

EverGreenCoin

Whitepaper May 2018

Background

EverGreenCoin (trading symbol **EGC**) is open source cryptocurrency software.¹ Originally derived from Bitcoin's source code, it has undergone major revisions and changes as part of its evolution. EverGreenCoin still keeps the advantages of its humble Bitcoin origins:

- Decentralisation: no centralised authority, all participants form a common consensus.
- Pseudo-anonymity: no personal information is surrendered.
- Global ability to transact: no geographical, gender, religious, cultural, or political restrictions.

However, we've branched away from Bitcoin and other currencies to alter what we consider negative traits like those promoting wastage and speculation:

- Energy-intensive technical designs have been replaced by environmentally-friendly approaches.
- Block generation time reduced, allowing for transactions to take place significantly faster.
- Block sizes increased, giving EverGreenCoin scalability for the future.
- Incentivising storage rather than trading: staking becomes rewarding and trading for nominal gains becomes less attractive.
- No master nodes or other constructs that discourage a fair and equal market based on investment amount, hardware, experience or otherwise.²

The Proof-of-Work (PoW) consensus algorithm in Bitcoin and prevalent in other cryptocurrencies relies on consuming energy. With this approach, the winner is the person who consumes the most energy the fastest: they will be rewarded the most. We break from this wasteful model, having ended PoW after mining a set supply of 13 million EGC. This encouraged early adopters as well as fairness of the Proof-of-Stake (PoS) consensus algorithm and reward mechanism.³

EverGreenCoin puts economics to work for our ecosystem: currency has never been so powerful.

¹ The name EVERGREENCOIN and the EverGreenCoin logo are registered trademarks of Steven Saxton on behalf of the EverGreenCoin Foundation, Inc. ("**The Foundation**"). Refer to section: Paperwork.

² Master nodes: we believe these are mechanisms by which larger stakers can strong-arm smaller ones. EverGreenCoin and its community strongly oppose this mentality: we believe that all stakers are equal and should have the same certainty.

³ EverGreenCoin uses a X15 PoW and PoS *hybrid* set of algorithms which do not reward/require large amounts of energy to maintain.

Ethos

EverGreenCoin sits uniquely amongst other cryptocurrencies: we're not just a coin. We're also a public charity and an incorporated business entity.⁴ Our focus is on achieving humanitarian and green goals, and the technology is a lever by which we can realise them.

Part of EverGreenCoin's mission is to demonstrate and catalyse support for sustainable technology. In a resource-restricted world, it makes little sense to drive key systems like blockchains on wastage—energy, computational, carbon or otherwise. We already have the capability to do better for the sake of the planet and ourselves: our future depends on it.

EverGreenCoin takes sustainability into account: we're proof that blockchains need not be wasteful and can be used as a catalyst for positive change.

We've married the brilliance of blockchain technology with the acumen of an incorporation and the conviction of a charity. The result is a blockchain driven not by profit, but by public and professional accountability towards charitable causes: a state-of-the-art store of value that we hope will catalyse the demand for sustainable cryptocurrency.

We believe that profitability will follow a sustainable approach to both technology and economics. Realisation of positive and sustainable goals will result in increasing rewards as popularity and adoption increase.

Breaking Away

The EverGreenCoin ethos is a stark contrast to the lucrative world of Initial Coin Offerings (ICOs), gimmicky tricks to inflate valuations, or pump-and-dump strategies. Through blockchain technology, we reach out to people in need to deliver crucial supplies, services and aid. We can break through the traditional boundaries at times where financial or geo-political roadblocks may exist.

We use blockchain technology as part of a comprehensive strategy to promote and fund initiatives like:

- Building wells and clean water services to places like Bangladesh, Kenya, and the United States.
- Funding education, internet and information access.
- Funding and promoting financial independence in remote and poverty-stricken regions through renewables and EGC.
- War and natural disaster relief efforts: refugee aid, hurricane relief and reforestation initiatives.





⁴ The EverGreenCoin Foundation Inc. is a United States 501(c)(3) registered public charity. Refer to the United States Patent and Trademark Office (USPTO) and the Paperwork section for details.

- Financial aid for solar panel installations for those unable to afford the substantial initial investment costs. We want to bridge the increasing divide separating the classes.
- Continued research and development of the EverGreenCoin Solar Staker project: a 100% solar powered device for staking EGC:

Seven percent annual network reward for helping process transactions.

Quality over Quantity

Longevity, stability and sustainability are at the core of our design and principles.

The EverGreenCoin blockchain has been designed with a low-carbon footprint in mind. Compared with resource-intensive blockchains like Bitcoin, EverGreenCoin is a sustainable cryptocurrency both in technological design and purpose. We will always focus on the quality of changes over the quantity of changes: in line with our ethos we firmly believe that success comes with code and organizational stability. Our model requires patience, determination and a view to longevity.

We invite anyone to join or review our efforts. We build EverGreenCoin in an equal and transparent manner:

- The codebase is open source, constantly developed, maintained and reviewed to ensure releases are of the standard the community expects. The source code can be publicly reviewed.
- We accept contributions from others and welcome suggestions, collaboration, pull requests and any kind of involvement from anyone who may be interested.
- We're *truly* equal opportunity: quality does not discriminate. Our community includes everyone across the globe: from youths to seniors; from third-world camps to first-world nations; peoples of multiple ethnic, religious and geo-political backgrounds join forces in the EverGreenCoin community.

Whether we're talking about code or community, our ethos is always quality over quantity.

Sustainable, Pragmatic Solutions

EverGreenCoin ambitiously seeks to resolve multiple problem spaces inherent with today's monetary and blockchain implementations.

Sustainable Technology

The EverGreenCoin blockchain doesn't just *drive* sustainable initiatives, it is *driven by* sustainable technology. Even during the PoW mining process, care was taken to avoid unsustainable and unnecessary waste:



- EverGreenCoin was not pre-mined or instantly mined. Our launch was based on principles of openness and fairness; the date being publicly announced over three weeks prior to launch.
- During the mining phase, 2% (1 EGC) of each PoW block reward of 50 EGC went to the Foundation wallet.
- EverGreenCoin's PoW mining phase used the well-tested and secure X15 mining algorithm. EverGreenCoin is proud to say that EGC mining had no part in supporting energy-hungry and wasteful ASICs.⁵

Six months after launch EverGreenCoin shifted from the *hybrid*³ model to PoS-only, ending the supply generation phase:

- For ongoing sustainability, PoS requires significantly fewer resources than PoW.
- New coins are generated as rewards for *staking*: supporting the network by running a node to process and verify transactions.
- Unlike PoW, the reward for staking can be accurately predicted: there is no element of chance nor imbalance in our PoS mechanism.

We practise what we preach—and we're proud that our blockchain reflects that.

Sustainable Banking

We recognise there is a growing public concern about how traditional financial institutions are handling our hard-earned finances. We share in this concern. It is common to hear about re-lending of monies already lent—*fractional reserve banking*—effectively making money from nothing via uncontrolled inflation. We believe these archaic and dishonest practises are unsustainable: debt-based culture is neither sustainable, pragmatic, nor a good way to live.

Sustainable banking means responsible banking. It means:

- You put your assets into a safe place, and you don't worry about it being used for *fractional reserves*.
- You can be confident the system is not here to make a profit at the expense of ethics.
- You're in control, no strings attached. You approve the transactions, you are your own bank.

Every dollar that is put away into sustainable banking is another dollar that is outside the control of financially irresponsible organizations. That dollar can no longer be misspent or endangered via *fractional reserve banking*, nor any other unsustainable banking methods. Take back control of your assets and the economy.

⁵ At the time of launch, X15 was not overrun by Application-Specific Integrated Circuit miners (ASICs). ASICs are energy intensive devices designed to consume as much electricity as possible to increase their chances of mining a larger share. Fortunately for EverGreenCoin's environmentally-friendly model, the PoW phase ended weeks before X15 ASICs were made available.



Charity at the Core

The EverGreenCoin blockchain leverages the charitable aspects of the Foundation: the two entities feed into one another to ensure alignment with core charitable and sustainable principles. As such, our focus is around delivering positive change. We earn your support through public transparency, honesty, open communication and delivery of promises made. We encourage donating to a good cause and incentivizing the rewards-based system.

Wrapping the cryptocurrency around the charity gives EverGreenCoin innovative growth opportunities, without needing to commercialize or seek profit as the primary driver:

- Our 501(c)(3) public charity and incorporated status gives us the framework to work with any entity with mutual confidence, within their processes and in accordance with the law.
- By donating your staking power to the EverGreenCoin network, you help the network and increase its value.
- This fortifies the capability of the Foundation and donors to accomplish our current and growing aspirations of making a positive impact.

With innovations like staking for charity, using the EverGreenCoin blockchain is in itself, a charitable thing.

Stores of Value

The ability for EGC to be instantly sent and received anywhere creates a borderless system. EGC can be transferred expediently with minimal carbon footprint, making it an ideal transmission mechanism for those seeking a better, greener way. No border, age, gender, credit restrictions, or hidden fees.

All of this, whilst supporting the environment and aiding humanitarian causes simply by *staking* EGC and choosing to donate a portion of your network rewards to a cause you believe in: *what's not to like*?



Branches

EverGreenCoin relies on support branches to run specific and focused initiatives. Each branch has its area of expertise, coordinating with other branches and sharing resources to work towards EverGreenCoin's overall charitable mission.

Current EGC branches:



EGC Renewables focuses around renewable energy.

Includes the Solar Staker project, a device that only needs sunlight and an internet connection to stake FGC and process transactions.



EGC Wellness includes efforts to promote wellbeing of both physical and mental health.

We aim to cultivate wellness via medicinal, homeopathic, nutritional and other approaches.



EGC Water specializes in water purification and conservation initiatives.

We aid and encourage protection of our most valuable resource: water.



EGC Gardens supports gardening, farming, and agricultural initiatives.

Recently venturing into urban farming, we're cultivating and nurture sustainable initiatives at the grassroots level.

We are always on the lookout for new branches with scope to help others. Where sufficient community involvement and expertise exists, new branches will be formed with hands-on support from the Foundation, community and other active branches.



Incentivising Staking

Fairness and equality are key: humanity and sustainability will always come before profits, but growth is very much part of the ongoing equation. EverGreenCoin may not be suitable for those who are looking to aggressively trade an asset or do not have the time and resources to do so. We promote staking and using EverGreenCoin over the trading of it. This promotes stability within our ecosystem. Our long-term, charitable vision enables us to strive for longevity over quick market gains and volatility spikes.

Our goal is to encourage network diversity by incentivising donors to stake their coins by running our software (wallets or nodes).

How do we incentivise staking?

- With a generous 7% network reward from staking that is not high enough to overinflate the currency, and is offset by steady adoption and growth, there is a strong incentive to hold EGC and support the network rather than sell. To date, actual inflation has been around 3% as not all coins are actively staked.
- No master nodes: everyone is on equal footing and receives the same rate for their contributions, regardless of balance size. No exceptions.
- Easy, secure and *charitable*: with desktop and mobile applications, you always remain in control of your EGC.⁶ Your charitable staking is easy and convenient.

Staking for Charity

Everyone can now aid charitable causes simply by running the EverGreenCoin wallet and Staking for Charity. EverGreenCoin enables nodes to stake directly towards another EverGreenCoin address. In a nutshell, this allows for your PoS rewards to be sent directly to a charity, cause, or other address.

- EverGreenCoin's Staking for Charity is built from the ground up to allow the Foundation to work and coordinate efforts with other charities, projects, environmental/green causes and corporations.
- It's been designed to be easy and simple to use. Benefactors need only pick from a list: no complicated addresses required! The wallet will take care of the rest: staking, network rewards, and sending a defined percentage off to the charity.⁷
- Approved initiatives are added to a maintained list which is dynamically updated by all wallets.⁸



⁶ Always follow good wallet security practises such as backing up information/keys/passwords and keeping them secure.

⁷ Note that staking 100% of your reward to charity will gradually reduce your balance over time due to transaction fees, usually 0.0001 EGC.

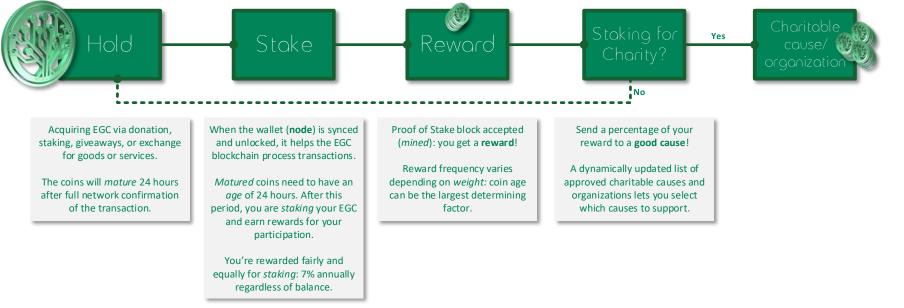
⁸ Anyone is welcome to apply for approval on the initiatives list, from individuals to organizations.

Staking for Charity is designed to give you maximum charitable control with minimal fuss:

- Staking for Charity can be used to send your network rewards to any third-party EGC address.
- Whether you're staking for a friend, individual, business or even another account of yours, EverGreenCoin automates outbound rewards in full or in part. Examples: diverting network rewards to an exchange account or gifting friends and family. *Try doing that, with your bank!*
- This enables speed and flexibility where for example a charitable cause is going through approval or breaking news/live events develop which require agility and quick action. EverGreenCoin users are not *stuck* with a pre-defined list that can't work outside the box.

Start, stop or change your Staking for Charity preferences at any time. EverGreenCoin donors retain control over their rewards while donating all or part of that reward in installments automatically. Our vision of blockchain charity and empowerment enables anyone to donate simply by holding EGC. We believe that mass adoption is about treating everyone equally and making things easy.

With Staking for Charity, 100% of your donation goes straight into your chosen charity's wallet, every time you get a network reward for computational work. Simple as that.







The EverGreenCoin Foundation and Charity

As the incorporated entity behind the blockchain, the Foundation places EverGreenCoin in distinction amongst other cryptocurrencies:

- As a corporation the Foundation can work with other corporations in a law-abiding manner.
- As a registered 501(c)(3) public charity, the Foundation can leverage benefits like public accountability, trust and recognition afforded to registered charities, while providing all of the accountability required by law and expected by the public.
- Charitable status helps the Foundation minimize costs: *bona fide* charities are provided tax advantages and relief. Every penny can be better leveraged in the way we intend: to help others, *not in paying the taxman*!

This innovative combination shields EverGreenCoin from much of the Fear, Uncertainty and Doubt (FUD) that many of our counterparts face. Perhaps it's because we can be taken at face value: we're not mega-investors telling you about the next great thing.

We do what we say on the tin: The Foundation is a charity at the core, and charitable principles drive our blockchain.

The Foundation acts as an ambassador and serves as a mechanism by which the charitable aspect of the Foundation and community can take action and facilitate initiatives. The Foundation backs initiatives through its own funds in the following ways:

- The Foundation's funds were generated by miners during the PoW phase. The vast majority of today's EGC supply was generated in this phase. Of every EGC block mined during PoW, 2% of the mining reward has gone toward the Foundation's funds.
- The Foundation stakes the coins to earn rewards, securely storing them.
- The Foundation's funds are used to support community-driven and grassroots initiatives like the EverGreenCoin Solar Staker.⁹
- Benefactors may donate directly to the Foundation and it can be found on the Staking for Charity list.

Examples of Foundation expenditures include:

- Funding the official <u>EGC Faucet</u>.
- Promotional events such as loading paper wallets for public distribution.
- Environmental Bounties: compensating individuals for promoting and helping to educate about EverGreenCoin such as: tree plants, environmental gatherings and events, and even working in one's own garden.
- Technical Bounties: compensating individuals for expenses and work where we are lacking the hardware, skills or man hours required.

⁹ We have set aside Foundation funds for longer term support of community initiatives like the EverGreenCoin Solar Staker.

• Other Bounties: Twitter, <u>EverGreenCoin Directory</u> listings and content submission/improvement and review.

The Foundation's funds are fully ring-fenced by the community and reserved for expenditures at the community's discretion.¹⁰

As a non-profit blockchain driven by charity and positive impact rather than commercial gains, expenditures have generally been minimal. The Foundation's funds are not used for supporting infrastructure or associated costs.¹¹

We'd rather spend the Foundation's funds on planting trees in the ground and putting desks in a classroom, than on an airdrop and unnecessary costs.

Our charitable outreach and humanitarian efforts give EverGreenCoin a distinct growth model that relies on our positive impact upon others. We are proud of our market strategy, which relies on word-of-mouth advertising from those who have benefited from our initiatives. We're proud about *honest marketing*, because it has longevity. Our money and efforts are better spent on direct aid than throwing money repeatedly at short-lived traditional advertising campaigns. In a world where outrageous, bold statements make the headlines—we disagree and want our reputation to be built on actions.

The Foundation relies on charitable donations and runs initiatives to fund itself and its campaigns. Our model relies on making a long-term commitment and on the generosity of ordinary people like you. Benefactors see our progress, realise the benefits of our ethos and feel empowered in turn to help others.

Like most things EverGreenCoin, we keep the Foundation simple, clear, and transparent.

History

EverGreenCoin has had a relatively long timeline compared with other cryptocurrencies. Long-standing status, enduring progress and devotion to its core principles are attributions to its growing importance as a viable and desirable charity and technology platform. The acquisition of our trademarks and formation of both the incorporation and the 501(c)(3) public charity attest to our commitment to the future.

We are committed to the charity and the blockchain, for the long term.





¹⁰ The Board of Directors always considers any *bona fide* opinions voiced at the board meetings, where anyone is welcome to join.

¹¹ Infrastructure costs are covered by the incorporated business entity and its Board of Directors.

Blockchain

1 Dec 2015	Initial public announcement announcing launch date of Christmas.
25 Dec 2015	Launch and PoW coin generation phase begins. No pre-mine, no insta-mine: public mining starts at block height #1. A block explorer goes live, and faucet pay-outs commence. PoS begins when the first block reward matures at block height #61.
30 Jun 2016	PoW and PoS hybrid model ends. Shift to PoS-only.
18 Feb 2017	A hard fork is successfully undertaken to increase the target block time. ¹²

Technical Details

EverGreenCoin has the following technical specifications:

Value
X15 PoW + PoS hybrid
525,960 blocks (±6 months, PoW has ended)
13 million EverGreenCoin
180 seconds
60 blocks (±3 hours)
7 blocks (±21 minutes)
7% APR
24 hours after maturity or full confirmation
None
5757
5758

¹² The target block time was increased from 1 minute to 3 minutes. This was done to stabilize the EverGreenCoin network and prevent unintentional forks from occurring.





Future Roadmap

EverGreenCoin is constantly evolving. With both Foundation and community-led efforts, we are excited about the technological and humanitarian goals on our roadmap:





Getting Involved

Every day, people like you help us drive positive change from the ground up.

If this whitepaper has interested you, we invite you to join our community. We're a friendly, international bunch and could use all the community support we can muster. EverGreenCoin relies on a strong global community to deliver aid to the causes that we care most about.

Join us on via forum, chat and more.

Paperwork



Contributors

This document has been authored by EverGreenCoin and various external contributors: it has been a collaborative community effort. We would especially like to thank the following authors for their contributions:

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