loans retaining less than 1% default rate.

Ayowecca Uganda

Climate change has led to prolonged droughts, erratic rains, and declined agricultural production in Uganda. Through permaculture, Ayowecca plants fruit trees in schools and trains local farmers to setup farms in their backyards. Ayowecca gives farmers seeds and equips them with basic agricultural and knowledge and entrepreneurial skills so they can have sustainable livelihoods.

This project has been financed through Gitcoin grants and has thus far restored 3 wet lands, planted fruit trees in 16 schools, in 8 health centers, and distributed 5000 seedlings to communities. They have collected 10 tones of plastic. Ayowecca will plant trees in 64 schools, 40 heath centers this year.

Eden Dao

The Eden Dao is a protocol to accelerate carbon removal. Eden DAO's thesis is that by creating tokenomics that reframe carbon as a source of money in the world (instead of a cost on the shoulders of corporations or consumers), it unlocks an elastic, optimistic demand engine that bootstraps world carbon removal supply.

To save our planet, we not only have to massively reduce the 40B tonnes of CO_2 we emit every year, but we will also have to capture all our historical emissions. This requires a global carbon removal ability of 50–100B tonnes a year. We currently remove 40M a year. Eden dao provides liquidity for pioneering projects to scale their high quality carbon removal methods by buying their future offsets.

Solid World DAO

Solid World DAO is building a carbon market place through tokenizing pre-purchased carbon credits, providing liquidity to bootstrap projects and bridging their carbon offsets on-chain to Toucan/Flow Carbon. This unlocks funding for pre-certified carbon sequestration projects to help them get off the ground. These projects might have otherwise not been able to scale due to long, expensive traditional certifying processes. Solid World DAO's existing set of projects encompass a network of over 1million hectares of suppliers that are helping farmers, forest owners, and mangrove growers.
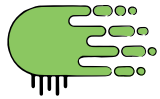
Treejer

Treejer connects donors with rural planters worldwide through smart contracts. A portion of donations go to fund Rural Development and Tree Rescue (tree insurance against natural disasters). Treejer has planted 200 trees and enabled 4 community development projects in forest areas in Peru.

Flow Carbon

Flow Carbon tokenizes carbon offsets from large-scale forest conservation and nature restoration projects enabling a transparent and efficient revenue stream for projects on the ground. Corporations, individuals, and protocols can easily access and trade credits in crypto exchanges. The GNT token corresponds to nature-based solutions from Verra, CCB Standards, and Gold Standard.
Focusing on nature-based solutions, Flow Carbon prioritizes projects that support livelihood opportunities for indigenous communities or protect areas of high-biodiversity ecosystems or endangered wildlife. Projects include Katingan Mentaya Forest Protection protecting 40 endangered species in Indonesia or Selva Mataven Forest supporting 16,000 indigenous people in Colombia.

BasinDAO

Basin DAO will generate carbon and eco-credits through protocol owned real estate and joint ventures with landowners. They execute climate, nature and carbon projects emphasising "core benefits" such as biodiversity, ecosystem services and climate resilience.

Senken

Seken is a gateway to the web3 carbon and regenerative economy: Corporations looking for carbon offsets, investors seeking ESG assets, or a regen human who wants to directly support carbon projects without intermediaries. Its current focus is on projects in Africa to enable financing and pre-financing opportunities to project developers who would ottherwise not have that access. Royalties of future credit sales funnel back to communities & land owners. Working with other projects like Toucan Protocol to tokenize these carbon offsets, they ensure the transparency, traceability, and no double counting of credits.

Return Protocol

Return Protocol will allow users to automatically and passively offset their on-chain transactions across any blockchain. Storing Return's NFT in your wallet set up with offsetting preferences, you can transact as normal while offsetting happens in the background. As funds are directed to carbon projects, transactions can become carbon neutral or even negative. Launch in May 2022.

KumoDAO

Kumo aims to create a carbon-backed stablecoin pegged to USD. Users can borrow interest-free KUSD against tokenized carbon offsets. If this is achieved, every transaction will act as a vault for carbon credits, embedding climate action into every transaction. This mechanism would need high demand for KUSD to be used throughout the ecosystem. The more KUSD is in demand and in circulation, the more carbon is taken off-market and the more financing is available to carbon projects. Viability is yet to be seen as the protocol is yet to be launched.

ReFiDAO

ReFiDAO acts as a home for ReFi project. They have been one of the driving initiatives for the collaborative growth of the ReFi ecosystem with initiatives such as founders circles. They launched the ReFi podcast to educate about meaningful climate impact using web3. They are also exploring an open-source event framework platform for local distributed ReFi meetups.

In the future, the ReFi hub will show talent, jobs, and act as an aggregator of ways one can get involved in ReFi projects across the landscape.

All4Climate

All4Climate builds bridges from web3 to climate activists on the ground. They onboard nonprofits into understanding how web3 can help their operations and provide a platform and community to launch climate initiatives.

Moonjelly

Not Launched

Moonjelly DAO aims to direct funding to ocean projects. A community governed fund will allocate decision power gated by educational and reputation NFTs earned through contributions and completion of relevant education flows, developed by ocean scientists. In Q3 2022, they will launch a token to raise liquidity, pairing scientifically proven impact, with indigenous artists, to generate further funding.

dClimate

Web3 enables dClimate to build Earth's climate record on-chain accessible to all. With Climate information, communities can understand how climate affects where they live & leverage this to build tools to adapt and improve conditions.

dClimate's data was used for $250 million+ of parametric weather risk insurance helping farmers in underserved regions like Cambodia get covered for as little as $11 with Arbol and Chainlink. Their carbon program launching this year will protect the Congo Basin rainforest by tokenizing 100 million tonnes of CO2 throughout Africa. On-chain satellite monitoring and verification will prevent deforestation. Through an IoT weather program, underserved communities can monetize data they collect in areas lacking granular insights. Since launch, 1500 unique users have made 1 million+ requests of the free 20TB+ climate data– satellite, carbon, temperature, rainfall, and wind data, including 60 million+ grid points and 120K weather stations.

Shamba

Builds an oracle to provide web3 projects with geospatial data and analytics to support applications like parametric insurance, carbon and eco-credits on the regenerative finance space. On chain models can map and quantify ecosystem services such as carbon sequestration, or use machine learning to identify potential hazards like floods from satellite imagery.

OFP Open Forest Protocol

Only large projects can access carbon accreditation, an expensive accreditation process. We have minimum ways to verify that projects are contiued to be taken care of. Open Forest Protocol brings reforestation funding, verification, and monitoring fully on-chain, unlocking carbon financing for projects. Through OPF anyone can directly invest in forest project operators and indegenous communities, who are planting and caring for a reforested area. Forest projects are registered as an NFT holding unique geospatial, ecological, and monitoring data. A network of validators can transparently verify or challenge forest data before on-chain carbon credits are minted, hence ensuring immutable and transparent credits. This data is verified every year to ensure forests continue to grow and are protected.

The project is pre-launch but they have 200,000 hectares across 24 projects in Africa, Latin America, and Europe committed through Open Forest Protocol.
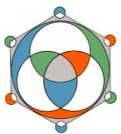
Avano

A regenerative NFT marketplace that incentivizes actions that maintain native ecosystems (ie. tree planting). Avano uses satellite, IOT devices, and georeferenced images to measure and verify regenerative actions. Users can buy NFTs where data is recorded and updated over time. As the ecological value is improved and updated, the value of the NFT grows, backed by evidence of natural value. This is yet to be launched.

H⟩ HeliosDAO

Helios invests in solar projects in emerging markets. It has funded 4 solar installations in India that will sell clean energy to industrial customers. E.g., $250k was invested in a project in Pune, India generating 500kW of power to the local grid, reducing customers' bills by 47%, and preventing ~1000 tonnes of CO_2 emissions per year. Web3, unlocks the ability to directly send funds internationally to emerging markets. Solar markets in the US and EU large capital chasing few opportunities drives the returns of solar down. In emerging markets, the opposite is true. Lack of financial infrastructure and limited access to institutional capital leads to low liquidity that could fund thousands of high impact projects. Data on all transactions, power generated, carbon emissions prevented, and investor returns are available on chain.

⬤ Digital Gaia

Local stewards, experts, and scientists can investigate and cross-validate knowledge of field data, scientific models, & local practices. Integrating that with real-world data builds a collective intelligence on regenerative practices.

Slow, expensive, and opaque methodology standards create bottlenecks between communities ready to positively impact the environment and a global market ready to fund them. In digital Gaia land stewards will be able to submit projects for experts and independent researchers to assess and provide feedback on methodologies. Independent assessments increase the impact rating for projects to get financed. Bounties encourage continuous data collection on the ground. Once projects are verified, impact-credits are created. We are yet to see this implemented in action.
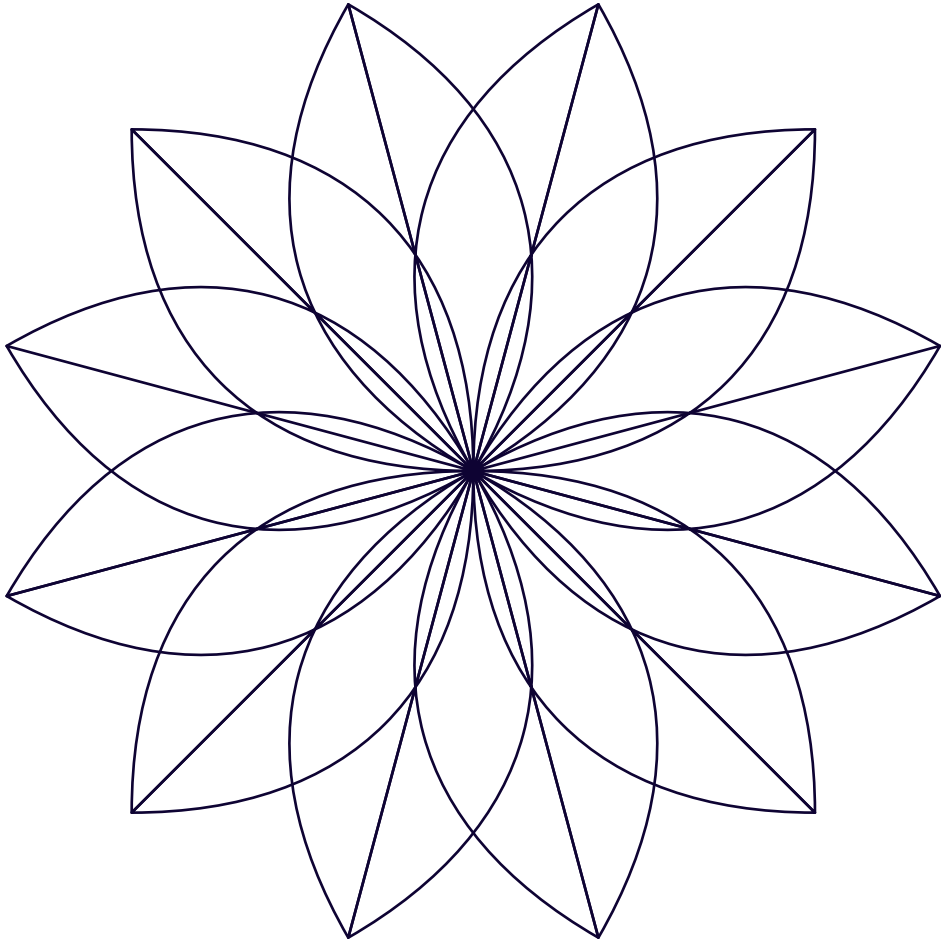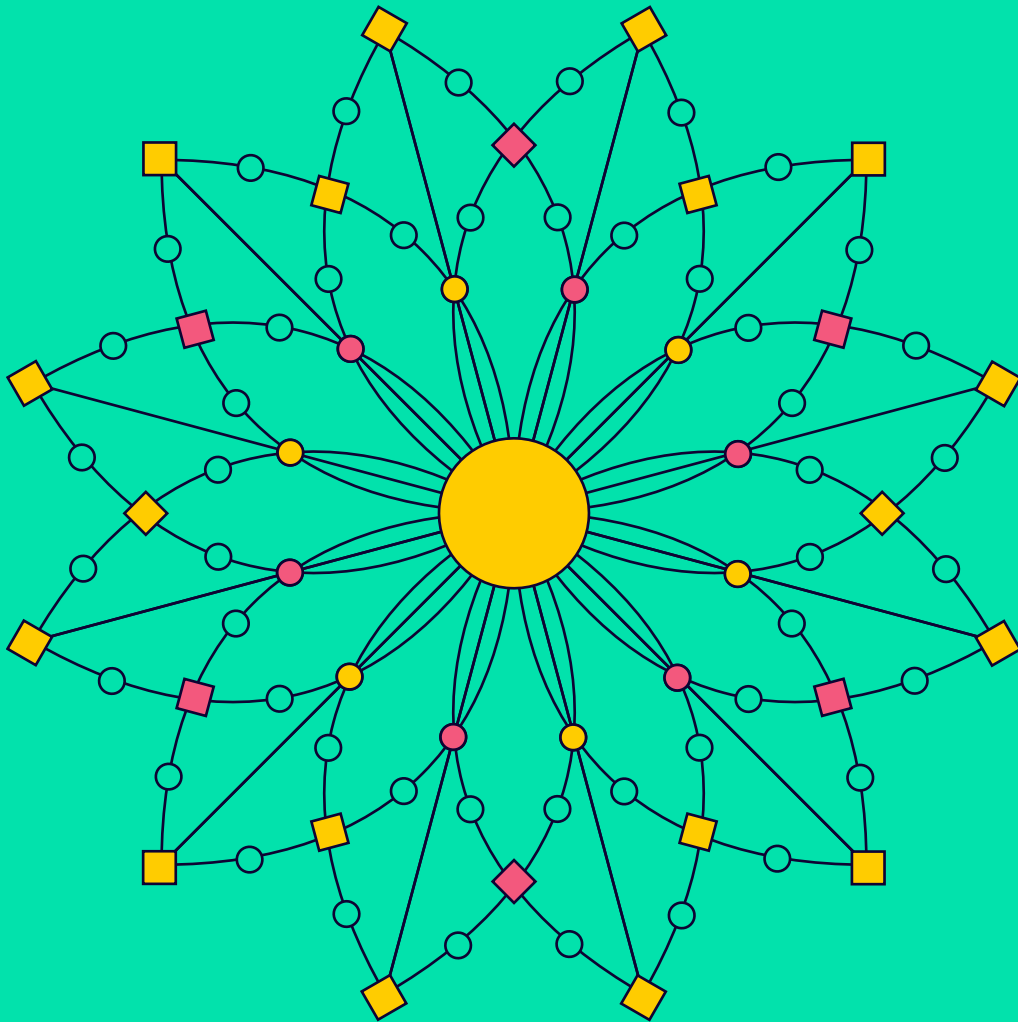
Coordination, Tooling
and Infrastructure

To regenerate the earth, we need to scale our ability to identify, optimize, and accelerate solutions that actually work. We also need to tailor each to their specific location and improve these with scientific expertise and indigenous knowledge.

Protocol Labs

Protocol Labs explores, starts, supports, and grows ways to make our digital technology better for humans. Their research explores decentralization, knowledge sharing, computation, energy, funding, distributed systems, cryptography, etc. All research is open-source, with users and contributors as part of the development process. Their licensing approach makes tools free for all to obtain and continuously update to match the evolving external reality.

Protocol Labs host an event series Funding the Commons to discuss experiments and frameworks to create and fund our collective commons. Topics include how to encourage open-source innovation and the maintenance of projects, approaches to incentivize risky research, and approaches to fund public goods at scale. Two of their main products are IPFS and Flilecoin. With IPFS, users can share information directly without needing a central server to name, organize, update, and share data. DAO voting systems like Snapshot rely on IPFS as a core part of their infrastructure. Filecoin allows users to pay others to store data. Fliecoin runs almost entirely on renewable energy from solar farms.

Research areas:

Knowledge Engineering- How can we discover, link, and process knowledge available in available data from previous efforts? A product that resulted from this research is The Underlay, a global, distributed public knowledge graph.

Cryptoeconomics – Engineering practices, tools, and coordination games to guide human interaction toward shared goals.

Networking – How can computer networks better enable information to move across the globe?

Meta-research – The economics of science and incentive systems in research, and validating scientific data and sharing that knowledge.

Ocean Protocol

Even though data enables large innovations and improvements across technology and science, a small set of large companies hold and control our data. Through Ocean Protocol, more people can capture the value of this data, whether it by preserving ownership, monetizing it, or enabling anyone to extract insights for scientific or technological discoveries that others can benefit from. Developers use Ocean Libraries to build their own data wallets and data marketplaces. Data owners and consumers use the Ocean Market app to publish, discover, and consume data in a secure, privacy-preserving way.

Datatokens are "data legos" -– ERC20 tokens to access data services. Through Ocean smart contracts, one can publish data (deploy and mint data tokens) or consume data services (spend data tokens) and re-purpose crypto wallets as data wallets and crypto exchanges as data marketplaces. The data itself does not have to be on-chain, only the access token.

As a user, you can earn by stacking OCEAN on datasets, publishing and selling your proprietary data or adding value to free data sets in Ocean Market. The most valuable data to perform accurate research studies is private, but this is usually hard to access and has privacy concerns. In the Ocean Market, data publishers monetize their data while preserving privacy and control. AI practitioners and data scientists can run algorithms, analyze, models, compare, and generate value from private data they could not access before without putting privacy at risk because the computations happen remotely and the data never leaves the premise of the user. Ocean Market is open source meaning anyone can build their own marketplaces with tools developed by Ocean. Ocean DAO provides community funding to projects to grow within the ecosystem.

PrimeDAO

Prime DAO is building coordination tools for a collaborative web3 ecosystem. DAOs operate as network organizations where governance drives shared resource allocation for common goals. While DAOs are highly interconnected and interdependent, they often operate in silos. DAO2DAO relationships are positive-sum incentive-alignment mechanisms for the growth of the DAO ecosystem.

Token swaps are the exchange of governance tokens to strengthen the alignment in vision of DAOs working on common goals. These tokens can be trustlessly exchanged between DAOs dependent on an agreed set of conditions. Toke swaps are trustless because DAOs can recover any shared funding if conditions are not met. Either the collaboration occurs, with the necessary funding being correctly directed, or it doesn't, and each DAO gets its funding back. It is also flexible. Conditions can be added in real-time to account for any changes that may arise while a negotiation is in process. DAOs can co-fund a new wallet representing a shared liquidity pool or a joint venture such as a shared product or research that unlocks value to all parties.

Prime's Proposal Inverter enables multiple groups to collaborate on a shared proposal for common projects and store the allocated funds in a common pool that will distribute funds once conditions are met. All of this can happen within Prime Deals, a framework and on-chain platform for DAOs to collaborate, negotiate, and execute agreements, creating verifiable and enforceable agreements. Think of Prime Deals as collaboration-as-a-service tooling. PrimeDAO also crowd-sources ratings of protocols.
Prime DAO is already using collaboration mechanisms with Balancer, GitcoinDAO, VitaDAO, and Symmetric as well as with the Celo and Gnosis ecosystems.

OP Optimism

Optimism is a low-cost and fast Ethereum L2 blockchain infrastructure that promotes the growth and sustainability of public goods. Optimism is giving all of the profits from sequencing (until it is fully decentralized) to public goods funding experiments. It has donated $1M to public goods through retroactive funding.

Public goods are underfunded because with no revenue-generating business model there is no exit mechanism to encourage the public to invest early in organizations. Another problem is how it is easier to agree on what was useful in the past than what will be useful in the future. Retroactive funding is as if society paused every now and then to look back, survey its citizens, and pay out the profit each individual deserves. This creates an exit scenario rewarding projects determined by how much public value these projects have already provided.

Kottani Pay

Microwork and DAOs open opportunities for anyone to earn income, yet banking systems make global transfer of value slow and expensive. Stablecoins reduce the costs and frictions of sending and receiving cross-border micropayments and Kottani can cut transaction fees by 93%. In Kenya, a pilot program used Celo's Valora digital wallet to connect 200 young workers with micro-work opportunities enabling untapped talent to access new opportunities. Using Kotani's off ramp, people in Kenya can exchange stable coins for local currencies.

Orca Protocol

Orca protocol is creating tools around DAO governance that put people at the center of the design. Their vision relies on the idea that DAO contributors can coordinate within pods. Pods stands for 'people organized decentrally.' Essentially, pods are small working groups centered around one's expertise. Organizing governance around group expertise, each pod has its own multi-sig creating mini-DAOs within a larger DAO. Pods can be emergent, fluid, and modular, as explained by Orca: "Pods can exist as neighbors, embed or be embedded in other pods, split, merge, etc" based on the ecosystem needs and can either work independently or in collaboration with each other.
Orca tooling can eventually enable a composable metagovernance framework in which each DAO has a meta-pod with stakeholders from different DAOs. This acts as a connective tissue of multi-DAO governance councils.

Kleros

Smart contracts are smart enough to automatically execute as programmed, but not to render subjective judgments or to include elements from outside the blockchain. . Kleros token acts as a 'Schelling token' which aligns the incentives of jurors staking in the kleros court to make fair decisions. Jurors for each case are randomly chosen from a pool of jurors that hold the necessary skills. Jurors are based around the world and do not know each other. So, each can build their own perspective and decision. If jurors vote coherently, jurors are rewarded, and penalized if their decision is biased. Web3 allows scaling the number of cases processed compared to traditional justice at a fraction of the cost and time. They have thus far solved +1200 disputes and have 764 active jurors.
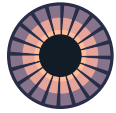
SourceCred

SourceCred makes nuanced contributions more visible and rewardable. They build systems to serve community members and flow value across these. As communities use SourceCred, a node graph is generated based on their contributions. Their built-in algorithm helps determine how much value contributions add to a project. Once a contribution is made to a project, an amount of Cred is assigned based on how much value it brought to the project (the assigned value of Cred to each contribution is decided by the community).

This Cred flows from the contribution to all the people and other contributions that made that specific contribution happen. Now you can imagine this graph growing connected by lines that flow Cred around the nodes based on what enabled what to occur. The more edges one contribution has to other important contributions in the project, the more Cred flows into it. https://cred.sourcecred.io/#/explorer

GardensDAO

Gardens is a plug-and-play DAO governance framework that gives organizations and movements a sustainable, regenerative token economy for funding public goods. # of Gardens DAOs: 22. Gardens are built around a Covenant, which lays out the community's mission and acceptable behavior within the DAO. Each Garden has a Common Pool from which any community member can propose funding from which will be approved through Conviction Voting, with a decentralized arbitration court, Celeste, protecting the Garden from bad actors.

Worldcoin

Worldcoin aims to onboard as many people as possible to a collectively owned currency to achieve equal opportunity for all. The strategy is to give everyone a share of it for free. A major challenge is ensuring that every person on board is a human and that they have not claimed their free share of Worldcoin already to avoid double claims.

Proving "unique-humanness" without managing privacy has been an ever-present challenge. Through a device called the Orb, they can capture the biometrics of a person's eye and convert it to a unique irreversible numeric identifier code. Although the image is deleted, every capture of this user's eyes will produce the same identifier. Yet, it is impossible to recreate the image of an eye from the identifier. A certificate is generated to create a Worldcoin wallet only the first time a user signs up, therefore avoiding duplicate claims.

Naturally, privacy is a key concern. However, this unique identifier code from the biometric scan is not stored or linked to any user's wallet, or transactions, at any time.

Worldcoin aims to produce thousands of Orbs to connect as many humans as possible to a commonly owned crypto network. They rely on these Orbs to be managed by local entrepreneurs distributed across cities, rural communities, and bioregions and whom are most familiar with their communities to aim for a distribution that represents a diverse, global group of people. The more people there are that collectively hold and use the same currency, the more useful that currency becomes for each participant. Hence, Orb Operators earn rewards for each sign up and on average, one operator signs-up 1060 users per week. Field tests are being established across Chile, Kenya, Indonesia, Sudan, and France. The project has not launched yet and we are yet to see how it evolves.
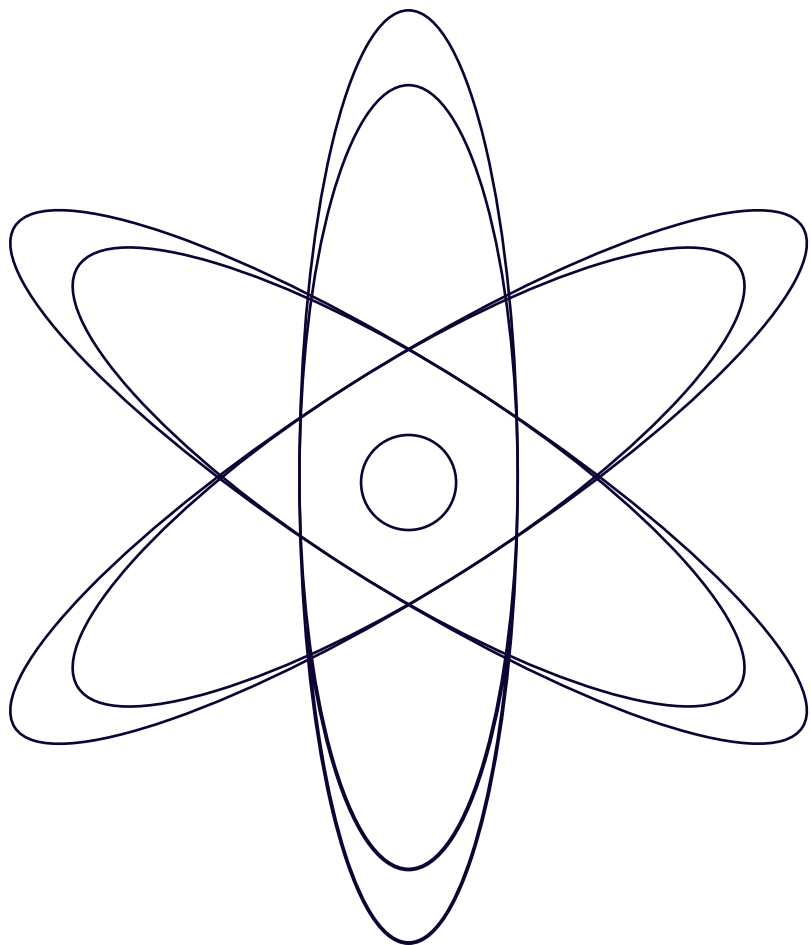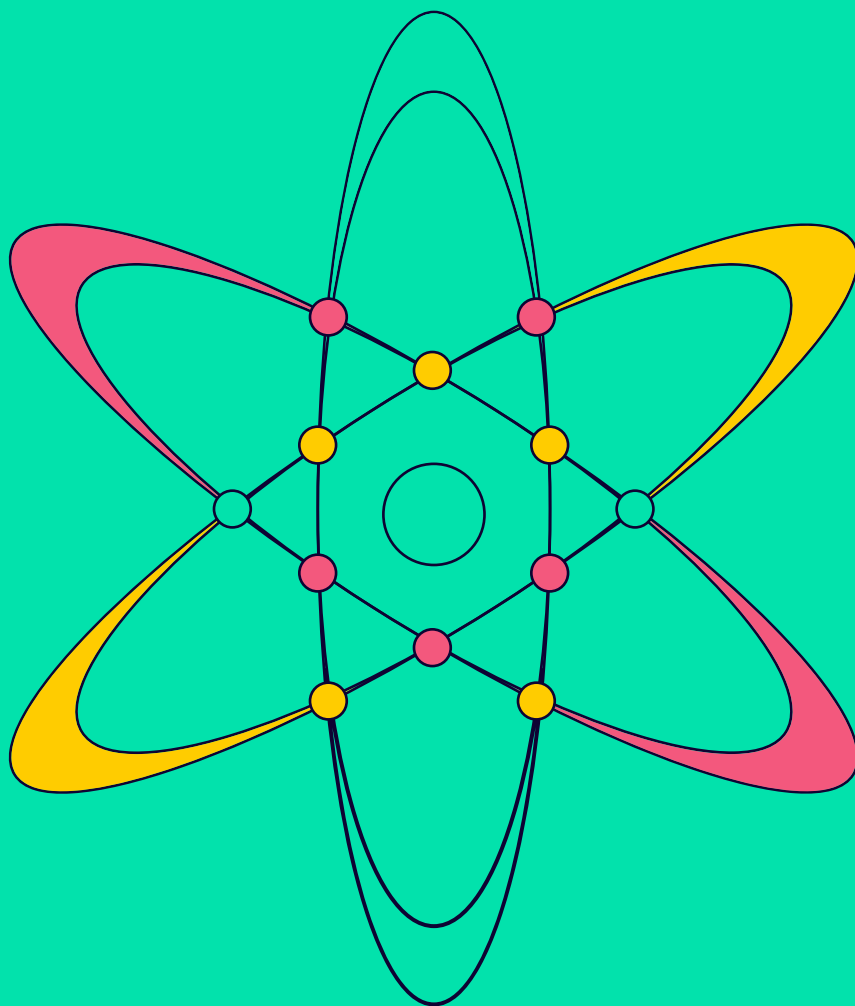
Applied Research

Web3 is still nascent and we there is still exploration to be done on how technologies can sustainably design for human thriving and the alignment of incentives through global coordination structures. In order to care for a global commons, these ImpactDAOs apply research theory to practice.

Curve Labs

Curve Labs designs modular pieces of new organizational frameworks that work for both people and the environment. They research, design, implement, and assemble composable designs for digital cooperatives, complementary currencies, and open-source carbon offset protocols, with web3 financial tooling like bonding curves that facilitate liquid and sustainable ecosystems. The CurveLabs team has played a significant role in creating projects like Toucan, Kolektivo, and PrimeDAO. The core approach to their work is always from the perspective of composable and sovereign design exploring how to combine open-source blockchain primitives to create novel organizations.

A vast part of their research focuses on how can we tokenize a new class of regenerative natural assets to accurately reflect the underlying current material realities of those assets through Green of Nature-Based Currencies. Curve Labs' research also explores how to apply this tokenomic framework to specific natural species like Posidonia Herbarium in Neptune, considered to be one of the most important ecosystems in the Mediterranean.

Curve Labs' Natural Capital Assets Taxonomy research provides approaches on how nature can be classified and valued within our financial system based. This taxonomy will closely represent a living system as an adaptable taxonomy of natural assets in alignment with web3 and ecological principles. Dive into their blogs and projects to explore a wide range of tools, frameworks and designs like cryptospheric ecotechnics (monetary currencies in service of our biosphere), decentralized negotiation prottocols or composable data markets can be implemented in real-life applications.

Token Engineering Commons

Token Engineering explores how we can design social communities, economic models, and flows of value for organizations that serve the collective purpose of the commons in alignment with individual success. It is the Schelling Point to design tools, standards, and methodologies, and to provide funding, for the emerging token engineering field. Just like other public good infrastructures (e.g. bridges), our future economic systems also need to be designed to be reliable under widely varying conditions.

If we can coordinate around standardized tools, processes, and best practices in complex system design, we can continue to safely experiment and improve the reliability of infrastructure networks in web3. TEC offers free courses, research initiatives, and workshops on topics like DAO Rewards Systems and Token Engineer Fundamentals so that more people can become skilled in designing systems that support and care for our shared resources.

TEC's work is inspired by Elinor Ostrom's research which explored the concepts of holistic governance mechanisms like conviction voting and disputable voting. TEC focuses on iteratively applying that research to their own community. Part of this exploration involves launching an economy with an Augmented Bonding Curve. The ABC combines elements of crowdfunding with a set of collective decision making processes over the use of communal funds.

Commons Stack

Commons Stack builds commons-based micro-economies, realigning individual with collective incentives. The Commons Stack develops a toolkit of mechanisms & interoperable web3 components that any community can leverage to raise and allocate shared funds, make decisions, and monitor progress in supporting the commons. Think of it as developing a modular 'techstack' to raise funds, make governance decisions, allocate capital, and measure impact. As they help more communities implement this stack they engage in continuous intentional experimentation and open-sourcing learnings.

The Augmented Bonding Curve (ABC) is the first modular piece that The Commons Stack is launching. ABC acts as a value-transfer interface between a commons and the rest of the world. ABC have specific design attributes like a vesting period where burning tokens is initially disabled, slowly unlocking tokens in correlation to how much capital has been allocated to fund projects, and a cash-out exit tax that recirculates to the shared treasury. These attributes align token ecosystems and group behaviors towards the maintenance of public goods. The value of public goods — including the work that goes into developing them — is able to be stored, measured, grown, and rewarded.

The Commons Stack focused the past year to implement the ABC and building a cultural framework that (following Elinor Ostrom's work) prioritizes caring for the commons. Token Engineering Commons can serve as a framework for launching a sustainable community of independent projects advancing new research fields in this case, token engineering. After launching the TEC community, the Commons Stack will vote on a community to launch next.

RⁱᶜC RadicalxChange

RadicalxChange explores the advancement of plurality, equality, community, and decentralization through building community and education about democratic innovation. They research and implement products to upgrade democracy, markets, data economy, the commons, and identity. Data dignity, quadratic voting, and quadratic funding are some of their most well-known contributions.

Data dignity explores how people should have the power to collectively bargain over their data, to make joint decisions regarding its use, and receive appropriate compensation. Data dignity is put into practice through Ocean Protocol.
Intersectional social identity aims to embody human's social and multi-dimensional characteristics. Each person has a digital journal with their identifying information. (Only that individual has access the complete data stored). If a person inputs X in their digital journal, each participant also stores the set of other participants who also keep copies of X. Participants store a degree of credit which they can offer as "social collateral" to confirm an identity statement of another person. Identify protocols like Democracy Earth and Idena use concepts like these for their platforms.

Quadratic voting is when voters can allocate budgets of voice credits across decisions to reflect the intensity of their convictions and the actual counted votes are a square root of the allocated voice credits. This mitigates the tyranny of the majority over minority groups. Quadratic funding is a more democratic way to signal the preference of the crowd to fund public goods. In the quadratic funding model, a common fund matches individual contributions to a project. A matching formula ensures common funds go to projects that are most valuable to a larger group rather than projects supported by a few wealthy backers. Gitcoin leads their grants round with this mechanism. RadicalxChange's research helps projects across the web3 ecosystem and beyond to incorporate frameworks for a more democratic commons.

Block Science

Block Science helps us understand how to design human-centred complex systems that are positive-sum. They help with pre-launch design and evaluation of ecosystem models based on simulation and analysis. The team combines mathematical engineering, game theory, behavioral economics, network interactions and computational analysis to create healthy sustanable ecosystems. Block Science has developed cadCAD, a tool that allows you to create a Digital Twin of a proposed framework to validate ideas prior to implementation such as exploring the parameters of an Augmented Bonding Curve that Commons Stack (mentioned on pg. 82) could implement. They actively develop and share designed frameworks on their blogs (too many and complex to describe them all here) including Risk-adjusted Bonding Curves for Financing Impact, and researching approaches to engineer ethics at the core of web3.

Other Internet

Other internet studies and builds social technology that aligns with and embeds collective values and culture. 'Social technology is the hardware and software that determine how we organize and collectively live our lives. It is also the ideas, knowledge, economics, and institutions that drive culture and sustain societies'.

Emerging technology has no playbook or known solution, Other Internet consults, engages in a joint-discovery with values-aligned projects. They develop communications strategies, product designs, social policies and interventions in complex governance and community ecosystems. It is a group of people building a deep understanding of technologically-driven change. They develop narratives, initiatives, and software primitives that support a technologically-driven change that is free, fun, peaceful, and equitable.

MetaGov

MetaGov is a research collective that is designing tools for us to navigate evolving applications of governance. In web3, communities have the right to self-governance (the right to come together and organize their own social and political insitutions). Self-governance is enabled by the architecture of the platform in which people interact. Some of their work includes research papers like composing games into complex institutions, Govbase lab building data sets in online governance, or the Metagov gateway – an open-source API to connect decision making tools to platforms where decisions need to be made.

Sovereign Nature

A home for exploration and development to reconfigure the relationship of humans and nature, with an emphasis on sustainability and self-governance, at the intersection of ecology, economy, and emerging technologies. They develop technology and web3 tools that reconfigure, rebalance, and restore ecosystems both internally as a team and externally through Hackathons. To date, they have hosted two hackathons with over 30+ nature-based initiatives participating. Sovereign Nature provides support to further incubate and develop these ideas.

A product under-development is a way to capture both extrinsic(i.e. ecosystem services) and intrinsic (appreciative value from donations) value into a wallet where value is locked "in nature". For example, we can capture and store the dynamic value of specific living species of a networked ecosystem or ecosystem service to balance and regulate the climate. This value is then redistributed to actors (communities/rangers/nature-stewards) that are restoring the ecosystem where these species live. This framework of identity, value generation, and capture is being established on a decentralised eco-centric governance model.

V Values Index

Values Index is building a crypto index fund that incorporates environmental, social, and governance (ESG) criteria. They are still developing the approach, but the first phase will be an open-source database for ESG metrics in web3. The aim is to collaboratively collect data on leadership, boards, employees, social following, GitHub contributions, proof-of-stake, carbon offsets, and funded D&I initiatives to inform an industry-standard scoring methodology for the ESG impact of web3 projects & protocols. Finally, they'll build products that enable people to invest in projects & protocols aligned with their values.

Crowdmuse

An open-source collaboration platform with forkable, regenerative business models called "smart workflows." Crowdmuse researches, pilots, and deploys smart workflows on chain so the community can contribute to existing projects, or fork their own local versions of sustainable supply chains, circular products, net zero emission initiatives, and regenerative communities.

Innovating smart workflows includes building web3 primitives to enhance dynamic value creation/distribution and evolutionary knowledge networks. It realigns incentives for open-source, collaborative R&D, and project development. The first smart workflow is a sustainable fashion brand and supply chain that brings together fashion designers, tailors, recycling manufacturers, and fast-fashion corporations to build hyperlocal supply chains for upcycled and recycled fashion brands.
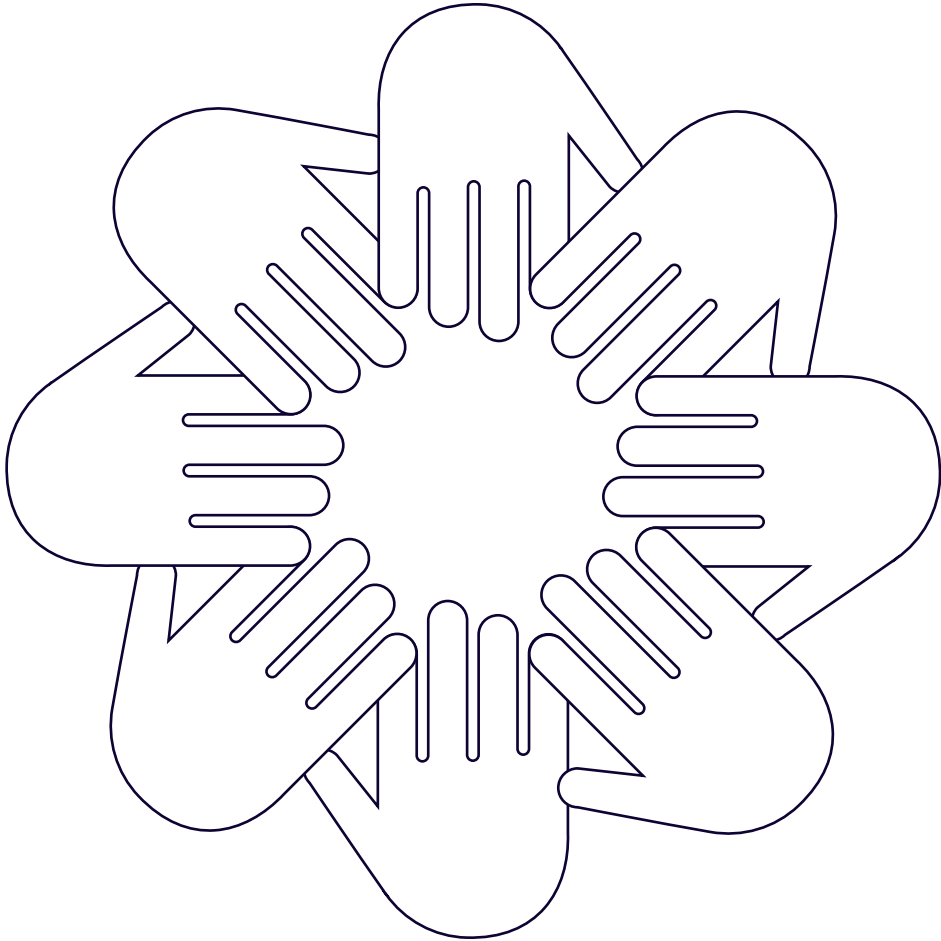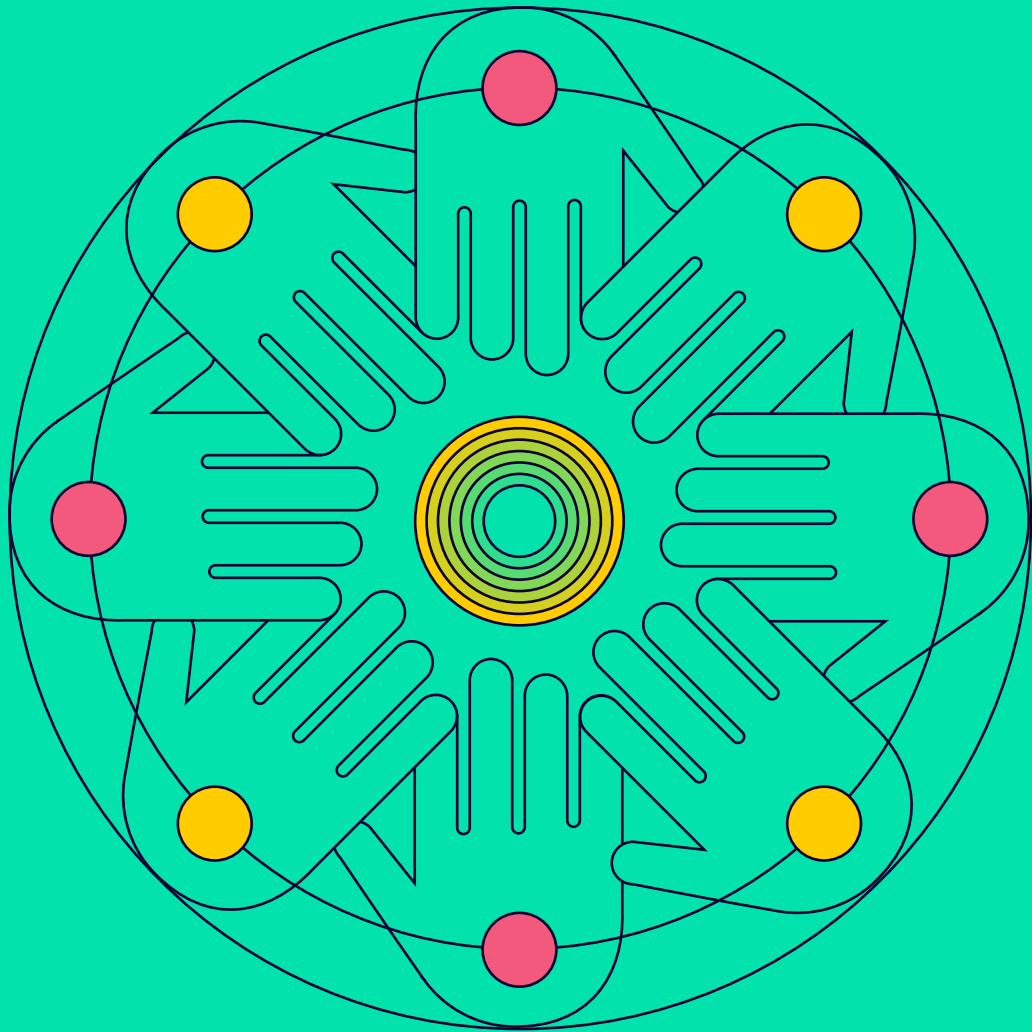
Commons Pools

These ImpactDAOs are marketplaces that create avenues for funding other ImpactDAOs. These New Giving Economies are the first capital that many new impact projects get.

Giveth.io

Giveth is building a culture of giving embedded in abundance – to reward those who give. Projects benefit from receiving 100% of the fund, and donors benefit from receiving GIV and can increase their rewards by stacking in the GIVfarm. Donors who give to verified projects –those who prove they provide a valuable public good– receive continuous stream of GIVback tokens to continue giving to other projects (think tax-deductible donations without the paperwork and bureaucratic hassle). Those with GIV tokens can participate in decision-making on the Giveth ecosystem.

Giveth's long term vision is to empower initiatives to develop their own regenerative microeconomics. [This is not yet live but a promising concept we wanted to include]. First, a curation system would allow users to stake their GIV on projects they care about, signaling support while earning a yield. A successful project in the GIVcuration will eventually get its own GIV-collateralized bonding curve, called a 'Gurve'.

For donors supporting projects with a Gurve, their GIVbacks are split: donors get some GiV and the rest goes to the Gurve, minted as 'project tokens'. Volunteers and the team can also earn project tokens through contributions and once the Gurve is live, the projects can use voting systems to govern their donations. With Gurves, a successful project on Giveth will be able to become a sustainable DAO, governing its own economy, with its supporters as stakeholders and donors as impact investors

As of today, there are more than 900 verified projects on the platform. Since March 2021 there have been a total of 9,547 donations from 3462 unique donors for a total of $615,445.94 to projects working on public goods.

🔥 Angel Protocol

Less than 60% of charities have enough saved in their reserves to cover more than one year of operating costs. Angel protocol's platform enables charities to receive low-risk, high yield perpetual endowments.

All donations are invested in DeFi products currently earning ~ 20% annula yield for partner non-profits. Donors can choose what percentage of their donation goes directly to the non-profit versus to the endowment. There are 130 charities onboarded, over $6M donations in endowments, $1.5M raised for climate change, $500K sent for Philippines disaster relief, $200K raised for Ukraine, and 80 Angel Alliance giving partners.

:D DoinGud

The DoinGud platform aims to empower creators to tap into sources of income while supporting social impact causes they care about. Creators can upload their work to the platform where curators and collectors can discover new art creations. Social causes can sign up to the platform to receive a portion of the proceeds artists choose to donate to.

Their Ocean Drop sale to support Open Earth's foundation work raised $61K to support the development of blockchain tools to enforce illegal activity in ocean conservation zones and implement ecosystem service credits for financing marine conservation starting with a pilot project in the Cocos Island marine sanctuary.

Unchained Fund

Unchained Fund raises and distribute funds for humanitarian aid quickly, transparently, and efficiently. Their efforts have been focused in on-the ground humanitarian needs in Ukraine. They partnered with a Ukrainian startup Weld Money which enables anyone to pay with crypto with a paycard, just like you would do with a regular bank account. Through this paycard, Unchained Fund can send direct aid to families in Ukraine. Unchained raised $7,585,546 and distributed $3,778,229 so far to 9015 applicants. Areas of donations include refugee support, food, communications, protective equipment, medicine, and direct transfer aid.

Endaoment

Endaoment has directed $38.5M crypto donations to nonprofits, given $21.8M in grants, and supported 1.5M nonprofits. Donors can directly fund nonprofits or donate to a community fund. Partnering with Circle, they wire payments to organizations through USDC stablecoins or via wire payments directly to US bank accounts. All contributions are tax-deductible.
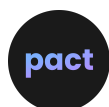
PactDAO

PactDAO is forming a coalition of mutual aid organizations to build a peer-to-peer reciprocity network of goods, skills, and services through social tokens powered by confidence amongst members. Mutual aid enables the community to rely on each through non-financialized means instead of on capitalism. Pact has deployed $12K to local, grassroots organizations in NYC.

Goldfinch

Goldfinch unlocks lending to anyone in the world. Their decentralized credit protocol for crypto loans without collateral expands access to capital in emerging markets. They are serving 200k+ borrowers across India, Nigeria, Southeast Asia, and others. Currently, many lending protocols require overcollateralization preventing many borrowers in the world fom participating. Goldfinch uses a concept called trust through consensus where borrowers show creditworthiness based on the collective assessment of backers, liquidity providers, and auditors to allocate capital. They have $82,568,598.95 in active loans.

PopcornDAO

Popcorn Network creates yield-generating DeFi products for users to earn from their cryptoassets and redistributing a portion to impact causes. They distribute 34% oft their fees to social impact organizations chosen by the token holders. Popcorn's dashboard calculates emissions and directs a portion of their fees (~2%) to Patch.io projects for fund carbon offset projects.

Good Dollar

GoodDollar is an anti-poverty protocol and DAO that creates an ongoing UBI stream flow to everyone who signs up as a human. Users can also stake with GoodDollar. They have streamed $50,000 UBI to more than 300,000 people. GoodDollar wraps around yield-generating decentralized finance protocols. Those funds are used to mint a reserve-backed crypto-asset (G$), which is used for yield-payouts and distributed daily as digital basic income to users.
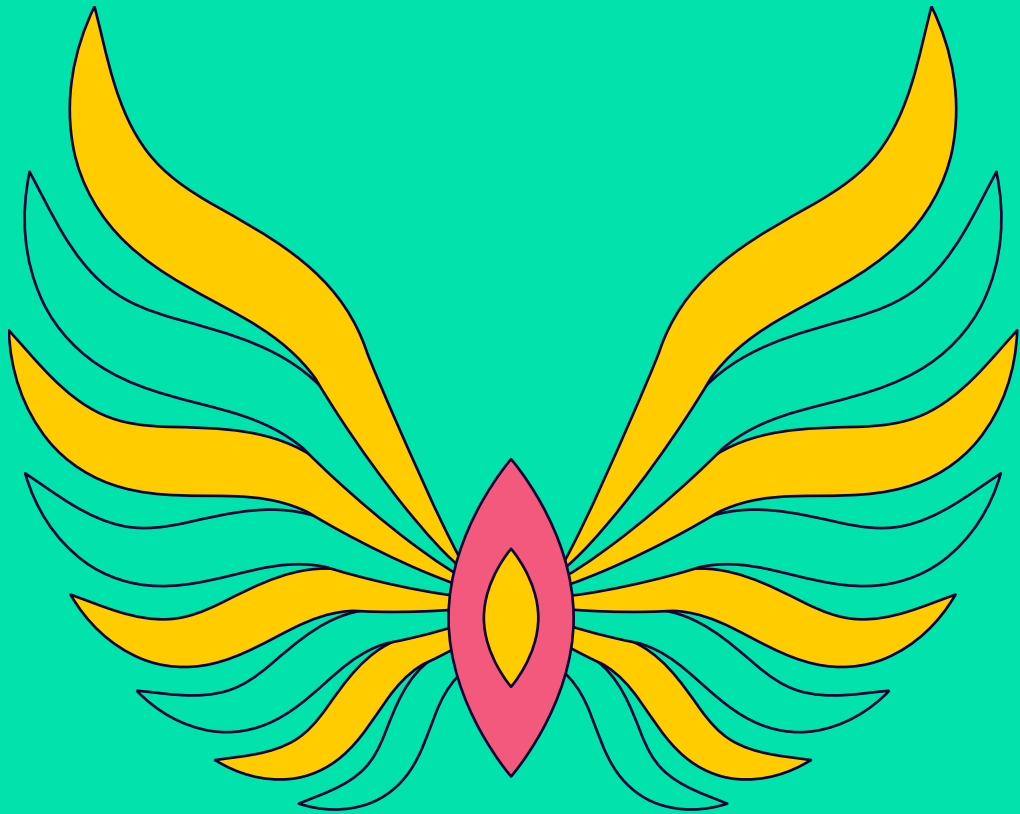
Culture
and
Education

Much of learning is experiential. These ImpactDAOs create cultural conduits for education and community. Students take an active role in crafting and creating the content and educational experience. Similarly, communities can craft the environments they live and share in.

Kernel

Kernel is an experiential, 8-week exploration of the depths of web3 that explores questions that care about the nature of the work we do and how it can help the people we care about.

This open, peer-to-peer network of humans exploring web3 and re-creating the experience one Block (cohort) at a time, Kernel explores the technical concepts of how blockchain operates while grounding those concepts in human principles. As systems are built, there should be trust, shared value, inclusivity, and aligned incentives, while also empowering the scaling of abilities. Kernel's content encourages us to ask better questions and to always consider our intentions first with humility, honesty, and intentional service. By pursuing one's own Adventure, or by participating in a Guild guided by other fellows, each cohort experiences the knowledge in full participation and exploration.

Over the past two years, Kernel has completed 5 cohorts and there are now over 1,000 Kernel Fellows throughout web3. Kernel's open-sourced 8-module, 16-lesson syllabus is a comprehensive and expansive lens on Web3 that demonstrates how by collectively co-creating a set of projects and technologies, can regeneratively cultivate a web to enrich our shared commons.
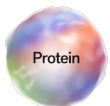
Protein

An incubator for regenerative projects to develop in an ecosystem that encourages the positive growth of people and ideas. Protein aims to discover how to best quantify and measure the impact of web3 projects. Legacy models for growth are often extractive, exploitative, and winner take-all, and they do not take into account their detrimental effects on the shared commons. Similar to the integral functions of protein to the human body, as an ImpactDAO Protein aims to support the regenerative development and growth of its community projects.

DreamDAO

Dream DAO is creating a path for Gen Z to explore and meaningfully contribute to the web3 x social impact ecosystem. Dream DAO provides diverse, global Gen Zers (15-20 years old) around the globe with the training, funding, and mentorship to become civic innovators. 41 builders are laying the groundwork for the DAO and its educational experience by developing governance, web3 learning materials, and establishing partnerships for future projects.

Members enter as Builders, grow as Explorers, and take-off via a Launch Year. Biweekly "Learning Together" sessions feature a community member or guest lecture on a web3 concepts that can bring us closer to a Solarpunk future. The Explorers program will place place 10-15 builders in impact-driven web3 organizations. The Launch Program will provide resources for one year to those ready to dive into web3 x social impact full-time.

Forefront

Forefront acts as a launchpad for web3 explorers to learn and create communities driven by social tokens. The main northstar, however, is to nurture human flourishing. They recently strongly highlighted the concept of DAO rhythms. In their Off-Season the community took time to re-align, internalize learnings and assess their priorities and focus on contributor well-being. Well-being is supported through exploring polarities at the Individual level (autonomy vs contextual awareness) and Organizational level (decentralization vs coherence through focus and designed structures. Specific projects include developing enriching contributor experiences other DAOs can learn from; research, deep storytelling, and curation for social tokenized communities; and building products to support social tokenized communities.
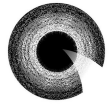
The DAOist

The DAOist supports collaboration in all its forms: the cultural shift that DAOs enable, a lifestyle lead through purpose, and the tenets of ownership, collaboration, and openness. Projects and efforts to produce DAOs through cultural public goods is governed are Dawn DAO, which is in-itself co-organised by individuals who belong to multiple DAOs. Through IRL co-living spaces, events, and media, the DAOist explores the collaborative possibilities across DAOs.

Metahubs are co-creation spaces where DAOists can meet for team bonding, collaboration strategies, and brainstorming. The first Metahub is located in Lisbon and is active since April 2022. Art, tech, and policy residencies will be hosted there to further explore DAO2DAO collaborations though in real life co-living experiences. The DAOist events, Global Governance Gatherings, and smaller meetups create space for members across DAOs to deepen bonds, engage in real conversations, ask hard questions, and tackle shared challenges. These events have been organized to date in Paris, Lisbon, Mexico, Barcelona, and Amsterdam.

Through media they produce, The DAOist team narrates different layers of how collaboration and co-creation can be embed as a lifestyle within the strategic scope of a DAO roadmap through content, videos, etc. A shared leadership stake in DAOist efforts through "Ambassadorships" is another layer of collaboration where outside DAOs focused on creating public goods can become part of the DAOist roadmap. Current Ambassadors include Giveth, PrimeDAO, Celo, and Eleven Yellow.

CabinDAO

CabinDAO is a network that focuses on how can we build decentralized cities with shared governance, culture, and community across independent physical nodes. With an emphasis on IRL residencies and retreats for digital communities, the DAO owns 50 acres of land and hosts DAO retreats and operates residency programs in order to share solarpunk learnings and tools for coordination.

Crypto Culture & Society

CCS is building the liberal arts of crypto by exploring the impact of crypto on culture and society. CCS aims to solve three main issues in the education system: a) students often pay high tuition and take out loans to attend college and yet have barely any say on where those funds are spent; b) online courses are good alternatives to IRL classes but are mostly focused on practical skills and lack community, network, and real-time collaboration opportunities; and c) internships and apprenticeships provide concrete experience, but in a very narrow scope pertaining to the tasks at hand.

In a learning DAO, students co-create the experience. They can also experiment with new reward structures such as turning workshop content into research material that guest speakers can share with the broader community and monetize. CCS has had two cohorts of students to date. Their most recent semester focused on how we design our digital futures. Discussions explored topics like "Humane DAOs, Humane Products" and "The Evolution of Community-owned Resources." The curriculum includes social experiences, elective courses, and tracks through which students can create content for future cohorts.

The Ready

Since 2015, The Ready has been operating as a self-managing consultancy, helping organizations develop more human and adaptive ways of working. Today they translate that expertise to support DAOs that explore emergent, self-managing, fluid organizational design. Within their framework, The Ready helps DAOs create a fertile space for inspiration and participation that improves DAO contributor performance and the contributor experience.

The Ready offers consulting for DAOs. The novelty is that change happens in a collaborative design and co-creation between DAO teams and The Ready to pilot, iterate, and evolve new ways of working. Their frameworks on how improved decision making, dynamic budgeting, and helping leaders "get out of the way" can allow cultures to emerge is available through podcasts and blog posts.

Twoplus

`Not Launched`

Empowers digital communities to thrive and create positive impact by putting mental fitness at the core of collaboration. Through ttheir community and cohort-based course, TwoPlus explores, designs and implements best practices to shape DAOs as strong mental fitness communities. The course blends indiviidual self- managing frameworks with higher organizational-wide practices.

Natives in Tech

Natives in Tech aims to cultivate an ecosystem of Native technologists that build free and open source technology for the use of Native communities. Natives in Tech DAO members host and take part in conferences and create opportunities for students of Native communities to learn about tech.

✦ WellnessDAO

WellnessDAO aims to prioritize health and wellness practices throughout web3. They currently offer meditation and yoga sessions as well as group accountability tools. They plan to expand next into IRL centers and retreat offerings where DAO members can attend in planned various around the world.

Ecodao

Ecodao is a web3 gallery to support the environment through regular NFT drops. The proceeds are divided up with 50% going to the artist, 25% to ecological causes, and 25% to the DAO.

Verses

Verses is an evolving space to articulate visions for a flourishing future. Verses collaborates on planting seeds towards an interdependent cyberspace. As such, member contribution is fluid and varies by project. Verses works on objects (artifacts, frameworks, mapping ecosystems), philosophies (navigating contradiction, permitting sensemaking, building a prefigurative politics for pluriversality), fostering a explorative community, capacity (enabling others to create predistributing and redistributing resources).

Verses experimental on collective possibility, imagination, and agency includes pieces like A Declaration of the Interdependence of Cyberspace, exploring the path Towards a Digital Pluriverse - a world where many worlds may fit.

Meta Gamma Delta

Alongside mentorship and access to community, MGD has distributed $300k+ to fund women-led projects ranging from NFTs, to DAOs, to DeSci, and is looking to launch a $1M fund to stream UBI for women while they go through their onboarding in a Web3 fellowship program.

Surge Women

Focused on educating and securing women's place in web3, Surge Women offers content, an all-female web3 jobs board, and an upcoming Surge Passport that will provide access to opportunities like free educational subscriptions, scholarships, mentorships, financial tooling, & partnerships with mission aligned organizations.

HER DAO

HER DAO aims to increase innovation and opportunities for economic success for women in Web3. Sponsored hacker houses allow early-career and experienced women to hack together with mentorship to nurture talent. Women can ideate and validate projects, build teams, and participate in conferences.

she256 She_256

She256 started as a DAO offering gatherings and educational resources for women to participate in the web3 space. Now, their mentorship program has linked over 900 young women with experienced professionals. Educational initiatives include hackathons, coding boot camps, and workshops designed for both middle-schoolers and postgraduates alike.
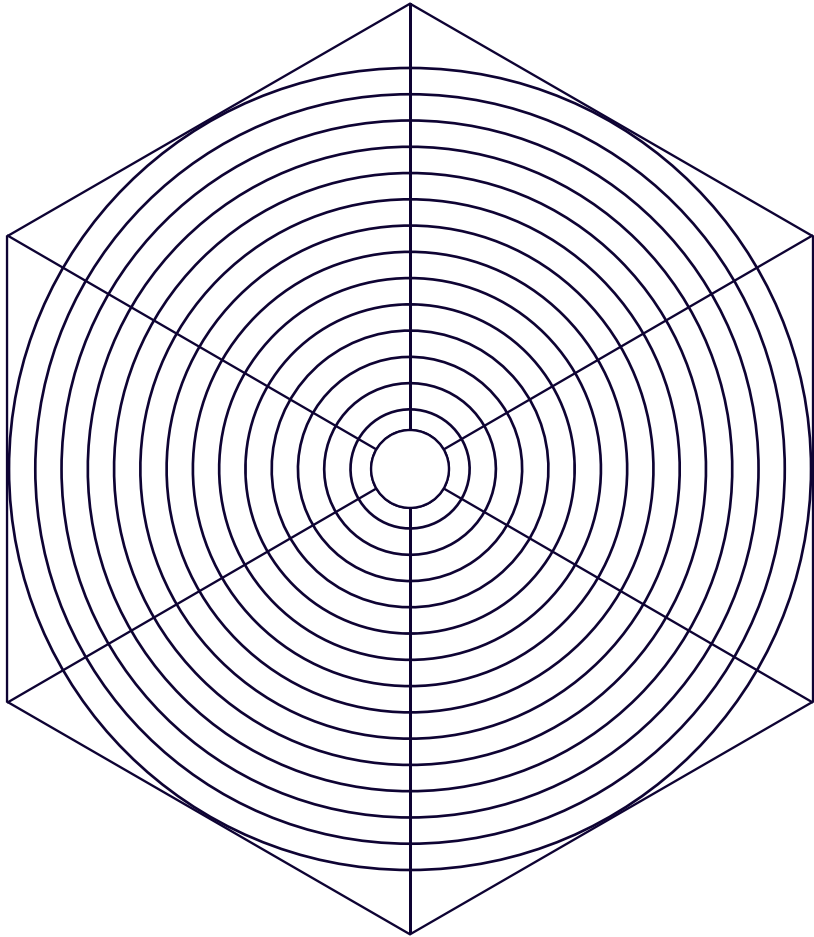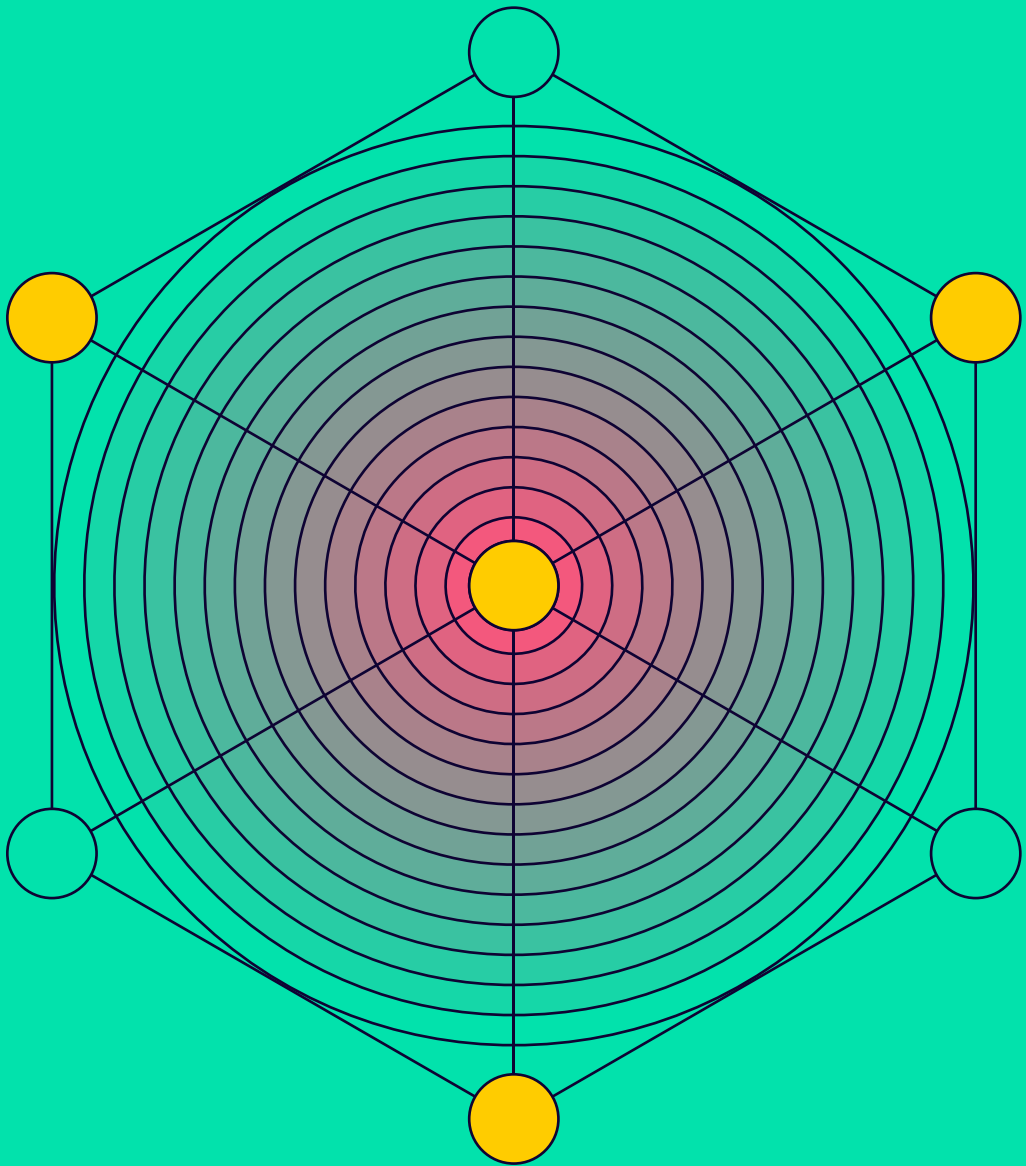
DeSci

The value of knowledge increases with its integration. In other words, new research is not going to bring much value to the world unless it is adopted by other people. So, these ImpactDAOs aim to increase the access and adoption of new knowledge.

Molecule

Molecule offers a web3 marketplace for research-related IP and scalable frameworks to build biotech DAOs. Their longterm goal is to decentralize the ownership, financing, and governance processes for drug development. They enable patient, researcher, and investor communities to directly fund, govern, and own research-related IP. The IP-NFT enables new fundraising and collaboration strategies. When researchers have to make the jump from grant funding for basic research to other sources of funding in order to turn a discovery into a product, early stage research often goes unutilized and the discovery of important therapeutic breakthroughs is slowed down and often never reaches potential patients.

Private companies, universities, and governments have funded research grants and the development and market deployment of biotechnologies. By tokenizing early stage IP and associated research projects, researchers and scientists are newly empowered. Freed of having to patent early, researchers can now engage stakeholder groups such as patients directly, collaborate with other researchers to promote open science, and gain attention through a public marketplace. IP-NFT allows different contributors to receive exposure to ownership in IP, in exchange for work. Emerging bioDAOs could eventually start modularly collaborating across different steps in a drug development pipeline. Molecule helps other biotech DAOs with legal frameworks, tokenomic designs, and access to liquidity through grants and token swaps to break the current Pharma models. They aim to productized biotech DAO frameworks so anyone can build their own biotech DAO, operationalize it, and leverage a large, open community of shared talent, scientists, patients and funders. Biotech DAO builders can leverage Molecule's IP-NFT legal licensing frameworks and DAO organizational frameworks. They will also be able to collaborate with and support academics via Molecule's marketplace.

∞ DeSci Foundation

Science needs to be reliable, transparent, independent, and openly accessible. Desci foundation explore new ways to incentivize, evaluate, finance and share science. Current incentives in curating and publishing studies prevent a focus on important replication studies. Independent replication of empirical results is critical to better explain for how the world works. Without replicability, novel findings can be based on error or fabrication and we are relying on a single source of truth. However, current publishing incentives place value in novelty not replicability. With community owned journals, replication efforts could be explicitly rewarded, given their importance for verifying the truth of reported novel discoveries.

Publication is also broken monopolized by 5 big player and either call for "pay-for-access" or "pay-for-publication". Both rely on unpaid labour of scientists for peer-reviews. Oopen access to scientific publications with rewards for peer reviews are better alternatives. Incentives that reward truthful verification and report are also potential ways to improve this. Desci Foundation aims for fast and unbureaucratic financial support for future research too.

◢ ForesightDAO

Foresight Institute is a 30+ year-strong Bay Area science non-profit, that advances a healthier future unlocked by bio, nano, neurotech, computing, and space technologies. Initiating Foresight DAO will allow them to support early-stage, interdisciplinary projects for sci-fi futures that are too ambitious for legacy funders to take on. Incentives mechanisms will reward due diligence scientists for their advice and mentorship as well as onboard the broadwiill also increase value of grant offering technical tracks, fellowships, tech trees, and competitions.

VitaDAO

VitaDAO is a community collectively funding and advancing longevity research. 35+ projects have been evaluated, $1.5m of longevity research funded, and $9m in the treasury to fund research. VitaDAO will hold the legal IP rights to projects funded and developed by the community, hence developing a growing portfolio of IP NFTs. Designing Vita as a DAO enables a circular ecosystem where token holders (who can gain tokens through conttributing work, funds, valuable research data, or IP) can signal support for the funding of specific research initiatives. The research will produce valuable, monetizable IP which will flow back to the treasury of the DAO to fund more projects.

LabDAO

<div style="border: 2px solid black; background: yellow; display: inline-block; padding: 8px 20px;">Not Launched</div>

LabDAO gathers around an open peer-to-peer marketplace, openlab, on which computational and wet-lab services can be exchanged. Openlab enables the shift from a centralized market with intransparent contract research organizations and siloed research institutes towards an open peer-to-peer market for laboratory services. The majority of fees generated on the exchange flow into open source development of life science tools.

Opscienth

A competitive culture in academia prevents collaboration, data sharing, reproducibility of studies, and efficient resource allocation that results in the mimization of knowledge accessibility. Opscienth is a scientific ecosystem aiming to unlocks data silos and democratize funding. Tools being designed include tools to integrate scientific identity, reputation and credentials to web3, an open-access data commons that can be queried, discovered, and analyzed, and community conferences and research.
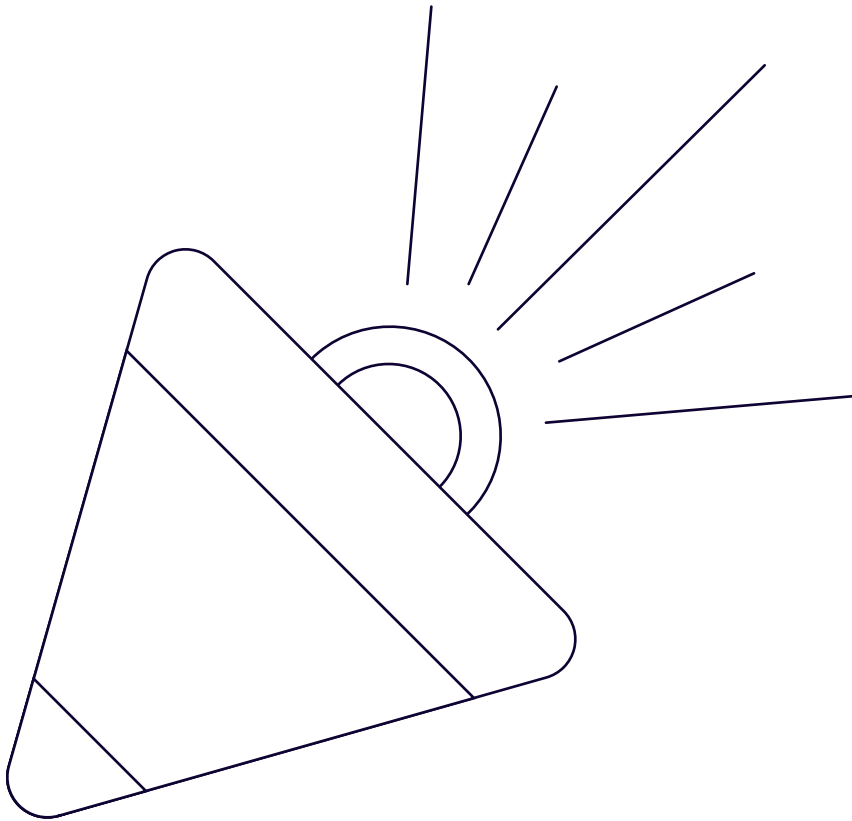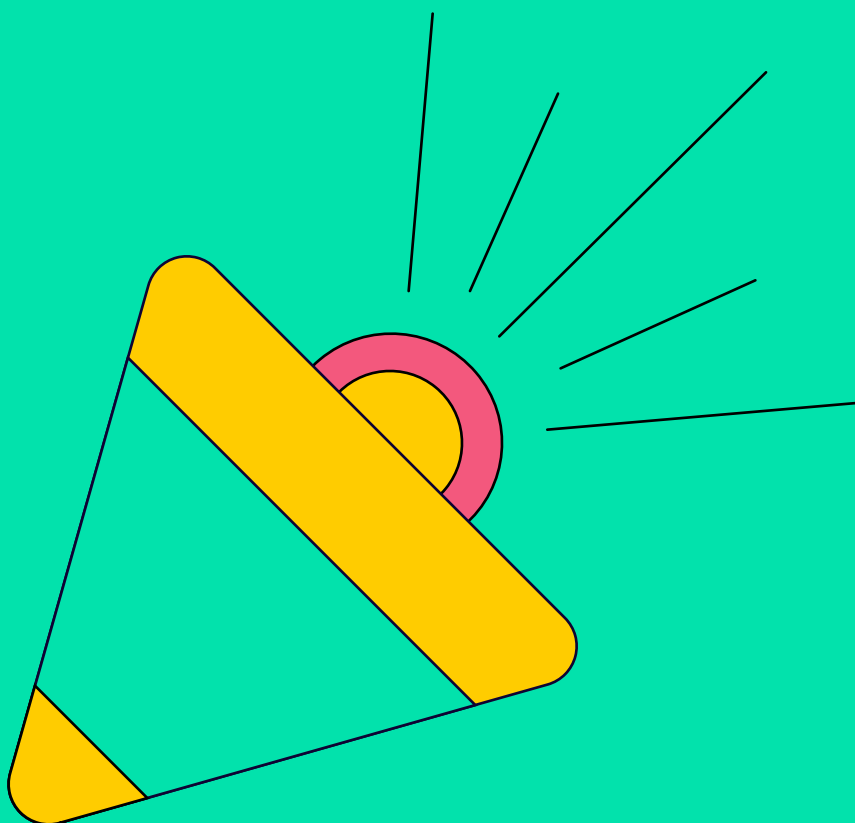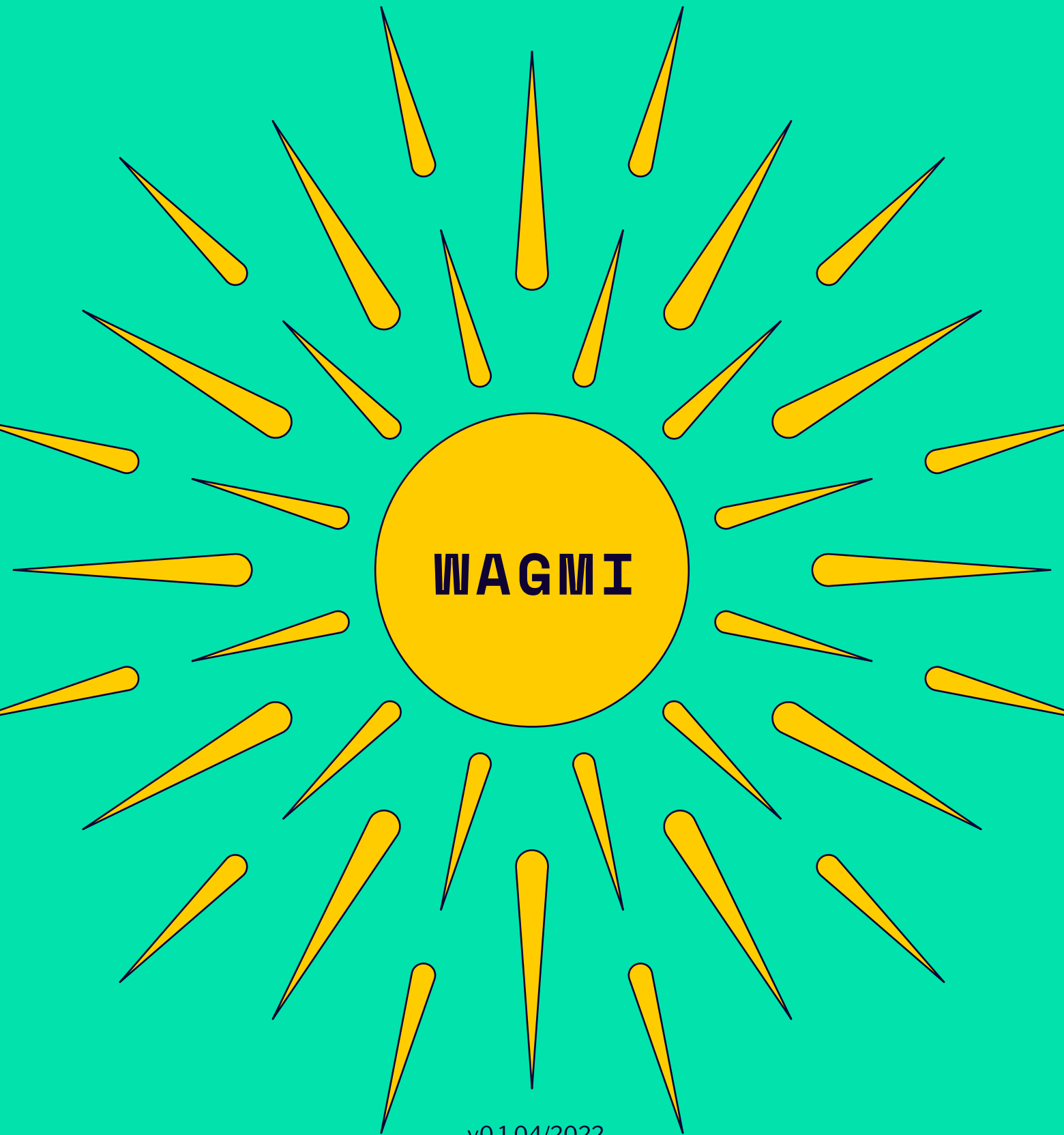
Git Involved

Join the ImpactDAO.Game

This edition of this book was written by the GitcoinDAO Public Goods Funding Workstream, Kevin Owocki, & Alejandra Borda (with pixels by the astounding Octavian Todirut) -- Together, we've spent many months researching ImpactDAOs through our work at Gitcoin & DreamDAO respectively.

That said, this book represents the limited vantage point of a handful of people. Therefore, this edition of this book is an imperfect vessel for education about ImpactDAOs. For the next edition(s), we envision that a diverse group of individuals could co-create resources about the Regenerative CryptoEconomics design space. Inviting a wider set of participants to contribute will enable us to explore the design space in a more inclusive, full, & decentralized way. In order to facilitate this:

1. This book is licensed CC BY 4.0. You may permissionlessly fork this book, make changes, and republish them with attribution as long as proceeds go to the public good or charitable causes.

2. Join the telegram group (https://t.me/+ORZ8joj8_AhjM2I5) to get involved in authoring further editions. Check the pinned messages once you are there for access to the ImpactDAO Database that Alejandra has put together.

WAGMI

WAGMI