



CryptoCarbon (CCRB):

A NEW TYPE OF CRYPTOCURRENCY

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ABSTRACT

SUMMARY

CryptoCarbon (CCRB) is a cryptocurrency based on the Ethereum blockchain which belongs to a class of Bitcoin 2.0 Protocol.

CCRB is one of the first cryptocurrencies which is backed up by a cashback platform, CCRB is also currently accepted in many independent platforms as a medium of exchange.

This whitepaper intends to give a brief and general outline about the usability of this new digital asset called CCRB and how any member of public can participate and earn CCRB. In this paper will explore how CCRB will function as an alternative cryptocurrency, the products and services and rewards available through the ecosystems associated with CCRB, the technical information of the product/digital asset (software specifications) named CCRB, and how CCRB is designed to provide a better experience for cryptocurrency users.

INTRODUCTION

What is CCRB?

CCRB is the first consumer-oriented cryptocurrency launched in the U.K. by CRYPTOCARBON, a london-based Service company which supports CCRB.

CCRB works just like Bitcoin, but removes mining for profit. CCRB is 100% pre-mined and the cryptocurrency is closely linked to cash-back and loyalty platforms.

Based on the Bitcoin 2.0 protocol, CCRB aims to virtually eliminate mining for profit – the aspect of cryptocurrencies responsible for harming the environment, through wastage of electricity.

The coins are stored on computers and transferred over the internet between digital “wallets”. CCRB is a digital asset that any member of the public can earn/mine as cash-back, loyalty rewards, referral commissions, and many more activity-based rewards. This can be done by linking their shopping and other eligible activities to the platforms that rewards users with CCRB.

A New Type of Cryptocurrency

Due to large number of services that can be served by CCRB, the team is confident that the actual capitalisation of the entire system will be much larger. Thus, those people who share the confidence in the success of the project, effectively become part of the initial team as co-founders, due to the CCRB accumulation on his/her personal account.

This is achieved through carrying on different activities inside the interconnected platforms.

These platforms will include cash-back shopping, affiliate marketing, social networks and different offers from the participating businesses.

CRYPTOCURRENCY

WHAT IS CRYPTOCURRENCY?

Cryptocurrencies are digital systems (protocols) for exchanging value between participants on a decentralised computer network. Bitcoin (BTC) is the most famous and widely-adopted cryptocurrency.

Most cryptocurrencies use hard-to-solve cryptographic puzzles called “Proof of Work” to secure the operation of the network. The process of verifying the cryptographic solutions is commonly referred to as “mining”. Bitcoin introduced a “reward” system, where the miner who solves a block is awarded a small amount of the cryptocurrency. This reward compensates the miner for contributing their hardware and electricity to the mining network.

The solution of a block is a vital operation to allow distributed consensus and add the block to the blockchain.

Technology-rooted movements like Bitcoin have demonstrated, through the power of the default, consensus mechanisms, and voluntary respect of the social contract, that it is possible to use the internet to make a decentralised value - transfer system, shared across the world and virtually free to use. This system can be said to be a very specialised version of a cryptographically secure, transaction- based state machine.

Ethereum:

Ethereum is a project which attempts to build the generalised technology; technology on which all transaction based state-machine concepts may be built. Moreover, it aims to provide to the end developer, a tightly integrated end-to-end system for building software on a hitherto unexplored compute paradigm in the mainstream: a trustful object messaging compute framework.

Ethereum has a blockchain which contains:

- Asset Tokens (ETH or ETC depending on which Ethereum!)
- A multitude of ‘user generated’ tokens that are created and managed through smart contracts
- Hashes stored in smart contracts

What is the difference between Cryptocurrency and CCRB?

Cryptocurrencies like BitCoin are based on technology called mining for distribution of token, where as CCRB is a new type of cryptocurrency (tokens), built on the basis of Ethereum technology. It offers maximum convenience, maximum security, and involves no bureaucracy. Anyone can review the contract of the currency via a link. The Enterprise Partner Group at Microsoft is on the front line, with some of the largest Ethereum technology customers.

The CCRB value creation does not depend on the activities of any particular company or individual but is dependent on the large scale participation and adoption of CCRB by the global users who expects loyalty rewards in CCRB in response to the acceptance offers made by businesses. This suggests creating value without any financial investments when a successful reward earning activity or trade happens.

WHY ETHEREUM?

Our choice of Ethereum as a base protocol was dictated by the following:

- 1) Out of all blockchains, it has the biggest and the most active developer community. Therefore, if something goes wrong with the consensus protocol, it has the highest chances of fast recovery. It's being endorsed by some of the world's largest financial software vendors, including IBM, Microsoft, and Deloitte.
- 2) It is the only production-ready blockchain that supports smart contracts. Turing-complete programming languages bring us to the next level of freedom with regards to features and security models that we can implement.
- 3) Ethereum Virtual Machine (EVM), the virtual machine that executes smart contracts, is independent of Ethereum public blockchain. All smart contract software that we develop is built using Solidity and EVM, which can be decoupled from the Ethereum public network and plugged into any other consensus mechanism.

It's a merge of Tindermint, EVM and public blockchain. If successful, it will be able to execute 10,000 smart contract transactions per second in a public blockchain. Transaction confirmation time is addressed in the Ethereum network by a switch to PoS during 2017.

Proof-of-cooperation (PoC)

What is PoC ?

PoC is a consensus algorithm in a conceptual stage which is required in the P2P network of a cryptocurrency. Every node in such a network must obey the same set of rules to maintain the networks integrity. All connected clients have the same data available to verify the state of the network. In the case of the proposed blockchain using this concept, a limited number of trusted nodes (CVNs) collaborate to create the blockchain.

They do this by completing the following tasks:

1. By examining the past blocks they determine what CVN should create the next block and publish their conclusion on the network.
2. They verify the validity and integrity of the last block, its transactions, and if it was indeed the respective CVNs turn. The resulting information from points 1. and 2. are digitally signed and sent to all other nodes.
3. These signatures are collected by the CVN that creates the next block. They are the actual consensus proof, and thus the proof of cooperation of all the CVNs. This bundle of signatures is stored in the blockchain together with the new block, which is only valid if it contains enough signatures according to the algorithm.
4. When the new block is completely built it is signed by the creating CVN and sent to the network.

BENEFITS

On traditional server architectures, every application has to set up its own servers that run their own code in isolated silos, making sharing of data hard.

If a single app is compromised or goes offline, many users and other apps are affected.

On a blockchain, anyone can set up a node that replicates the necessary data for all nodes to reach an agreement and be compensated by users and app developers.

This allows user data to remain private and apps to be decentralised like the Internet was supposed to work.

CRYPTOCARBON (CCRB) SPECIFICATIONS

WALLETS

Web: <https://cryptocarbon.co.uk/>

Android: in development

iOS: pending review in app store

Full node: Ethereum Mist with EIP20 address from the above **PROTOCOL**

CCRB is issued using EToken protocol, which is a set of Ethereum smart contracts.

Documentation: <https://github.com/cryptocarbon/cryptocarbon/wiki>

We use ETH network (the forked one).

SPECIFICATIONS

Primary project website: <https://cryptocarbon.co.uk>

Supply: adjustable

Symbol: CCRB

ICAP symbol: BCC

Decimal places: 6

Transaction fees in CCRB: Transaction fees in ETH: refunding to sender

ERC20compatible contract address: 0xe4c94d45f7aef7018a5d66f44af780ec6023378e

SECURITY

The CCRB wallet uses state-of-the-art wallet technology power by Ethereum smart contracts. Here are some of the highlights of it:

Security features are implemented on the very fundamental level possible - inside Ethereum smart contracts.

Independent security oracle services are used to authorise transactions inside the network.

The CCRB wallet service never has access to customer account keys and can't move money or adjust balance without customer consent - all encryption is done on the client-side, following best industry practices.

ECOSYSTEM AND COMMUNITY

PRODUCTS AND SERVICES

The success of the project depends on different platforms connecting the consumers and business using CCRB as a reward for participation rather than on the activities or success of any particular company or individual. The development of a successful decentralised reward based market with a large portfolio of products and services targeting global consumers where CCRB will be used as a token by the participating retailers or other businesses. The concept is set to revolutionise and replace the traditional cashback and loyalty programs, in that it allows businesses to tap into a new customer base by targeting consumers who have an interest in using cryptocurrency to pay for products, goods and services. The retailers get rewarded in increased sales by offering innovative payment methods that save consumers money by allowing them to purchase products cheaper, and also by gaining greater loyalty from consumers..

The first integration of CCRB was with a UK-based cash-back provider, offering access to cash-backs, savings, spending and discounts from leading retailers around the globe including over 35,000 outlets in UK. This Platform also provides access to travel, utility, insurance and other price comparison platforms and allows customers to earn CCRB for free, based on shopping and other online activities. Any user may get CCRB for referrals and marketing, as well as other social activity through the available social media platforms.

The amount of CCRB a user will receive will strictly correspond to the amount of shopping or promotional activity the user will perform. This innovative and ground-breaking new concept of earning cryptocurrency through shopping is a giant leap towards introducing cryptocurrency to a larger crowd, by changing their shopping habits and online activities into mining as described by the crypto-world to earn cryptocurrency.

The CCRB units can be transferred between users, exchanged for BTC or other Cryptocurrencies, or spend for premium features and services which will be available in the ecosystem time to time.

ASSET DETAILS

The total supply of CCRB and its rate of issuance was decided by considering the products and services that are available to be supplied for the shop and mine reward earning activities of the participants.

The results are roughly:

70 million CCRB is currently created and will be issued to users.

21 million (30% of the total initial supply) is created, and most of it will be going to early contributors and active users.

CCRB is only available as proof-of-work, which means the activities mentioned above, and introduced from time to time.

It is a premised proof-of-work model unlike many cryptocurrencies

It is an improved proof-of-work model rather than a mining for profit model, and is a greener coin with lesser carbon footprints.

Is the CCRB supply infinite?

No. The annual issuance of CCRB is capped at 21 million which is 30% of the market CAP (initial supply) similar to Ether. This means that while the absolute issuance is fixed, the relative inflation is decreased every year. In theory, if this issuance was kept indefinitely, then at some point the rate of new tokens created every year would reach the average amount lost yearly (by misuse, accidental key lost, death of holders etc), and an equilibrium would be reached.

Distribution model 2020

We have the ambitious goal to achieve 1 billion users in the ecosystem and providing unique products and services. The team is highly committed and expect businesses to accept CCRB in return for its selected products and services from time to time and payout CCRB according to the proof-of-work model as explained above.

CONCLUSION

So far we have implemented important innovations in CCRB, but we won't stop there. We have analysed the requirements for a CryptoCurrency for a fair economy, and have identified important features that will be implemented in the near future.