



# 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 (token).

CCRB is the first cryptocurrency which is backed up by a cashback platform, and the company behind CCRB have developed a platform where CCRB is the method of payment.

This paper will explore how CCRB will function as an alternative cryptocurrency, the products and services associated with CCRB, the asset details, and how CCRB will result in better outcomes for its participants.

# INTRODUCTION

## THE COMPANY

### What is CCRB?

CCRB is the first consumer-oriented cryptocurrency launched in the U.K. by CRYPTOCARBON GLOBAL LTD, a London-based Service Company.

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 protocol, CCRB will 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 can be earned/mined as cash-back, loyalty rewards, referral commissions, and many more activity-based rewards.

### A New Type of Cryptocurrency

Due to our commitment to the creation of a large number of services that will 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 our confidence in the success of the project, effectively become part of our 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, and many more which will be added using the users social connections.

## **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, where as CCRB is a new type of cryptocurrency (tokens), built on the basis of Ethereum technology. This suggests creating financial value without any financial investments.

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.

### **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 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 CCRB, a limited number of trusted nodes (CVNs) collaborate to create the CCRB block chain. 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/Ambisafe/et...>

We use ETH network (the forked one).

## SPECIFICATIONS

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

Supply: adjustable — currency administrator can issue and redeem tokens in exchange to cash deposits and withdrawals.

Symbol: CCRB

ICAP symbol: BCC

Decimal places: 6

Transaction fees in CCRB: % of value, 0 for now.

Transaction fees in ETH: refunding to sender

EIP20compatible contract address:

0xe4c94d45f7aef7018a5d66f44af780ec6023378e

# SECURITY

The CCRB wallet uses state-of-the-art wallet technology powered 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

Our team has developed a marketplace with a portfolio of products and services targeting global markets for which CCRB will be used as a token by the participating retailers or other businesses.

The first integration was with a UK-based cash-back provider, offering access to cash-backs, savings, and discounts from leading retailers which already covers over 35,000 outlets in UK. This partner company also provides access to travel, utility, insurance and other price comparison platforms.

This platform also 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 companies own social media platform, as well as their own 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, converted into BTC/fiat, or spent for premium features and services which we intend to offer from time to time. The partner company has also developed a platform where users can

advertise and sell goods and services in return for CCRB.

**Social Network:** The next product developed by CCRB is a social network with a fully-functional applications store, where only cryptocurrency is to be used.

## **ASSET DETAILS**

The total supply of CCRB and its rate of issuance was decided by the products and services that are available to be supplied in return.

The results are roughly:

- 70 million CCRB is currently created and will be issued to users as proof of work.
- 21 million (30% of the total market cap) 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 model, and is a greener coin with lesser carbon foot-prints.

### **Is the CCRB supply infinite?**

No. The issuance of CCRB is capped at 30% of the market CAP. 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 our ecosystem providing unique products and services.

The team is highly committed and expect to accept CCRB in return for its selected products and services which it will offer from time to time and will 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 currency for a fair economy, and have identified important features that will be implemented in the near future.