

BCB BLOCKCHAIN WHITEPAPER

BUILDING CITIES BEYOND BLOCKCHAIN



Version: 1.21

Last Update: 5 November 2019



Project: BCB Blockchain

Ticker: BCB

Website: <https://www.bcbchain.io>

Company: BCB Innovation Pte Ltd

UEN: 201927825D

ABSTRACT

Modern society is seeing the development of smart cities as the next phase of human development. However, the development of smart cities requires ecosystem products and services, and ecosystems that permit connectivity between systems belonging to citizens, private suppliers and the public sector.

BCB Innovation Pte Ltd (201927825D), hereafter called BCBChain.io meets this need by providing [a] the technology for developing products and services, [b] the ecosystem, an infrastructure that enables the participation of all stakeholders in way that their systems can interoperate, and [c] a utility token for ecosystem services.

In this whitepaper, we describe all the 3 offerings and their merits in resolving the challenges for the creation of better smart cities.

TABLE OF CONTENTS

INTRODUCTION	6
Vision	
Mission	
OPPORTUNITIES	7
Market Size	
Growing Initiatives by Governments	
Growing Private Sector Support	
OBSTACLES FOR SMART CITY SOLUTIONS	8
THE SOLUTION: THE 3 PILLARS	9
Technology Pillar	
- BCB Mainnet (BCB Blockchain Protocol)	
Transactions Pillar	10
- Smart Contract BRC20 and Virtual Machine	
- BCB Wallet and BCB Scan	
- BCB Card	
Ecosystem Pillar	
Dapps SDK and Marketplace	
- BCB Foundation	11
- BCB Academy	
- BCB Incubation	
- BCB Innovation Power Fund	
- Smart City Initiatives	
- Smart City Sandbox Environment	
BCB MAINNET	12
Communication Protocol	
Consensus Algorithm	
Data Storage Technology	
Cryptography	13
Smart Contract - BRC20	14
PARTICIPANTS, SERVICES AND RULES IN BCB ECOSYSTEM	15
Participants	
Services	
- Transaction fees	
Rules	16
- Supernodes Governance Model	
- Ecosystem Growth Model	
- Mining Pool	

- Max Token Supply	17
- Locked BCBs and Release Mechanism for Team and Foundation	
- Burning Mechanism	
<hr/>	
TOKENOMICS	18
<hr/>	
BCB Distribution	19
Use of Contributions	
<hr/>	
OUR SMART CITY CONCEPTS	20
<hr/>	
Renewable Resource	21
Sustainable Smart City	
Quality of Life	
Empowering people, businesses and governments	
Interconnectivity across Cities	
<hr/>	
CASE STUDY - YATAI CITY	22
<hr/>	
MILESTONES & ROADMAP	23
<hr/>	
TEAM	24
<hr/>	
DISCLAIMER	26
<hr/>	
CONTACT	27
<hr/>	

I N T R O D U C T I O N

There is an exciting [opportunity \[described in page 7\]](#) in the development of smart cities with blockchain technologies. Recent trends have shown that blockchain can be successfully utilised in IOT, entertainment, information technology, cybersecurity, and many more industries.

In this white paper we introduce smart city technologies and a smart city ecosystem developed by BCBChain.io, a Singapore registered company, to enable and support technological solutions for the smart cities of the future. BCBChain.io has developed its own technology (a blockchain protocol called "BCB Mainnet") and is using this technology to develop new products and services. It is also building an ecosystem for smart cities called BCB Ecosystem as a smart city solution. The BCB Ecosystem is an infrastructure that enables the participation of all stakeholders in way that their stems can interoperate; and a utility token, BCB, that can be used in the ecosystem for the payment of products and services. Development of the technology and ecosystem began in March 2018 and consists of these [3 major pillars \[as further described in page 9\]](#).

Vision

BCBChain.io seeks to provide a streamlined and secure blockchain protocol for smart cities. It will be able to interface with other forms of technologies to create & support the solutions for the smart cities of the future so that they are more livable, workable and sustainable for the next generation.

Mission

BCBChain.io is committed to the development of its blockchain protocol for both public and private sectors, providing a one-stop shop for turning smart city concepts into smart city solutions. BCBChain.io supports projects in the following ways:

1. Providing the technology infrastructure for smart cities
2. Accelerating growth of smart city projects
3. Empowering smart city projects
4. Creating projects to address current or future issues in smart cities

O P P O R T U N I T I E S

Market Size

According to Grand View Research, the smart cities market size is expected to grow to 2.57 Trillion by 2025^[1]. These domains include tourism, smart grid, security, education, home and building, healthcare, transport, water and waste.

Growing Initiatives by Governments

There is also a growing number of countries in the world supporting smart city initiatives. India's Smart City Mission^[2] aims to create more than 100 smart cities with more than USD \$13 billion. Canada's smart cities challenge^[3] has prize money of up to USD \$50 million. Australia's competitive Smart Cities and Suburbs Program^[4] has grants totaling up to USD \$50 million. The European Commission's Horizon 2020 scheme^[5] offers projects projects €14.5 to €20 million each totaling up to €83 million. According to IDC, it is also predicted that government spending on Smart Cities will reach \$158 billion^[6] per year in 2022.

Growing Private Sector Support

There has been a huge emphasis and concern on sustainability in the 2019 World Economic Forum^[7] covering waste, climate, forest protection as well as an alliance of more than 50 CEOs collectively reducing their own carbon emissions by 9%^[8]. The private sector has Bill Gates investing USD\$80 million into Arizona^[9] as well as multinational companies like Alphabet (Google's Parent company) 's USD\$50million investment in Toronto^[10] and Cisco's USD\$1 billion Smart Cities Program^[11].

[1] Smart Cities Market Size Worth \$2.57 Trillion By 2025 | CAGR: 18.4% <https://www.grandviewresearch.com/press-release/global-smart-cities-market>

[2] India's Smart City Mission <http://smartcities.gov.in/>

[3] Canada's smart cities challenge https://www.canada.ca/en/office-infrastructure/news/2017/11/backgrounder_smartcitieschallenge.html

[4] Australia's competitive smart cities and suburbs program <https://www.business.gov.au/assistance/smart-cities-and-suburbs-program>

[5] European Commission's Horizon 2020 scheme <https://ec.europa.eu/inea/en/horizon-2020/smart-cities-communities>

[6] IDC Forecasts Smart Cities Spending to Reach \$158 Billion in 2022, with Singapore, Tokyo, and New York City Among Top Spenders <https://ec.europa.eu/inea/en/horizon-2020/smart-cities-communities>

[7] 6 things we learned about the environment at Davos 2019 <https://www.weforum.org/agenda/2019/01/the-environment-was-high-on-the-agenda-in-davos-but-what-actually-happened/>

[8] An open letter from business to world leaders: "Be ambitious, and together we can address climate change" <https://www.weforum.org/agenda/2018/11/alliance-ceos-open-letter-climate-change-action/>

[9] Bill Gates invests \$80 million to build Arizona smart city <https://money.cnn.com/2017/11/13/technology/future/bill-gates-smart-city-arizona/index.html>

[10] Google's parent company to build futuristic neighborhood in Toronto <https://money.cnn.com/2017/10/18/technology/future/google-toronto-sidewalk-labs/index.html>

[11] Cisco Announces \$1 Billion Program for Smart Cities <https://newsroom.cisco.com/press-release-content?type=webcontent&articleId=1895705>

OBSTACLES FOR SMART CITY SOLUTIONS

Projects that want to become smart city solutions face steep challenges. These challenges are:

1. Lack of multi-field talent pool and academic support. Smart city problems often require multi-field expertise to resolve. There is currently a lack of cross field learning and courses in fields like technology and sustainability or technology and finance. As of Q1 2019, there are less than 5 universities that provide smart city courses.
2. Difficulty in acquiring government support for sandboxing. Often times, many good projects are left hanging for months or years because they are unable to easily acquire the government support for sandbox environments to test their solutions.
3. Lack of security, trust of data and access to real-time information. Current consumer data sets are often stored on the cloud where they are sold to companies. Typically, most information in cities is at best a monthly view, if not longer. That means city managers are forced to make a decision based on historical information, rather than real-time data.
4. Lack of a single wholistic ecosystem for data to be efficiently utilised and shared across multiple cities. Data from different companies are often in different formats and are not easily combined. Hardware and software companies find it hard to collaborate as there is no definitive platform for smart city solutions. This makes it difficult to utilise and gain from the implementation of the analytics-driven insights that come from data comparison in multiple cities.

Today, cities can overcome all of these challenges with a well-connected, wholistic and secure blockchain ecosystem.

THE SOLUTION : THE 3 PILLARS OF THE BCB ECOSYSTEM

The three pillars that form BCBChain.io's solution and their constituent elements are:

- **The Technology Pillar**
For the development of products and services with BCB Blockchain Protocol (Mainnet).
- **The Transactions Pillar**
To enable transactions on the ecosystem, BCBchain.io has developed its smart contract, BRC20. It has developed and issued a utility token, BCB, for infrastructure services so that developers and services providers can use them to obtain infrastructure services like the tools such as BCB Scan and BCB Wallet.
- **The Infrastructure Pillar**
The infrastructure that enables the easy participation of stakeholders and their systems. Projects can be developed with the Dapps SDK and Marketplace, Smart City Sandbox Environment, BCB Foundation and Smart City Initiative.

We explain how these 3 pillars enable smart cities in the following sections:

Technology Pillar

We believe in using blockchain technology alongside any form of functions to create and support the solutions for the smart cities of the future so that they are more liveable, workable and sustainable for the next generation. To this end, we developed our own blockchain. Participants in our ecosystem can use this technology to develop services, share information and applications.

BCB Mainnet (BCB Blockchain Protocol)

BCB Mainnet which runs on Docker and the PBFT algorithm is a flexible, trust-free, secure and proprietary enterprise ledger that can support smart contracts and the creation of utility based smart city dapps, solutions and BRC20 Tokens. BCB Mainnet supports 10,000 TPS and low transaction fees. The BCB Mainnet infrastructure runs on the supernodes which are upkept by transaction fees.

Transactions Pillar

We also developed on our blockchain, the smart contract and virtual machine and provided tools for transactions within the ecosystem. BCBchain.io has also developed its smart contract, BRC20. BRC20 can develop and issue a utility token for ecosystem services so that developers and services providers can use them to obtain the tools such as BCB Scan and BCB Wallet. More information on the smart contracts, tokens, payment fees and admission into the ecosystem are found in sections below.

BCB

The participants on the BCB Ecosystem ([see p. 16](#)) will use our utility tokens, BCBs, to access the tools and pay for services provided. The tokenomics is explained in [pages 18 and 19](#).

Smart Contract BRC20 and Virtual Machine

Inspired by ERC20 published in 2015 by Fabian Vogelsteller, we developed BRC20: our technical standard used for smart contracts in our ecosystem on the BCB Mainnet for implementing tokens. The smart contract for BRC20 can be programmed with Go, Python and Javascript. BCBChain.io provides the BCB Virtual Machine (BVM) to support modularization and reduce the risk of smart contracts affecting the main blockchain. The modularization also increases efficiency for the operations of smart contracts.

BCB Wallet and BCB Scan

The BCB wallet supports the storage and transfer of BRC20 tokens. It is lightweight and convenient to use for users. Mac, Windows, Android and iOS versions are available. BCB Scan is a web-based block explorer to explore addresses, tokens, transaction records of BCB.

BCB Card

The BCB Card allows users to pay with confidence with the BCB wallet in multiple cities.

Infrastructure Pillar

To develop an ecosystem, BCBChain.io has created the following components described below.

Dapps SDK and Marketplace

The Dapps SDK allows the creation of decentralised games, e-commerce businesses, and apps of all kinds. The Marketplace features all the BCB Dapps to users of BCB Ecosystem and the public. The Marketplace is monitored strictly. Projects that run on the Marketplace go through a strict application process, code of conduct evaluation, and technical audit by the BCBChain.io team, supernode holders as well as the BCB development community.

BCB Foundation

The foundation holds smart city and blockchain IPs for the use of research and development by the BCB Ecosystem. Foundation-supported projects can utilise the IPs and technologies at minimal to no costs. The technologies created by the projects can be volunteered to be co-owned by the foundation as a pay it forward model to the development community.

BCB Academy

BCB Academy is an online learning center that provides learning materials and tools to develop utility tokens, Dapps and smart city solutions. The blockchain courses can be found online, onsite, in the classroom, and can be learned by individuals and organisations. Courses include Blockchain 101, Blockchain for Developers, and BCB Developer Course.

BCB Incubation

BCB Incubation typically supports smart city-related blockchain projects from the idea stage. We help tailor the support to match the challenges faced by the projects. Students as well as startups are both welcome. We work with partners like universities, associations, governments, private and public funds, incubators, and companies. The BCBCChain.io team provides advice and mentoring, accelerator programs, incubator facilities, funding support, technology infrastructure, and marketing outreach among our network. We work with partners to run incubation programs, hackathons, competitions, and events to develop excellent projects.

BCB Innovation Power Fund

BCB Innovation Power Fund is an early stage to late stage investment fund that partners both public and private funds to co-curate and co-invest in smart city solutions. It participates in alliances of blockchain and smart city funds. It hopes to promote more public as well as private funding participation for the development of smart cities.

Smart City Initiatives

The BCBCChain.io team seeks to collaborate with public and private sectors to co-implement initiatives to support the development of communities, growth of case studies, and adoption of technologies for smart city ecosystems.

Smart City Sandbox Environment

Sandbox environments are provided for projects built with BCB Mainnet.

BCB MAINNET

BCB Mainnet is a proprietary software developed on tendermint. The developer portal with technical documentation can be found on: <https://www.bcbchain.io/api/>

The BCB Mainnet architecture model is inspired by open source blockchains like Ethereum, Fabric, Tendermint, and Cosmos. It draws the best from them to create the underlying design that mainly includes:

- Communication Protocol
- Consensus Algorithm
- Cryptography
- Data Storage Technology
- Smart Contract

Communication Protocol

The underlying layer of BCB Mainnet records all transaction information on each block simultaneously. BCB Mainnet is compatible with multiple P2P protocols; and supports communication protocols such as HTTPS, TLS, and WSS (Secure Websockets), it also supports extension without forking the blockchain.

Consensus Algorithm

The consensus mechanism is one of the core components of the blockchain, in order to achieve consistency for each node in the blockchain system. The BCB Mainnet chooses the BFT-DPOS consensus mechanism (based on Byzantine fault-tolerant entrusted equity), which functions with high performance and high efficiency even with just 2/3 of the nodes operating normally. This allows for real time resolutions thus creating conducive speeds for enterprise applications.

Data Storage Technology

BCB Mainnet states are expressed in the form of the state database. The start state is called the genesis state, and the input set is the so-called transaction (tx) in Blockchain. The transition function is the smart contract. BCB Mainnet's "shared state" is made up of many small objects that can interact with each other through a state machine infrastructure. Docker is supported.

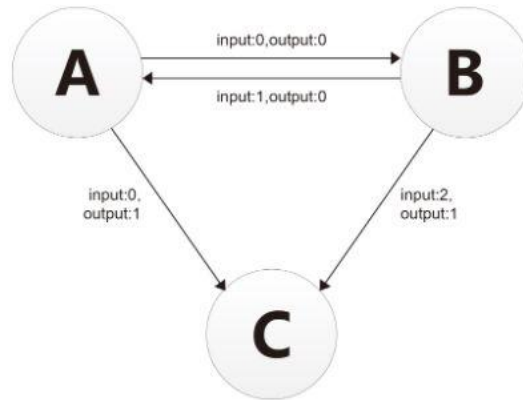


Figure 1: State Machine Infrastructure

Cryptography

BCB Mainnet uses a variety of algorithms to secure encrypt the private and public keys as shown below.

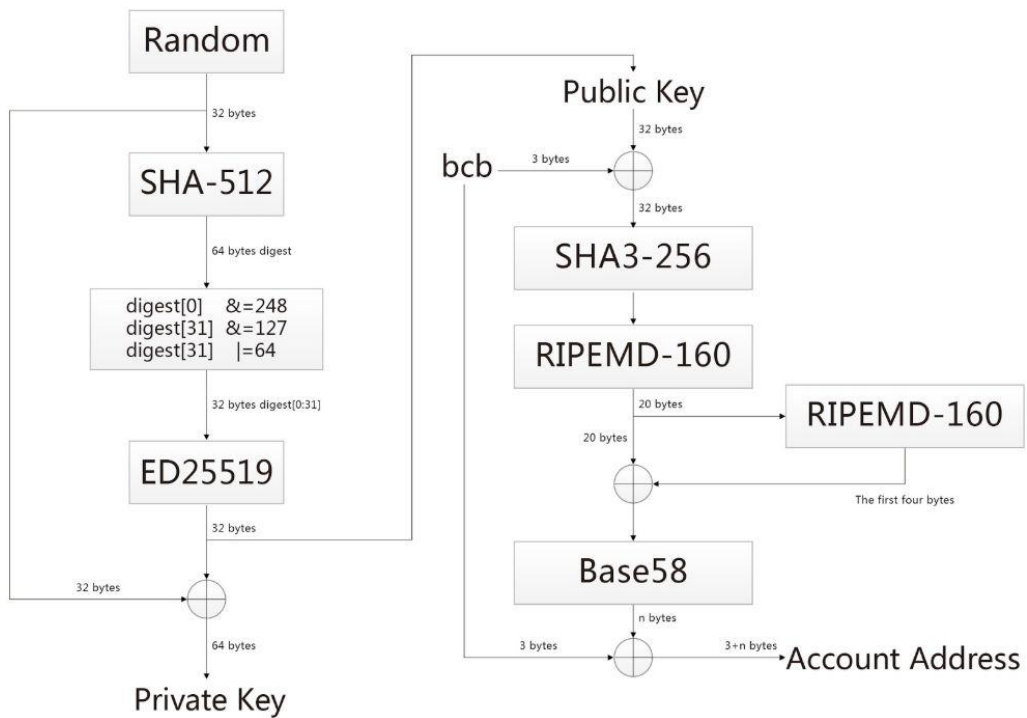


Figure 2: Cryptography used in BCB

Smart Contract - BRC20

BRC20 redefines smart contracts, in addition to data on the chain, it also allows data on the chain and under the chain to interact, and supports event response to changes in the state of the data on the chain and under the chain. Most of the commercial applications in the real world are very complex, and this complexity is reflected in the data structure and logic rules.

For an independent BVM module, the execution procedure is as follows:

1. The contract is written by the client (Console-User) in the form of a command line or RPC.
2. Cli/RPC is the processing module of the contract, responsible for receiving, and passing the input to the middle layer, and is also responsible for feeding back the results of the underlying processing to the client.
3. The RPC (Remote Procedure Call) module is responsible for receiving the execution request from the blockchain network and sending the request to the middle layer, and returns the result to the blockchain network after the execution of the contract is completed.
4. The middle layer (Mid-Ware) is responsible for synchronously transmitting commands and requests from Cli/RPC and RPC to the underlying compiler and executor for compilation and execution. The compiled execution result is returned to Cli or RPC.
5. Compiler & Actuator is responsible for compiling, running the execution environment, receiving and executing scripts, and feeding back the results to the middle tier. An active blockchain network with very frequent contract calls to ensure that contracts run stably and efficiently.

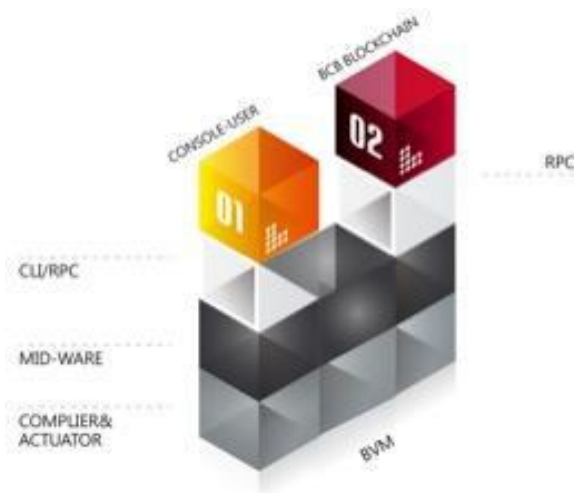


Figure 3: Smart Contract BVM Module

PARTICIPANTS, SERVICES AND RULES IN BCB ECOSYSTEM

Participants

Participants in the BCB Ecosystem include:

1. Developers and companies who use BRC20 to create solutions that provide products and services. As an open blockchain platform, BRC20 is available for use by developers who are allowed to create tokens in their jurisdictions for products and services.
2. Users who pay for the transaction fees, products and services that operate on the BCB Ecosystem. As an open blockchain platform, the BCBChain.io team only provides the ecosystem and infrastructure and will not be liable or responsible for any issues between all parties including users and products and services offered by developers and companies.
3. Supernodes and the BCBChain.io team who upkeep the BCB Mainnet are initially chosen by the BCBChain.io founders.

Services

Participants will need to access ecosystem services in the three pillars using BCBs. Holders of BCB do not have any rights to future payments from the BCBChain.io in the form of dividends or rights to any assets.

Transaction fees

The current fee for transacting on the BCB Ecosystem is the fixed value of USD \$0.0089 in BCBs as per current exchange rate on exchanges. The transaction fees are decided by the BCBChain.io team and may be subjected to change depending on network usage. The transaction fees are paid to the BCBChain.io team. There may be fees in addition to the transaction fees that the parties pay when acquiring services or products.

Rules

Supernodes Governance Model

BCB Ecosystem runs on the supernode governance model. Supernode holders include the BCBChain.io team and organizations providing long-term partnership and support for BCB Ecosystem development. Supernodes are only admitted by the BCBChain.io team. Supernodes runs servers which supports the BCB Ecosystem. Only supernodes can vote on the decisions of BCB Mainnet. For matters concerning the governance model of the BCB Ecosystem, supernodes hold annual general meetings and periodic updates. Meeting decisions will be voted on the BCB Mainnet. Votes require $\frac{2}{3}$ majority for decisions to be confirmed. Supernodes are currently owned by the BCBChain.io team and partnered organizations. Each supernode shall nominate a representative to represent it. To continue to support the BCB Ecosystem, the supernodes can benefit from the BCBs received from the mining pool.

Ecosystem Growth Mechanism

New BCBs can be only be released via future sales. The future sales of BCBs are held as a means to finance the BCB Ecosystem and to facilitate transactions on the Ecosystem. Future sales of BCBs can only be initiated digitally on the smart contract. The initiation for voting can only be initiated by the BCB supernodes.

Mining Pool

The mining pool accounts for 30% of the total initial token issuance. The mining rewards will decrease by half for every 66 million blocks. Only supernodes can mine the BCBs from the mining pool. Each halving cycle takes approximately 4 years. After halving 28 times, in 2130, the mining revenue will become 0 and all the mining revenue will be composed of transaction fees only. The following table lists the full mining economics.

Year	Total No. of Transactions	Total Mining Reward (BCB)
2018	0	0
2022	65999999	9900000
2026	131999999	4950000
2030	197999999	2475000
"	"	"
2122	1715999999	0.295042992
2126	1781999999	0.147521496
2130	1847999999	0.073760748
-	Total	19799999.93



BCB T O K E N O M I C S

Company	BCB INNOVATION PTE LTD UEN: 201927825D
Website	https://www.bcbchain.io BCB Blockchain (Building Cities Beyond Blockchain) is a blockchain protocol & ecosystem to develop solutions to support the economies of smart cities.
Ticker	BCB
Token Type	BRC20 (The BCBChain.io team has defined "BRC20" as technical standard naming definition for the token type)
Total Token	Initial Total Token Circulating Supply is 66,000,000 BCB Token supply can be only be released via the future sale of tokens initiated by the voting of the BCB supernodes.
Token Distribution	Total Token Circulating Supply 66,000,000 BCB Total Sale 13,200,000 BCB (20%) Team 13,200,000 BCB (20%) Foundation 19,800,000 BCB (30%) Mining Pool 19,800,000 BCB (30%)
Price per BCB	Value of USD \$5 in ETH, BTC, USDT
Transaction Fee	USD \$0.0089 per transaction in BCB
Initial Release Date	1 March 2018
Initial Distribution	10 March 2018

Token Supply

The token supply of BCB is 66,000,000 as of the date of this whitepaper. The token supply can be increased by the BCB supernodes via the ecosystem growth mechanism. New BCBs are generated to support the implementation of smart city solutions for the population, businesses, and governments in smart cities.

Locked BCBs and Release Mechanism for Team and Foundation

BCBs are locked and released in the following periods for the team and foundation.

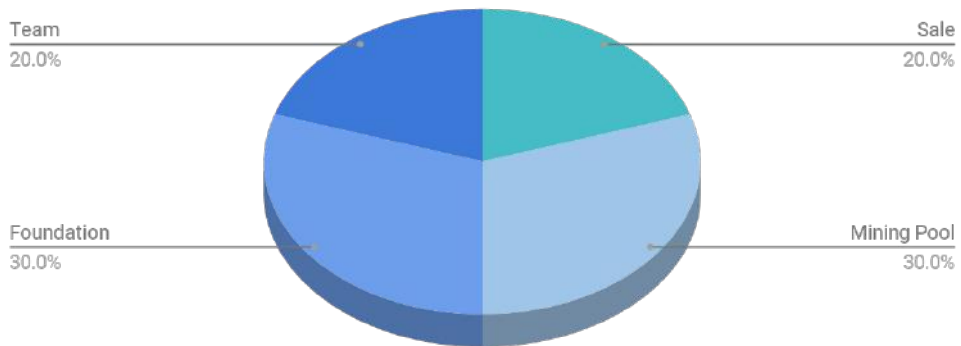
[\[More details about the tokenomics can be found on page 18\]](#)

Release Date	Release %	Team (BCBs)	Foundation (BCBs)
21 July 2019	10%	1,320,000	1,980,000
21 July 2020	20%	2,640,000	3,960,000
21 July 2021	40%	5,280,000	7,920,000
21 July 2022	20%	2,640,000	3,960,000
21 July 2023	10%	1,320,000	1,980,000
Total		13,200,000	19,800,000

Burning Mechanism

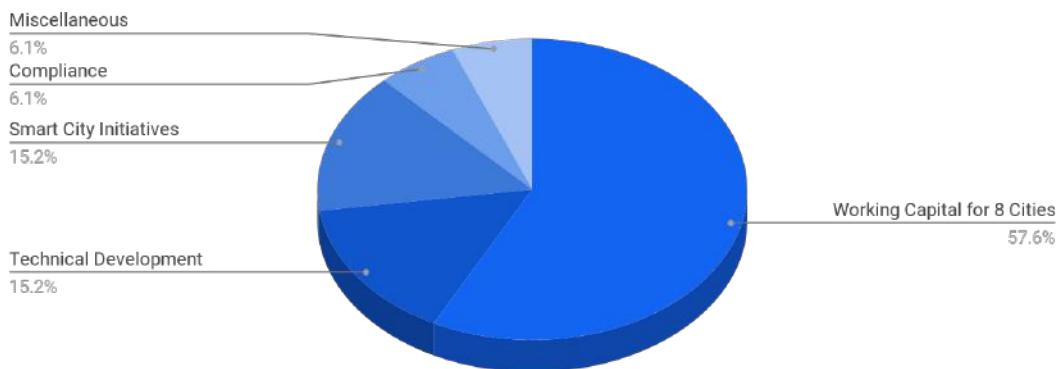
The BCB burning mechanism comes from the transaction fee collected from the network. The amount of BCB to burn is determined by the BCB supernodes. The BCB burning mechanism method is not limited to transaction fees.

BCB Distribution



Use of Contributions

The contributions from the initial sale of BCBs will be calculated as per the following expenditure explanation. The expenditure during the initial 3 years will be spent in 4 main groups: working capital for offices in 8 cities in South East Asia, Technical Development, Smart City Initiatives and Compliance. As time goes by, more capital will be required to be raised and unlocked to create and support more smart city solutions globally.



OUR SMART CITY CONCEPTS

Smart city refers to the use of emerging information technology such as the Internet of Things, cloud computing, urban infrastructure, renewable resource, sustainable environment, social and livelihood, economic industry, and municipal management to smartly perceive, interconnect, process and coordinate the relevant activities and needs of residents' life and work, businesses and government functions.

We believe in creating cities that:

- Run completely on renewable resources without affecting the environment
- Improve and empower quality of life and work for people, businesses and governments
- Interconnect cities across distances



Figure 4: Artist Impression of a Smart City

Renewable Resource

Renewable energy, water, air and food are key areas for a smart city. The BCB Ecosystem supports renewable resource solutions. One of the examples that blockchain technology can be deployed in is the power supply market. The use of solar, wind and hydropower to generate electricity can be managed on the smart grid supported by BCB Mainnet. In the agriculture space, BCB Mainnet with its traceability and transparency technology, can be used to support the supply chain and production of plants, fruits, seafood, meat and many other food supplies.

Sustainable Smart City

Our concept of a sustainable smart city is one that is able to monitor, analyse, forecast and provide solutions in all areas of life and work for an emission-free, pollutant-free, environmentally friendly city that is sustainable for generations.

Quality of Life

There are many types of measurements for quality of life. The “World Happiness Report” and the “Human Development Index” are both by the United Nations. At BCB Smart City, we believe in the flexibility to balance one’s health and apply one’s knowledge for one’s best quality of life. We hope to continuously use the BCB Ecosystem to support solutions for faster learning, storage & transfer of knowledge, reduction of sickness, improvement of health and well-being both physically and mentally.

Empowering people, businesses and governments

BCB Mainnet solves inter-departmental, coordination problems by providing a unified source of truth, making information delivery more efficient, with each department assigning a predefined, conditionally independent interface.

Interconnectivity across Cities

As global populations become more concentrated, BCB Mainnet can service the growing mass of information by interconnecting cities. This interconnection deepens the global digital business, allowing cross-cutting platforms to connect services in different cities. One aspect of such a solution is a multi-city integrated tracking and payment system for accurate and transparent transportation mileage bills.

CASE STUDY - YATAI CITY



Figure 5: Artist Impression of Yatai City

On March 2019, Yatai City, a \$15B USD, 120 square kilometre special economic zone in Myanmar, is the first smart city to use BCB.

BCB Ecosystem supports the growing living & working population, merchants and enterprises in Yatai City by providing solutions like:

- Digital points for commerce, digital wallet, payments, rentals and utility bills
- Storing the deeds of the land and properties of Yatai City
- Building smart city solutions, including infrastructure

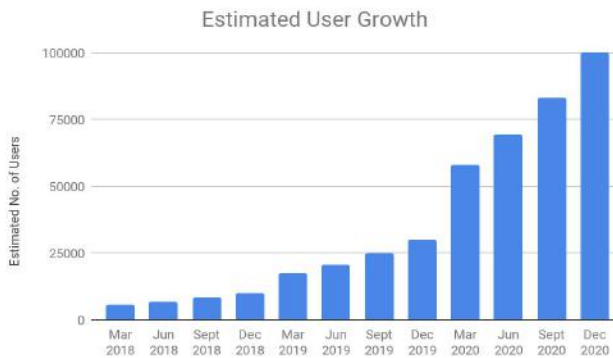


Figure 6: Projected User Growth of Yatai City

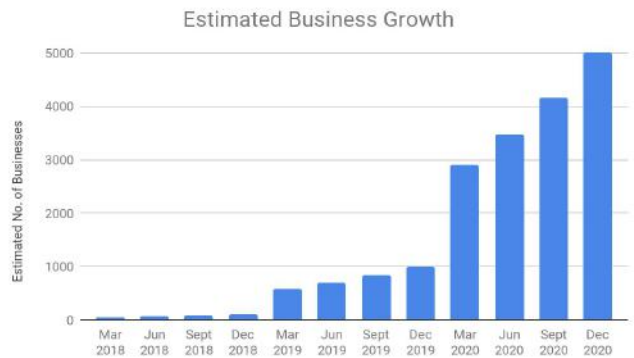
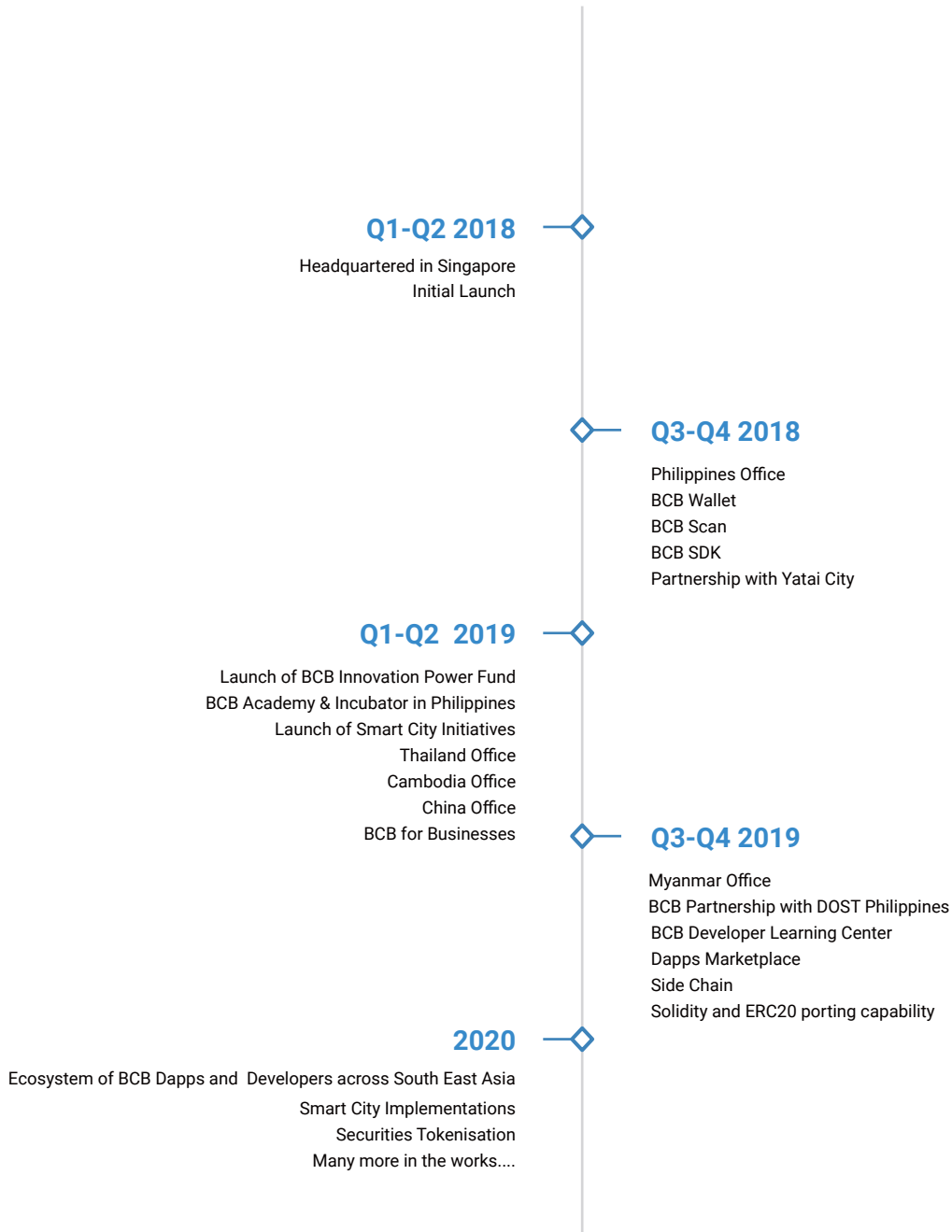


Figure 7: Projected Business Growth of Yatai City

Disclaimer: Yatai City's economic value does not represent the economic value of BCB.

MILESTONES & ROADMAP



T E A M



CEO Douglas Gan

Douglas Gan is the CEO of BCB Blockchain. He is a Singaporean technology entrepreneur and angel investor for startups.

Douglas Gan is a technology entrepreneur and angel investor for startups.

Douglas is also the CEO and co-founder of GBCI Ventures, a leading smart city solutions venture builder. GBCI uses artificial intelligence (AI) as the backbone and weaving together AI, robotics, virtual reality, big data and IoT to build smart cities all around Asia and connecting them to offer borderless urban services.

His achievement can be marked by winning the Young Professional of the Year by Singapore Computer Society in the Year 2011. In addition, his alma mater, Ngee Ann Polytechnic recognized him with an Outstanding Alumni Award, given to the Top 25 Alumni since the schools inception 50 years ago.

Between 1997 and 2019, Douglas sold seven of his companies to multinational corporations. With his vast experience in multiple industries, Douglas leads BCB to become one of the fastest growing and top blockchain company in the world.



CO-CTO Vanessa Koh

Vanessa Koh is the CO-CTO of BCB Blockchain.

Vanessa Koh is a Techpreneur and a start-up specialist, who partners with CSuite Executives to engineer the best customer-centric products and deliver multimillion dollar revenues. Since 2010, Vanessa has started 4 technology start-up companies in the areas of SAAS infrastructure, software and web applications development, Enterprise Resource Planning systems, Blockchain and smart contract technologies as well as 2 Fintech investment funds.

Driven and with a hands-on approach, Vanessa has recruited and worked with the brightest talents around Asia and enjoys applying game theories and gamification in her work. Vanessa holds a Bachelor of Computer Science in Game Design from the University of Wollongong.



CO-CTO Jason Su

Jason Su is the CO-CTO of BCB Blockchain. He has over 12 years of IT experience.

Since 2007, Jason has worked as a senior programmer in the high-tech field in a number of multinational companies. With a strong technical foundation, he founded his own company in 2013.

His company provides online gaming platform solutions, mobile applications, data storage system development and maintenance, and network security. His clientele consists of over 100 companies in the Philippines, China, Hong Kong, Taiwan, Thailand, Myanmar and Singapore.



VP, Policies Jessica

Jessica is the VP of Policies.

Jessica has years of experience in Fintech's strategic growth to manage Fintech's relationships with international institutions to shape the global policy environment in which BCB does business.

Experienced in promoting the emergence of a world beyond cash; the deployment of open, interoperable payment systems; the development of digital infrastructure, policies, regulations, and platforms that promote digital financial inclusion; the application of BCB solutions to a broad range of smart city and development objectives.

She drives international thought leadership, building alliances across countries and industries, and advocating effectively through international fora are vital requirements.

DISCLAIMER

All information and materials contained in this document are provided for informational purposes only and are subject to change at any time. BCB INNOVATION Pte Ltd ("BCBChain.io") may, add information to, remove or amend any information and/or material contained in this document at any time and in its sole discretion without notice. This document and all information contained herein is not directed at or intended for use by any person resident or located in any jurisdiction where (1) the distribution of such information is contrary to the laws of such jurisdiction; or (2) such distribution is prohibited without obtaining the necessary licenses or authorizations by BCBChain.io and such licenses or authorizations have not been obtained. Products and services described herein may not be eligible for sale or available to residents of certain countries or certain categories of purchasers. Please consult the applicable terms and conditions such as sales restrictions or key specific notes for further information once the final documents may be available. No information or materials contained herein should be construed as a solicitation, offer or recommendation, to buy or sell any products or services, regardless if those products and services are viewed by purchasers themselves as investable or non-investable assets, to execute any transactions or to conclude any legal act of any kind whatsoever. The materials should not be regarded by recipients as a substitute for the exercise of their own judgment. Any opinions are subject to change with notice and may differ or be contrary to opinions expressed in another context as a result of using different assumptions and criteria. No purchasing or other decisions should be made solely based on the contents or information found in this document. When making a decision about purchases, purchasers should seek the advice of a legal or other relevant professional advisor or qualified expert. Purchasers have the utmost duty to conduct their own research that products and services described herein are not deemed as securities, investment or other financial instruments with respect to all jurisdictions relevant to their purchasing decisions. BCB does not guarantee that an active secondary market will necessarily be developed for the BCB. As a new entity as well as the issuer of BCB, BCB does not have operating history prior to this project. BCB does not provide advice of investment, legal or tax nature and nothing herein should be construed as being financial, legal, tax or other advice. BCB does not represent that any products and services discussed herein are suitable for any purchaser who may or may not wish to purchase. This document may contain statements that constitute "forward-looking statements". While these forward-looking statements may represent judgment and future expectations of BCB, a number of risks, uncertainties and other important factors could cause actual developments and results to differ materially from those judgment and future expectations. BCB will give its update or alter its forward-looking statements whether as a result of new information, future events, or otherwise, whenever appropriate. This document may contain third-party content or links or reference to third-party websites. These content and links are provided solely for your convenience and information. BCB has no control over, does not assume any responsibility for and does not make any warranties or representations as to, any third-party content or websites, including but not limited to, the accuracy, subject matter, quality or timeliness. BCB, or if any, the applicable third-party owner, retains all right, title and interest (including copyrights, trademarks, patents, as well as any other intellectual property or other right) in all information and content (including all text, data, graphics and logos) in this document. Individual pages and/or sections of this document may be printed for personal or internal use only, and provided that such printouts retain all applicable copyright or other proprietary notices, including this disclaimer. BCB has taken all reasonable care to ensure that the facts stated in this document are true and accurate in all material respects, and that there are no other facts the omission of which would make misleading any statement in the document, whether of facts or opinion.



C O N T A C T

Website: <https://www.bcbchain.io>

Facebook: <https://www.facebook.com/BCBblockchain/>

Telegram: <https://t.me/bcbcommunity>

Github: <https://github.com/bcbchain>

Email: project@bcbchain.io