

The Commons Project White Paper

Executive Summary

Our current economic model is exploitation based, with value and wealth accumulation created by extracting resources from the environment primarily for economic self-interest. The Commons Project is designed to address the complex circumstances of resource extraction and wealth accumulation and the resulting costs borne by society at large, while creating a pilot program that influences behavior for sustainable resource use.

The underlying concepts of this project are drawn directly from *the efficiency of resource use*, a natural condition in structural and metabolic systems of living organisms and ecosystems. Biological or living systems are highly resilient, demonstrating a remarkable efficiency in locating, obtaining and distributing resources to sustain life even under constantly changing conditions. Scientifically, this efficiency operates through a multi-level predictive hierarchy which provides living systems with the ability to find the best predictive solution with the least effort in changing environments.

To build a model that mirrors the efficiency of living systems, while accounting for the broadest human patterns of resource use, commonly available resources of land, water and air will be targeted. Each resource will be assigned a quantity-based value, which is tracked via a dynamic measurement process as it is used by individuals and communities throughout the system. Data collection will initially focus on the food, energy and transportation sectors which have the biggest impact on environmental and climate change.

The project offers two concurrent initiatives.

1. Development of a mobile app that is used for data collection and offers real time visualization of direct environmental impact of individual and group actions.
2. Development of a digital token representing the value of common resources, using a trust economy and distributed ledger-based system.

The Commons App

The use of resources and related data is provided by individuals through a mobile application and compiled on the individual, local and global level for a

composite picture. The use of resources will be represented in a virtual world similar to many of the simulated community building games currently available. Real time visualization on the direct environmental impacts of individual and group actions that are normally invisible will be graphically displayed in the virtual world.

The Digital Token

Every user of the app will receive a daily allocation of tokens representing the average common resource consumption for use during the day. The individual will enter data through the app, and the interface collects and displays actual consumption patterns for that day. Behavior drives allocation, if the consumption is less than average the user earns more tokens and if more than the average, the user loses tokens. The creation and distribution of these tokens has the potential to serve as the basis of a universal basic income. Tokens can also be earned through collective actions that decrease the use of common resources. The distribution of tokens will be administered through a Distributed Autonomous Organization using smart contract technology on a trust economy platform such as blockchain.

The Commons Project seeks to establish a new a market-based economy where the economic motivation is not a maximization of self-interest, but a minimization of resource use based on maintaining a sustainable existence. In this economy “profit” is the continuous minimization of resource use through innovation, the tokens earned through the reduction in resource use will be credited to the end users and the creators of the innovation. The decreased environmental dependency and establishment of a market economy based on distributed governance system has the potential to create a transparent, user driven and robust system of resource use.

The first project deliverables will introduce a prototype application, partner to create an agent based model of the Commons and convene an international conference to set underlying parameters with input from a variety of specialties and inclusive global representation. The success of the pilot project is largely dependent on the continuing evolution of the underlying technology and a global adoption of the application by ten percent or greater of the world’s population for the token to achieve recognized value.

The Commons Project is being incubated within the Plexus Institute and was developed by Institute members with additional contributions from outside experts. The principal author is Mike Taylor RN, MHA.
<https://plexusinstitute.org/our-work/the-commons-project/>

The Commons Project Vision: A Story of the Future

Amber had to make a decision – her water usage had dramatically increased and she did not have a clear idea why. She did not want to see all of the work she had done to earn extra tokens by conserving water be undone. Usage of the commons app provided a universal basic income which could be applied to resource use; the extra tokens are a significant addition to the universal basic income and provided flexibility for unexpected circumstances. Amber lived in an older home with mature trees and it was very likely that the increasing water usage she was seeing was related to tree roots causing leaks in the pipes. Amber decided that she should contact the plumber who had offered to do a pressure test on her water pipes.

The plumber was willing to first do a pressure test without any charge because he would also share in the tokens earned from the conservation of water resources by repairing the pipes. She appreciated that this plumber suggested using pipes from a manufacturer that had a long-life guarantee. This way the tokens that she would earn by replacing the pipes and stopping the leaks would be generated longer than with a lower quality pipe. She knew that she could then use the tokens earned by saving water to invest in in her cities light rail new “Smart Train” system.

She was already on her way to the Light Rail and her job which reminded her that she had until the end of the month to decide whether to invest in this new system. Like everything else now under the commons economy, the goal was to decrease the use of resources. The smart train system would accomplish this by having trains adjust to the number of people coming on and off the train at various points including adjusting to seasonal and hourly differences. A train car could be added seamlessly when needed and taken away when it wasn't.

Amber had always thought that it was ridiculous that often when she came home late at night on a 6-car train, which was capable of holding hundreds of people, only to have a couple of dozen commuters. By investing in upgrades to the Light Rail project, she would not only earn tokens for being a rider but also additional tokens from having invested in its development.

While sitting on the train Amber engaged in one of her favorite activities, watching the commons app on her phone that tracked the air and water

becoming cleaner and land being restored as a direct result of the actions of people all over the world. Looking at the app, it seemed to her as if she was viewing life in action, like a new form of being, made up of individuals taking action for the benefit of every living being watching parts of the world going to sleep and other parts waking up.

Amber's thoughts turned to her job of keeping track of space debris and managing the robotic collectors. Her job was funded by contributions from everyone on the planet from their token income. While this universal contribution was called taxes, it was essentially just a holdover from how society referenced these things. It seemed to Amber that it was more like a type of insurance that insured the system would continue for everyone.

She knew that it was likely that her job would not be needed in the future because satellites were being designed to go to a special designated orbit at the end of their useful life where they would join other used satellites flying in formation waiting to be picked up by an Orbiter. It wouldn't bother her if this particular job did go away because she knew that she would still have a basic income. Amber didn't feel as threatened as when she lost a job before because there would be other emerging opportunities. It was remarkable how quickly businesses had adapted from making profit by extracting resources to making profit by conserving resources. So many new possibilities.

The Problem We are Facing

We live in an age where problems are globally interconnected but solutions are piecemeal and woefully inadequate because we look for solutions with the same economic paradigms that created the problem in the first place. Our current economic system, sees environmental resources as independent assets to be managed, exploited and hoarded as if each action could be isolated from another without consequence to others or the larger ecosystem.

When we consider the global trends tracked by [GapMinder](#), poor people are moving into the middle class, where they will have increased access to food, energy and transportation, and further pressure will be placed on shared natural resources. Without fundamental change, this increased pressure on the world's resources will only accelerate the impact of climate change and economic inequality.

Seeing resources, problems and solutions as isolated is no longer viable because we know that resources, problems and solutions are interconnected,

and every action taken by an individual, no matter how small, has an impact on planet earth. The most appropriate way forward is to think of resources and behaviors that impact them as interdependent systems.

The Commons Project tackles these difficult issues by using complexity science and systems thinking in the design and implementation of the project. Building a globally interconnected social media platform, offers a direct model for influencing individual and multilevel group behavior changes around environmental impact while maximizing users participation and delivering evidence based benefit across all global participation.

The Commons Project hopes to answer these questions:

What can I do as an individual to reverse climate change?

You already know that the choices you make every day, have an impact on the environment. What you eat, how you get to work and simply living, have an inevitable impact on the environment and the resources we share. Everything we consume has an impact on the land, water and air even though these impacts are not immediately obvious. Whatever you had for lunch yesterday was gathered from different parts of the earth and at different times until it was put together on your plate.

The Commons project wants to show you that what you do makes a difference. The Commons app will have a virtual environment similar to the many community building game apps currently available, so as you make positive changes they will show up in the virtual environment as restored land, cleaner water or air. As more players join from around the world you will be able to see the positive changes on both local and global levels. Read on to see how you can get paid for this at the same time.

How do we create a Universal Basic Income to decrease income inequality that is ecologically sustainable?

There is a certain amount of food, water, shelter and energy that a person needs daily to keep themselves well. All of the things we need to sustain ourselves use the common resources of land, water and air in one way or another. The Commons Project will create digital tokens representing the value of water, land and air for the basic amount of resources any person needs. These tokens can form the basis of a Universal Basic Income immediately raising the standard of living of the poor. As good choices result in visibly cleaner air, water and land, the viability of existing renewable resources increases economic stability, productivity and investment in new projects and opportunities for work.

What can my business do to impact climate change?

The competitive environment of making a profit by extraction makes it very difficult for any company to do well while also doing good. In the Commons Project, token value is tied to a reduction in the use of common resources through efficiency and innovation so the greater the reduction in environmental impact the greater the profit. In this economic scenario, profit is a direct result of the reduction of resource use and the creation of planned product and service cycles that adapt to available technologies and environmental conditions.

If this project is of interest to you or your organization you may reach out to us at ... The opportunities to contribute are quite varied.

For details on the Commons Project rationale and plan, please go to ...