Greenex: A Green Cryptocurrency backed by Green Assets



By Frank Brun 2nd June 2021

www.greenexcoin.io

Abstract. Cryptocurrencies represent a revolutionary new way to conduct business, and after nearly 13 years since Bitcoin was conceived as an idea, there remains the opportunity to create a unique cryptocurrency that is directly connected to a series of hard assets, from a constantly decentralising digital coinage, by owning eco-friendly 'green' assets that generate clean and green energy to generate electricity, organic 'green' food, that generates income that flows back all the holders of such a coin. This is the first of its kind, the first to attempt to bring the cryptocurrency concept out of the cyber world and into the real world and provide an eco-friendly and sustainable outcome. That cryptocurrency is: Greenex.

1. Introduction

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Cryptocurrency, led by Bitcoin¹, has started a revolution in the way finance and business is conducted. However, to date, few of these cryptocurrencies have properly penetrated the mainstream imagination beyond being a speculative and volatile new asset class. In fact, no cryptocurrency provides a physical product, nor do they provide a service that can be sufficiently attached to a tangible realisable outcome. Indeed, cryptocurrencies by their very nature are not tangible. They rely on the confidence of the users and holders in order to have value. In this regard, even tangible goods require the perception of value of a group of people in order to have value.

¹ Bicoin Whitepaper, viewed 4 June 2021 https://bitcoin.org/bitcoin.pdf.

2. Solving a problem of Asset-backing

As it stands in 2021, the adoption of cryptocurrencies remains gradual and it is reasonable to suggest that not more than 1% of the world's population is holding or using any cryptocurrency in any meaningful way. To add to this adoption, there appears to be tension between the broader community, in particular the political and corporate elite, that suggests the energy usage of cryptocurrencies is questionable. This paper will not delve into the accuracy of those particular claims, other than to say any genuine focus on encouraging a sustainable approach to the way we treat our planet should be an important part of our lives.

Therefore, there are issues of confidence in a cryptocurrency system that remain from both a residual fear of leaving a government-forced traditional currency system, as well as the fear of the unknown born from a lack of familiarity.

This issue can be addressed by providing tangible assets as a form of indirect security over the cryptocurrency coin itself. In this regard it is a social contract between coin holders and the coin itself to be able to provide an asset that generates income for the coin holders. There is a sort of faith given to all currencies, and by providing coin holders with returns in the form of income from the underlying assets attached to the coins, it compounds the confidence and faith in the coin.

By creating an active relationship between the currency and physical assets, those assets and the fruits of those assets will bring the Greenex Cryptocurrency to life.

At the same time, Greenex will invest in clean, green energy assets which solves the further problems of the image of environmental friendliness of the cryptocurrency industry as a whole, but also refocuses the attention of society on this new technology being able to magnify the vast opportunities for pursuing the green energy revolution that the cryptocurrency revolution should operate in tandem together.

These problems of a lack of familiarity born from lack of tangibility, and the perceived lack of environmental sustainability are two problems that can be solved collectively with one comprehensive cryptocurrency.

3. An Asset-backed Cryptocurrency

Greenex aims to solve the issue of cryptocurrencies operating in what to most people in society still perceive as a technologically parenthetical cyber domain. Greenex will issue and trade coins from a central source to decentralise the ownership of the coin, whilst at the same time using the capital proceeds from the coin to fund the acquisition of hard 'green' assets that generate tangible, tradeable products. These products will include solar energy from solar farms and organic products from its own farm process. These are the tangible products that will form the backing of the Greenex cryptocurrency.

The holders of Greenex coins will be rewarded with an income stream from the coin from the proceeds of the hard assets. In this regard the coin will generate a negative net pollution to the environment. It will generate energy from clean sources and input this into the wide economy.

By investing and trading the Greenex coin, the coin itself will draw financial and economic energy from the global economy to produce sustainable energy sources, both in the form of solar energy and in the form of organic 'green' human fuel (food).

In practical terms, Greenex Coin will move to toward decentral ownership as the coin will not be owned or controlled by any one entity, nor will it be dominated by one entity or a small group of entities. The issuance and trade of the coin will dilute the ownership over time, and in doing so allow for assets to be purchased by the central originating entity. This central originating entity will acquire assets that will generate income and that income will flow to the coin holders.

Diagrammatically this can be seen as:



The Greenex Coin will receive funding and liquidity which will drive the generation of Green Assets, which in turn will drive the value to both Greenex Coin holders as well as society and most importantly - the environment.

4. Scarcity, Fixed Supply and the Propensity to Zero

The concept of currency being of limited supply is rooted in ancient philosophy and mathematics. However, the mathematical understanding has caused a state of flux both in society's understanding of money and of mathematics. Bitcoin, as a pioneer, has justified and presented a practical example of how a currency can have greater and indeed increasing value. This relationship of a currency with the mathematical values of infinity and zero are only just beginning to be properly explored.²

² Breedlove, R, *The number zero and Bitcoin*, viewed 2 June 2021. https://breedlove22.medium.com/the-number-zero-and-bitcoin-4c193336db5b.

Notwithstanding this, Bitcoin remains without a physical asset-backing, and relies almost entirely on the good faith and confidence of the people who use it. That is not to say that the relative scarcity of gold has itself not relied on thousands of years of people agreeing to attribute value to it, as a bank of last resort. This has been the case in times of crisis, as perhaps has now become the case of cryptocurrencies in the current global economic – and monetary policy – environment.

In this regard a currency that has a fixed supply represents a constant. This can be explained in mathematical terms as the connection between zero and infinity.

The concept can be presented as:

 $0 = \infty$

Once taken as a starting point, the further notion of currency and its transactions are representative of a system which can be explained in terms of thermodynamics. The first law of thermodynamics, known as the Law of Conservation of Energy states that:

"Energy cannot be created or destroyed in an isolated system."

Any currency, whether regarded as money (a store of wealth) or not, is at the very least a store of financial energy for a given period of time. Therefore, this can be applied to the theory that wealth is neither created nor destroyed. The energy will move from one place to another.

Fittingly, the second law of thermodynamics states that the entropy of any isolated system always increases. Entropy can be defined as the level of disorder or volatility of the energy in a system. This concept fits with the inherent volatility of any market or put another way 'any economic system subject to market forces' which would include financial markets, property markets, consumer markets. Given the isolation of cryptocurrencies, particularly in their formative years, this volatility remains evident. The degree of isolation is relative to other larger systems with greater levels of energy and force. The cryptocurrency market represents between 0.5% and 0.8% of all currency in circulation depending on the determination of the value of notional currencies in derivatives markets and the true volume of currencies in property and other assets. Taken in this context, cryptocurrencies are very isolated and the degree of entropy or volatility is quite evident and understandable.

Finally, the third law of thermodynamics states that:

'The entropy of a system approaches a constant value as the temperature approaches absolute zero'.

The relevance of this to currencies and financial markets highlights the importance of zero and the scarcity of a currency in its practical application. By creating a currency with a finite supply, there will be a theoretical constant that ensures the stability of the system. However, the application of thermodynamics to currency, and indeed mathematics to currency is an evolving and everchanging process.

The importance of Greenex being limited to its fixed supply is that it will be measured in terms of the productive output of the assets that back the coin. This is the defining unique proposition of Greenex. It is a coin-backed by assets. And those assets generate assets for the holder of the coin.

5. The Technicalities of an Asset-backed Coin

Greenex was not designed to be 'mined' through proof-of-work (PoW), nor was it designed to be 'farmed' through proof-of-stake (PoS). Both of these concepts involve energy, in the case of PoW, the verification process of mining is increasingly energy intensive as it requires computing power to generate coins. Proof-of-Stake is ostensibly less energy intensive, but it also requires dedicating existing funds to be quarantined and rendered unusable for periods of time. The proof-of-stake process is also fraught with uncertainty, susceptible to volatility, and most of all, does not generate a tangible asset as an outcome. Neither POS nor POW provide an inherent hard asset-backing.

A pre-determined supply, meaning that the total supply has already been mined, means that the coin is ready to embark on the purpose for which it was intended. There is no risk to security as the coin carries the same characteristics as any other blockchain currency. Greenex sits on the Binance Smart Chain network. This means it has both the security and low transactions costs to facilitate safe and secure operation.

It has the verification built-in, available in the same way on Etherscan (BSCscan), with all transactions cryptographically protected and stored and available for verification. Any risks from misuse or misappropriation can be traced to wallets on the network and transactions' unique transaction IDs.

The genius of blockchain technology that were inherent in Bitcoin and any other cryptocurrency operates seamlessly for Greenex on the Binance Smart Chain network. The safety and security of the coins' users is paramount and this protection is greatest when the supply is fixed and there is both stability and assurance as to the volume and nature of the coin's supply.

The system of a cryptocurrency coin that relies on being backed by hard assets is one that can change and evolve over time. Indeed, it should. The integrity of a coin and the integrity of the system requires that it change accordingly over time.

As a starting point 42 billion coins have been generated and sit in a single wallet. With liquidity funding, the coin can grow over time.

The flowchart below shows the process of the Greenex (GREX) coin being released to interested parties who become holders of the coin, the funds for which will be passed to the primary coin holder who will invest the funds into Solar Farms, Organic Food Farms and related industries. From there the income from electricity generated from solar and income from organic food being produced will be distributed to coin holders.



In practical terms it would appear that the majority coin holder could abuse this position of obtaining funds, but then this would cause the collapse of the coin, there is every incentive for the majority coin holder to generate income and distribute that income to the coin holders, which will drive up the price of the coin in the long term. Meaning, the value given back to coin holders will reward the coin holders to provide more value and this is a cycle. Note that the entire time the flow of funds are coming from external sources that may or may not be green and clean but are flowing into Greenex's system which creates clean and green energy and food. The cycle is both positive and sustainable.

For the purposes of clarity, the legal issues will be addressed for avoidance of uncertainty and to promote the sound ethical and legal legitimacy of the project.

6. Economics of the Greenex Coin

The 42,000,000,000 token supply of the Greenex Coin is intended to strike a balance between an ample amount for distribution without requiring decimal denomination and keeping with the philosophy of a finite number. There is also consideration for the rapidly and limitless increase of the global fiat currency volumes that will negate the seemingly large volume in the order of billions.

As an example, the following scenario is provided as a hypothetical:

Blocks of 100,000,000 units could be issued to a potential group of enthusiasts who want to provide liquidity for Greenex, driven by their common desire to help the environment by generating clean energy and organic food. There could be as many as 50 individuals purchase blocks of 100,000,000 each for USD\$10,000 per block which would give \$500,000 in capital.

Theoretically there would 51 owners of which 50 would have 5,000,000,000 coins and the majority owner as custodian with the remaining 37,000,000,000 coins.

From here the purchase of a rural property, followed by an installation of solar panels, accompanied by planting of herbicide, pesticide and GM-free organic vegetables could be undertaken by the custodian. As income is generated by the supply of electricity from the production of produce, the profits from the operation for example could be \$60,000 annually, equating to \$5,000 per month, could be distributed to the 50 coin holders based on their Wallet addresses and based on their respective number of coins held.

It is important to note there is incentive for the custodian to dilute their ownership as well as increase the productive output of the coin to increase its value in the long-term. In this regard, the entire community around the coin and all coin holders have a vested interested in the productivity and success of the coin, much in the same way we all have a interest in advancing clean energy and organic food.

Whilst the price of the coin will fluctuate, there would arguably be more stability as the value of the coin, and therefore its underlying price would be based on its productive capacity, and would in theory rise over time, or at very least maintain its value as it remained productive. Any mismanagement or fraud on the part of the custodian would be mitigated by the market forces self-regulating their conduct.

7. Proprietary, Legality and the Social Contract

The coin will be initiated from one central entity and then distributed accordingly to spread and dilute the ownership to create a balanced and fair ownership of the coin. The initiating owner, as custodian of the majority of the coinage initially, will be responsible for using the liquidity created to purchase assets and distribute income. There is no formal contractual relationship. Theoretically however, there would be what is known in common law jurisdictions as a constructive trust, meaning that no formal trust has been formed but one has been "construed" or deemed to occur and from a legal standpoint a theoretical obligation persists that requires that coin holders receive distributed income from their ownership of the coin.

Notwithstanding the absence of formal legalities, cryptocurrency and the manner in which it is conducted is a good example of Natural Law, meaning that the market, the community will self-regulate the currency and its custodianship. If the custodian fails to perform in the best interests of the coin holders, then the value of the coin will decline, and the coin will cease to exist.

This negative and cynical view of the world is not in the interests of the custodian; therefore, the structure of the coin is that all parties have a vested interest in its success, in its legitimacy, in its integrity. There is an inherent moral compass to which all parties are adherent to.

The guiding light of a greener, cleaner society and world is incentive to ensure the success of the coin.

8. Concluding Remarks

There remains much room for technical discussion of the coin and its possible development paths. This will be discussed further in a future "Green Paper" which reflects the technical nature of the development of the coin, but also the fluid and evolving nature of a living document. Something that every whitepaper should always be continually growing from.

In the context of the unique proposition of this coin, the technical architecture is simplistic, much in the same way the business proposition is unique, the technology of Greenex is very direct in its intention. Greenex, with the right promotion, support and leadership has every right and every chance at success.