Blockchain Data Center powered
By Private Electricity Trading System

BDC

White Paper

All Mined BTC Buyback！ BDC！

Legal Bill

Legal Bill

Project Summary

Purpose

Build a decentralized data center ecosystem that independently uses global eco-friendly electricity.

Goal

1. Secure eco-friendly power facilities around the world and complete the blockchain technology with a decentralized electrical power trading system utilizing the abundant eco-friendly energy resources, reducing unnecessary power distribution costs.

2. Through the saved cost of electricity due to lower prices, the company creates a global data center business ecosystem and designs an innovative crypto economy.

Project Overview

BLOCKCHAIN DATA CENTER TOKEN Project (Project Name: 'BDC') is a data center ecosystem project that aims to build a decentralized electrical energy transaction system and a cryptocurrency generation transaction distribution system that will be used as a means of power trading value in that system. To this end, we build a private power transaction system blockchain infrastructure for decentralized electric energy production and transaction and provide a stable and open transaction environment for BLOCKCHAIN DATA CENTER TOKEN tokens created and validated through network participation.

• BLOCKCHAIN DATA CENTER TOKEN Project works with citizens, cities, local governments, and national units to build a global infrastructure for inefficient existing energy production and trading market improvements.

• BLOCKCHAIN DATA CENTER TOKEN Project designs the BLOCKCHAIN DATA CENTER

TOKEN token system, a network distribution medium, based on a reliable stand-alone

electrical energy trading validation system.

• BLOCKCHAIN DATA CENTER TOKEN tokens are used as a medium for trading electricity

over an initial network and are designed to function as a trading currency for a crypto data

center ecosystem.

• The meaning of the transaction currency of a crypto data center ecosystem includes the

possibility of being a transaction-based currency of the Security Token Offering (STO)

project, such as mining projects, power distribution projects, and the establishment of large-

capacity electrical energy generating facilities in subsequent phases

1. B LOCKCHAIN DATA CENTER TOKEN
I Project
B (Project Name: 'BDC')

1-1. Importance of Electrical Energy and Current Status of Use

Electricity energy is a very efficient solution for economic development, welfare, and poverty alleviation in modern society. Ensuring that everyone can use electrical energy fairly is a continuing challenge to global development.

However, the energy production system so far is hardly environmentally friendly. Historically, energy production systems have relied on carbon dioxide (CO_2) and other fossil fuels (coal, petroleum, and gas) that produce greenhouse gases. To solve the problem of recent rapid climate change, we need to shift our consciousness about the current energy sources for electrical energy productions.

The global community is currently spending a lot of energy on expanding its data center to the extent that this phenomenon has come to be known as the cloud war.

In addition, there should be concerns about the current centralized problems of large-capacity power sources and transmission and distribution facilities, and how to fundamentally address large-scale energy losses that inevitably arise while delivering electrical energy from large-scale power plants to users.

1) Bitcoin Mining

The Blockchain Data Center (BTC Mining Center White Paper refers to this as the BDC Center) continues to expand, and the global bitcoin hash rate is expected to surpass 85EH/S and reach 100EH/S soon. (1EH/S = 1 Million TH/S)

According to the Cambridge Bitcoin Electricity Consumption Index, developed by the Jersey Business School at Cambridge University in the U.K., the amount of power that goes into the bitcoin mining network for one year is estimated at 64.63 terawatt-hours (ThWh). This amounts to 0.26% of the world's total electricity output and 0.3% of its total consumption.

(Source: Cambridge Bitcoin Power Electricity Consumption Index)

How does this amount of electricity compare to the world's ranking in electricity usage? According to Cambridge University, the annual power consumption of bitcoin mining networks ranks 41st in the world amongst different countries. It is like the amount of electricity used by the entire country with a mid-sized economy. BDC power consumption has a similar correlation with prices.

Bitcoin Price Fluctuations (July 2018~July

Bitcoin Electrical Power Consumption Index (July 2018~July 2019)
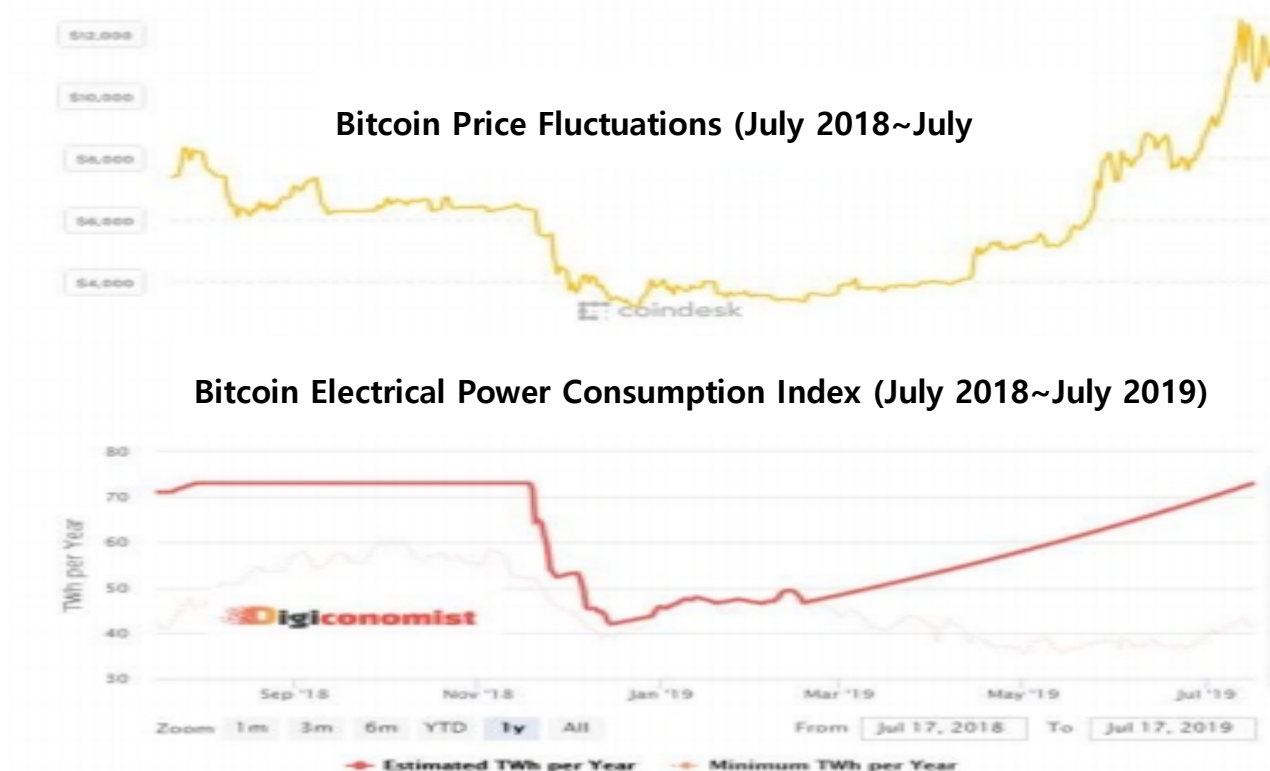
2) Cloud Computing

It is also much larger than the BDC as well as the IDC center. Along with 5G and artificial intelligence real-time streaming service, it is increasing explosively. Global IT companies such as Google, Oracle, Amazon, Microsoft, and Alibaba are making aggressive investments to expand their cloud infrastructure. Oracle announced that it will create data centers in 12 locations around the world over the next two years. Google has also decided to build five additional data centers, and it has already invested 30 million USD in building cloud infrastructure over the past three years.

Amazon is also making additional investments by announcing its plan to expand 12 data centers (+22.6% compared to before). So why are global IT companies making such aggressive investments?

the top global market cap group

Company name		Marketcap (USD)	Marketcap (KRW)
Apple	🇺🇸	928,000,000,000	1056 조원
Microsoft	🇺🇸	919,000,000,000	1046 조원
Amozon	🇺🇸	902,000,000,000	1026 조원
Google	🇺🇸	840,000,000,000	956 조원
Berkshire Hathaway	🇺🇸	504,000,000,000	573 조원
Facebook	🇺🇸	501,000,000,000	570 조원
Alibaba	🇨🇳	480,000,000,000	546 조원
Tencent	🇨🇳	455,000,000,000	518 조원
Johnson & Johnson	🇺🇸	362,000,000,000	412 조원
JPMorgan Chase	🇺🇸	344,000,000,000	392 조원

http://www.mrktcap.com/ 2019.07.April

One thing in common with global companies, such as Apple, Microsoft, Amazon, and Google, that are about to join a 1 trillion USD club in market value, is that they are expanding their "cloud" business. This is because "cloud" will eventually serve as a platform to fuse core technologies of the fourth industrial revolution, such as the Internet of Things (IoT) and artificial intelligence (A.I.).

Cloud is the fastest-growing segment of the data-driven Fourth Industrial Revolution, with companies moving rapidly toward digital transformation.

This is because cloud computing power is essential to effectively manage and leverage the proliferation of data to generate new value.
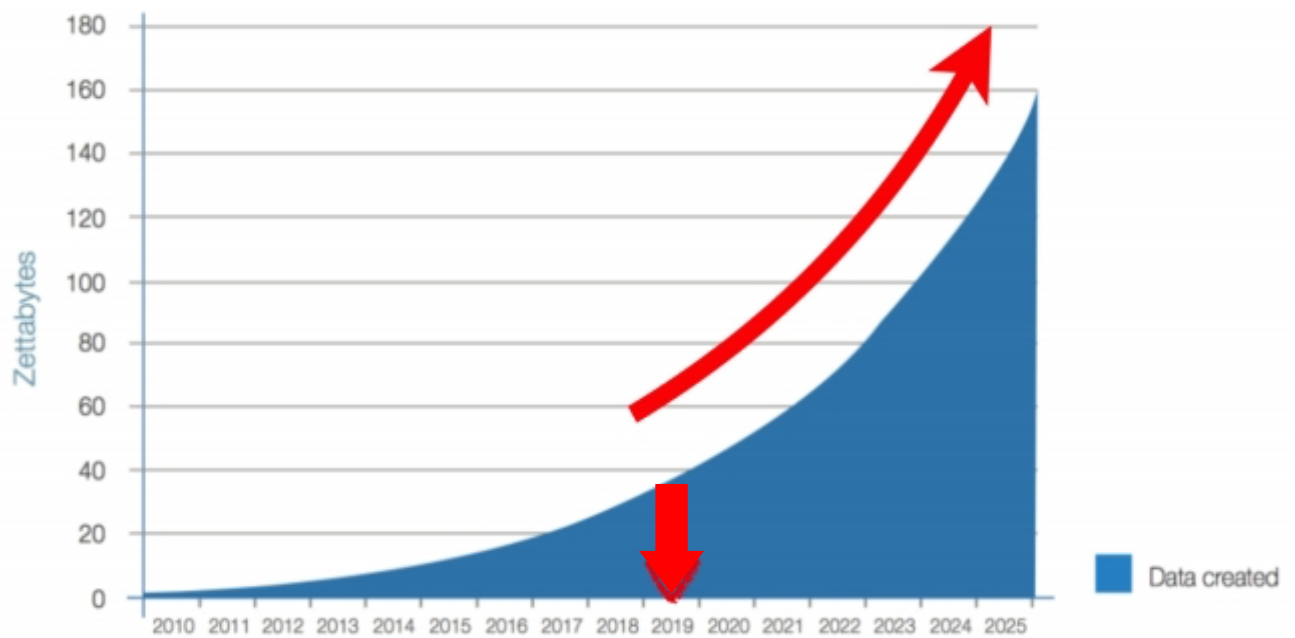
Source: IDC's Data Age 2025 study, sponsored by Seagate, April 2017

3) Annual Size of the Global Datasphere

IDC Data Age 2025 studies show that today there are approximately 25 zettabytes (=27.49 trillion gigabytes) of data in the world as of 2019. These digital data are rising rapidly, including medical information, mobile information, wearables information, and digital camera information, and are expected to be 6.5 times higher than in 2019 by 2025.
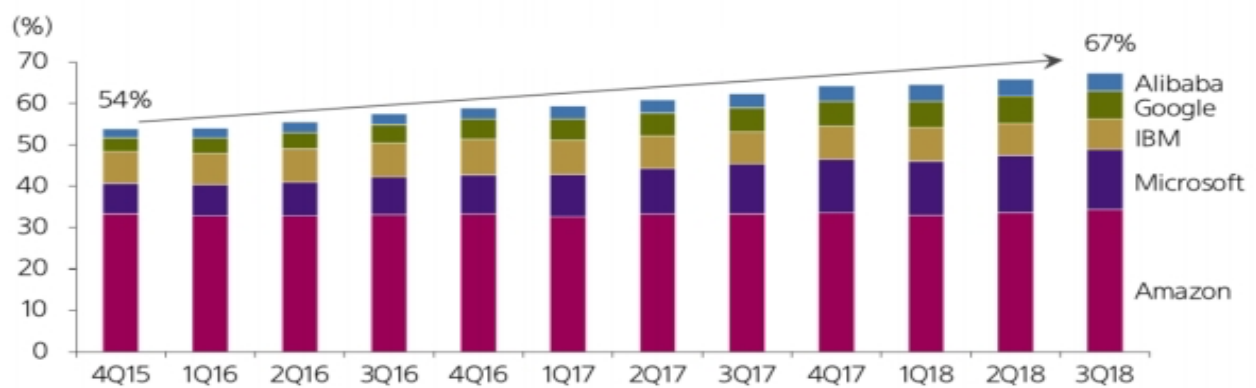
4) Composition of Cloud Ecosystem

It is gradually expanding from IaaS (Infrastructure as a Service) and PaaS (Platform as a Service) to SaaS (Software as a Service).

Domain	Business Details	Representative Companies
IaaS (Infrastructure as a Service)	Provides the most basic computing resources, such as networks, storage, and servers	Amazon, Microsoft, Google, IBM
PaaS (Platform as a Service)	Provides an environment for software development in the cloud	Amazon, Microsoft, Google, Salesforce
SaaS (Software as a Service)	Develops and delivers software based on IaaS and PaaS computing environments over the cloud	Salesforce, Microsoft
Physical Infrastructure Provider	Ownership of data centers and leasing them to companies in need	Equinix, Digital Reality, CyrusOon, Interxion, Coresite Reality

Cloud 'dinosaur' companies with enormous capital, such as Amazon and Microsoft, build, own, and operate their own data centers, but even those companies rent and use data centers in the new market, while non-super cloud companies quickly build or expand their IT infrastructure to respond to market conditions.

5) Market Share by Top 5 Cloud Services Companies

The IaaS/PaaS cloud market is increasingly dominated by top players. According to market share trends, the combined share of the top five companies (Amazon, Microsoft, Google, IBM, and Alibaba) was 54% at the end of 2015, but expanded to 67% as of the third quarter of 2018.

Considering the first-mover advantage, economies of scale, the depth and diversity of economic services of the leading companies, their competitiveness is expected to become stronger over time.

Because competitiveness in the cloud market can be determined by 'economies of scale', cloud operators need a 'super-large infrastructure investment' called data center, and 'high maintenance savings' such as operating costs to achieve economies of scale to create price competitiveness.

*Hyperscale Data
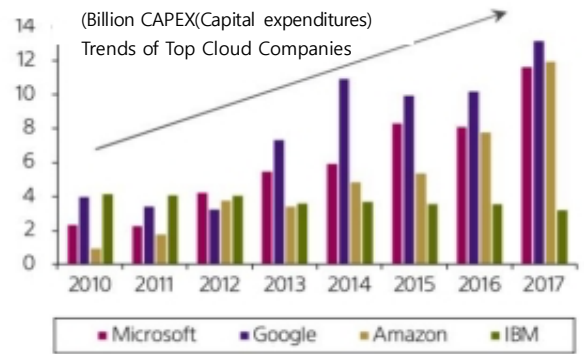
*Bloomberg

The cloud market is solidifying a duopoly between the first mover Amazon and the fast follower in Microsoft, but as they are still in their early stages, the top players have enough room to grow together, and not to compete for each other's market share. Until the market reaches maturity, top cloud service providers will continue to expand their investments and expand their services that can be delivered to ensure a competitive edge.

6) Spread of Hyperscale Datacenters

According to Cisco data, the number of hyperscale data centers essential for managing large volumes of data has increased by 14.2% (386) compared to the previous year in 2017, 448 in 2018, and is predicted to rise by 10.17% (628) in 2021 compared to 2020.

By region, North America accounted for 48% of data centers and Asia-Pacific accounted for 30%.

*UN Population Prospect 2017
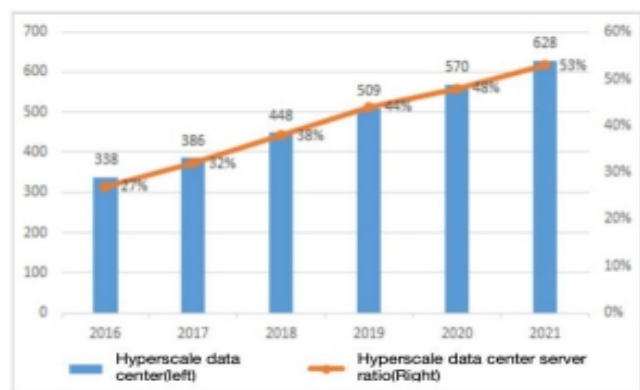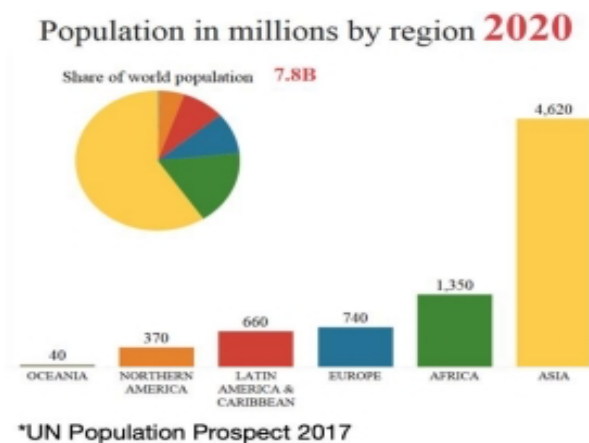
*CISCO Global Cloud Index(2018)

However, as cloud usage increases due to the supply of mobile data terminals, Google, Amazon, and Facebook are actively attracting global data centers in Asia, and as of 2021, the Asia-Pacific region is expected to reach 39% of the total and 35% of the total in North America.

7) Cloud Data Center Investment Costs and Prospects

As the cloud data center market grows in size, companies around the world are investing in data centers. According to Gartner's 2018 data, IT data center system investment costs increased by 3.87% year-on-year to 188 Billion USD in 2018 and 190 Billion USD in 2019.

With the cloud market expected to grow steadily by 2025, investment costs are certain to increase further.

(Billion USD)
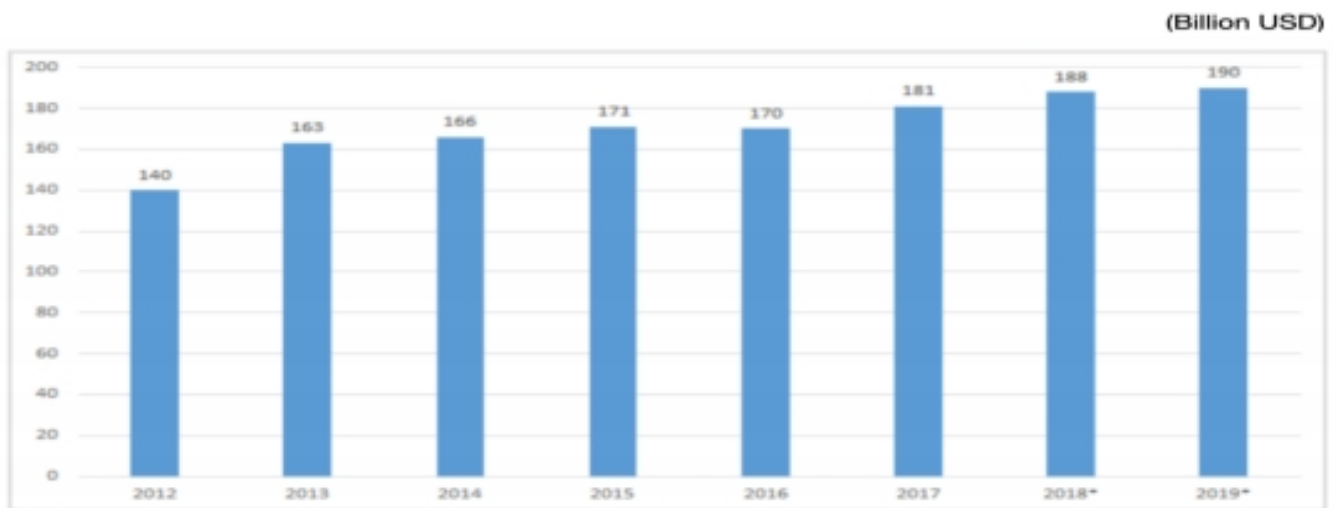
*Gartner(2018)

8) Cool IT

This is a result of evaluating foreign companies side by side based on the same criteria, such as companies' performance, commitment to use of renewable energy, and transparency of information disclosure.

Already more than 80 large multinationals (http://there100.org/companies) have promised to use 100% renewable energy, while some are calling on their partners to procure part of their electricity use from renewable energy. The Norwegian National Fund, the world's largest sovereign wealth fund, and U.S. university funds, including Stanford University, have been withdrawing investment from coal-related companies one after another. With the Paris Climate Change Agreement aimed at reducing greenhouse gas emissions worldwide in effect, international pressure on governments and businesses is expected to intensify. In the current era of 'carbon zero' economy, the use of renewable energy is seen as essential not only to the corporate brand image but also to reduce the real economic burden.

The Cool IT Leaderboard (Version 4 - December 2010), Greenpeace.
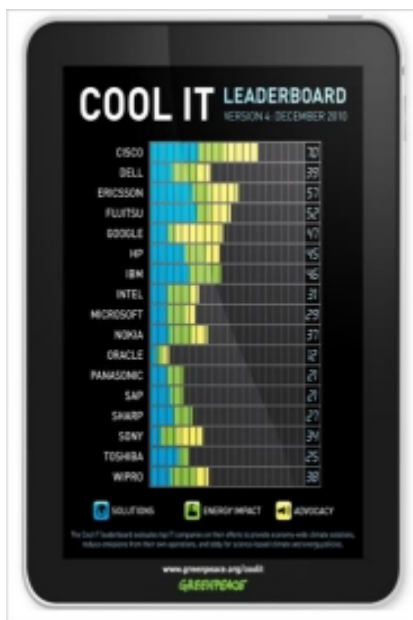
	Previous Total	New Total	Climate Solutions				Energy Impact					Political Advocacy				
			Current Savings Calculation	Funds Metrics	Investment	Future Savings Idea	Absolute Emissions Reduction Target	Mitigation Strategies	Infrastructure Siting Policy	Product Efficiency & Supply Chain Footprint		Political Speech	Political Policy	Reaction Bonus	Negative Lobby Penalty
Cisco	62	70	31	19	10	2	0	17	5	7	2	3	22	7	8	7	0
Dell	28	39	14	7	6	1	0	16	5	6	2	3	9	7	2	0	0
Ericsson	53	57	27	17	9	1	0	11	2	5	-	4	19	5	10	4	0
Fujitsu	36	52	30	17	7	1	5	9	3	2	1	3	13	2	10	1	0
Google	33	47	11	2	4	5	0	6	0	1	5	-	30	9	11	10	0
HP	41	45	22	12	8	2	0	14	4	4	2	4	9	2	6	1	0
IBM	42	46	25	16	6	3	0	21	5	8	4	4	0	4	4	0	-10
Intel	27	31	11	2	5	3	1	15	4	7	2	2	5	0	6	4	-5
Microsoft	31	29	11	5	6	0	0	12	1	7	4*	-	6	3	5	3	-5
Nokia	22	37	12	5	6	1	0	15	4	6	1	4	10	4	6	0	0
Oracle	n/a	12	4	3	1	0	0	4	1	2	1*	-	4	0	4	0	0
Panasonic	14	21	11	6	3	2	0	10	1	1	-	8*	0	0	2	0	-5
SAP	22	21	8	5	0	3	0	13	3	6	4*	-	0	0	0	0	0
Sharp	18	27	15	3	6	3	3	12	2	2	-	8*	0	2	0	0	-5
Sony	16	34	7	0	5	2	0	16	5	5	-	6*	11	5	11	0	-5
Toshiba	22	25	18	10	3	2	3	7	2	1	-	4*	0	0	2	0	-5
Wipro	n/a	38	13	9	0	1	3	16	4	9	0	3	9	3	5	1	0

*If a company does not have significant cloud driven footprint to warrant an Infrastructure Siting Policy, it will be evaluated for 10 maximum points under the Product Efficiency/Supply Chain Footprint criterion, and vice versa.

9) Conclusion

Both BDCs and IDCs must use a huge amount of electric energy to maintain the data centers, and their consumption is certain to increase further in the future.

So now what? Does electricity have to go through a complicated distribution process like it is now?
Who needs it the most?

What if we could save the distribution process by attracting data centers near an eco-friendly power plant instead of building power transmission towers and converter substations to send electricity over a long distance?

That's right!

This is the most efficient way to utilize electrical energy.

This is what we call a decentralized, blockchain-based power grid, a private blockchain network called BLOCKCHAIN DATA CENTER TOKEN that practices transparent disclosure and trading of electrical energy between the producer power plant and the user.

1-2. Electric Energy Trade

BDC network is an energy trading platform that supports transparent disclosure of energy production information and fair trade with consumers.

Electric energy producers make transparent disclosure of their energy output and are certified through the BDCnetwork. In proportion to the amount, BLOCKCHAIN DATA CENTER TOKEN tokens can be reused to preserve the cost invested for energy production, for reinvestment such as the expansion of electric energy production facilities.

The stable BLOCKCHAIN DATA CENTER TOKEN network can provide stable returns to electrical energy producers and suggest more reasonable electrical energy consumption costs to consumers, excluding the cost of building and operating large power distribution facilities, costs of securing redundant power, and costs of losing power.

In order to reflect the exchange value of electric energy that varies by power source, ECT (Exchange Certificate Token, a private Blockchain Sub Token only used to validate production, not actually distributed and is automatically incinerated in 1KW units with the used token) and BLOCKCHAIN DATA CENTER TOKEN (tokens are used to handle electrical energy costs through payment, clearing, and settlement processes.

1-3. Electrical Energy Production Management

The BLOCKCHAIN DATA CENTER TOKEN network system is a scalable model that can provide economic benefits to both producers and consumers through various simulations. For more solid proof, BDCNetwork will initially focus on stabilizing the trading system of the produced electric energy.

Along with stabilizing the trading system of electrical energy, a pilot complex is installed by adopting clean energy generation technologies tailored to the characteristics of each region, demonstrating whether the generated electrical energy can generate economic incentives through the BDCnetwork. This accumulation of empirical data is transparent and, after initial system stabilization, applicants are recruited to participate as producers in the BDCNetwork. Advice on

locally available clean power sources and facilities are provided to the recruited producers.

After the amount of energy produced by producers participating in the BDCNetwork exceeds a certain amount, it will expand to the area of energy demand management.

2. Place of Business

Geographic Distribution of Mining Facilities Worldwide
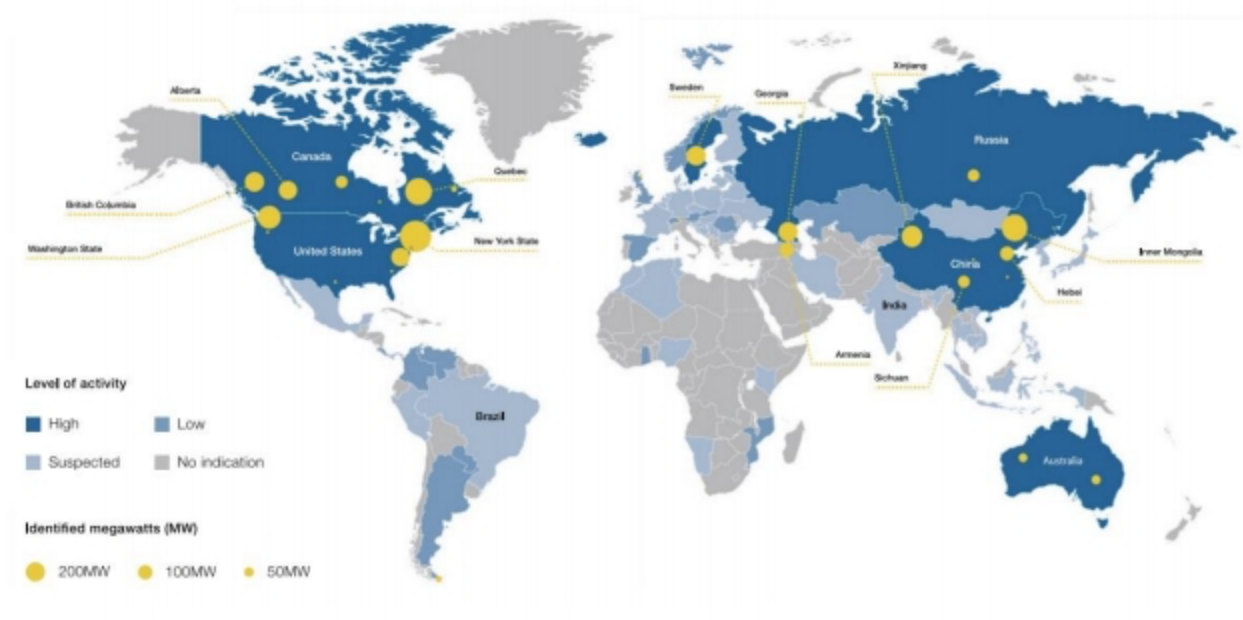
Source : Cambridge Center for Alternative Finance 2018, University of Cambridge

As shown by the geographical distribution of the above mining facilities, large mining facilities are concentrated in China, North America (US and Canada), and Northeast Europe (Russia and Georgia). Until 2017, over half of the world's mining facilities were installed in China, and despite the regulations by the Chinese government, it was still an important hub for mining facilities. In fact, the deepening regulations did cause some overseas relocation of mining facilities in China, but there was no large exodus of mining facilities in China. However, many small and medium-sized mining facilities in China eventually ceased operation due to a continuation of decline in cryptocurrency in 2018, on top of the deepening regulations.

Large mining facilities in China are located in the north (e.g., Inner Mongolia, Xinjiang Autonomous

Region, Hebei Province, and Heilongjiang Province) and southwest (e.g., Sichuan Province, Yunnan Province, and Guizhou Province), and outside of China, the United States (e.g., Washington State, New York State) and Canada (Quebec, British Columbia, Alberta) and Scandinavia (e.g., Iceland, Norway, Sweden) are showing an increase in mining facilities.

In other words, the mining of cryptocurrency, which had been concentrated in China since 2017, has been spreading from China to North America and Scandinavia, along with the strengthening of the Chinese government's regulations, and this situation can be seen positively in the crypto ecosystem. This is because the geographical decentralization of mining reduces the risk of closing operations due to economic factors (e.g., steep increases in electricity prices and excessive taxing on mining revenues) and political factors (e.g., unstable political situations, tougher sanctions on mining industries) that may occur at certain local stations.

Such large mining facilities are located in selected areas, and it is important to select locations that meet certain conditions to install large mining facilities.

So what factors are important in selecting locations for new mining facility installations?

1) Areas with cheap electricity supply

2) Local regulations that are favorable to the crypto market, including the mining industry.

3) A politically stable region

4) Areas where Internet connections are fast and smooth

5) Cold weather (cooling costs of facilities can be reduced)

Location selection for mining should be made considering the above five factors.

2-1. Place of Business Selection Criteria

Important requirements for preparing an energy platform include designing a system that enables stable and fair distribution, designing the location and role of each unit play that forms the network, as well as designing an incentive structure.

We have already secured eco-friendly power facilities in Mongolia, the center of wind, solar and IGCC clean energy generation in the Northeast Asia Super Grid, in Tajikistan,

called the Alps of Central Asia, which has infinite hydroelectric resources,

and in Irkutsk, Russia, which houses the world's freshwater lake,

and we want to build our blockchain data center near these facilities first, review system testing and

business safety, and do business to become the center of global data centers.

2-2. Response to Energy Demand

(1) Pilot Operation

• The company will design electric energy trading facilities to meet the maximum forecast demand and test-run the facilities completed so that they do not become idle and produce excess energy.

• **During the trial period of electricity production testing**, the facility will attract BDC, IDC, storage centers, etc. in accordance with 83% capacity based on the maximum amount of energy that can be produced and traded.

• The company will test the uniform and stable energy supply of energy production facilities, production certification through the BLOCKCHAIN DATA CENTER TOKEN network, and the actual transaction process at all times.

(2) Commericial Operation

• Connect to the power system network after continuous and stable validation of electrical energy production and testing of the transaction process through the pilot operation.

• Through the BLOCKCHAIN DATA CENTER TOKEN network, the stable supply of energy to general household commercial facilities, etc. will continue to provide economic benefits, such as improving the living standards of local residents.

• The BLOCKCHAIN DATA CENTER TOKEN network, stabilized through intensive transaction testing during the trial period, certifies and records all of these transactions.

(3) Frequency Regulation

- In the beginning of the project, clean energy production facilities will be independently installed, and then clean energy production will be increased with private capital that recognizes the commerciality of energy production and trade through the BDCnetwork.
- If the ratio of clean energy production exceeds a certain percentage of total power generation, it can affect the stability of the power system.
- For this purpose, an ESS installed near the BDCnetwork production facility or the substation facility will be utilized to respond to the power system frequency.

3. Decentralized Electrical Energy Trading System

A power trading system is essential to efficiently use and validate the power that have been secured.
We designed a decentralized power trading system based on blockchain and the key elements of the system are as follows.

3-1-1. Transparency

Information stored in the open blockchain is accessible to anyone. Thus, the activities of network participants are transparently disclosed through the blockchain.

The network introduces an open blockchain to fundamentally block the problem of information imbalance.
The information imbalance is likely to be abused by information monopolists, which also makes the decisions of participants difficult, and therefore affecting the entire system. By eliminating information imbalance, the health of the transparent ecosystem is maintained.

3-1-2. Stability

The network is based on blockchain, where multiple nodes share data. This approach is more difficult to target than centralized data management, and the possibility of data loss and falsification is significantly lower.

Centralized data management has an advantage in terms of efficiency, but it is likely to be subject
to computer attacks such as hacking or DDoS because the ownership and management of data
is concentrated on a specific entity. In addition, there is a relatively high possibility of data loss or
forgery.

3-1-3. Efficiency

The BDCnetwork can improve the unnecessary cost structure because it minimizes the involvement of trusted third parties.

The existing energy ecosystem has a large number of trusted third parties at different levels, and if their roles are minimized or automated, a more efficient revenue and cost structure can be created.

3-2. Components

The network operates on a structure that logically translates the process of generating and consuming electrical energy into a distributed platform based on blockchain.
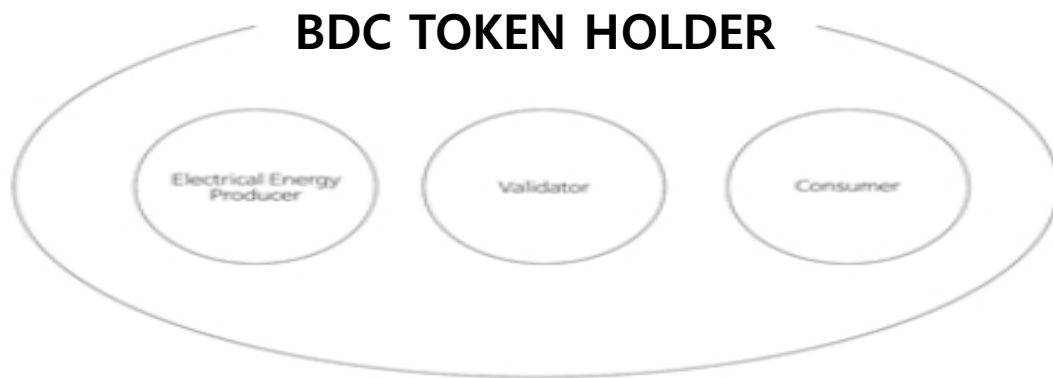
BDC TOKEN HOLDER

3-2-1. Participants

Participants in the network can be distinguished as follows:

- Electrical Energy Producer
- Consumer
- Validator
- BLOCKCHAIN DATA CENTER TOKEN Token Holder

(1) Electrical Energy Producer

Electric energy producers produce electric energy through clean electric energy generation facilities, and through the validation process of the network, they receive BLOCKCHAIN DATA CENTER TOKEN tokens equal to the amount of generated electric energy.

The conditions for becoming an electrical energy producer are as follows:
- Have a functioning clean power generation facility
- Permission from the validator
- Power generation certification H/W installation[1]

(2) Consumer

Those who use electrical energy produced by electric energy producers and pay energy usage

fees through the API's payment window are called electric energy consumers.

The conditions for becoming a consumer of electrical energy are as follows:

• Have facilities capable of receiving electrical energy

• Approval from the validator

• Obtain BLOCKCHAIN DATA CENTER TOKEN token to use as payment

1 A software for BDCApps or software that conforms to the standard protocol of BDCApps must be installed.

(3) Validator

Validators are those who protect the network from internal and external threats and monitor

and certify it for efficient operation. In return, the validator will earn a certain percentage of the

cost as commission.

They are motivated by self-deposit BLOCKCHAIN DATA CENTER TOKEN tokens and deposit fees to maintain

the stability of the BDCnetwork. The BDCnetwork is designed to stabilize the network

through actions in the validator's own interests, even if the validator is not necessarily trusted by

other participants. Refer to [6-2] for an explanation of this.

The conditions for becoming a validator are as follows:

• Deposit a certain number of BLOCKCHAIN DATA CENTER TOKEN tokens in the BLOCKCHAIN DATA CENTER TOKEN

token pool

• Permission from existing validators[2]

3-4. Concept Model

3-4-1. Producer Case

1) Company H that conducts hydroelectric power generation supports and wishes to participate in the project. The company is registered as a clean energy producer of the network after consultation with DAO.

2) Company A's unique information is installed in H/W and S/W using API at company H's hydroelectric power plant, and the amount of electricity produced through the network is validated.

3) Company H's hydroelectric power plant generates "ECT A" Private Sub tokens equal to the amount of energy produced in the electricity production chain every 10 minutes through the individual and independent electricity production chain H, and sends them to the validator via DAO smart contract for validation.

4) Validator compares the amount of "ECT A" indicating the output and the amount of "BLOCKCHAIN DATA CENTER TOKEN" paid by the consumer in return for the use of electrical energy, validates it, and receives a certain amount of token[4] as a validation fee.

5) Energy producers participating in the network can establish a payment system through API.

6) Company A can transfer the issued BLOCKCHAIN DATA CENTER TOKEN token to the exchange and transfer it to the token buyer.

3-4-2. Consumer Case

1) Energy consumers who participate in the network can use the payment gateway to pay for the energy used.

2) Energy consumers can receive energy directly from energy producers participating in the network

3) If an energy charge is to be paid to producer A, the BLOCKCHAIN DATA CENTER TOKEN token corresponding to the amount used is paid through the payment gateway provided by API.

4) At the same time, the payment gateway asks A to validate this consumption, and the paid BLOCKCHAIN DATA CENTER TOKEN token may be incinerated if the validator determines it to be valid. [Explained in 5-4]

5) If the energy consumer is not a member of the network, he/she can pay for the energy use using the token and BTC obtained through the crypto exchange.

3-4-3. Validator Case

1) Validate the amount of ECT token sent every 10 minutes from the DAO Smart Contract.

2) The validator validates the ECT token and, if correct, approves it in the DAO Smart Contract.

3) DAO Smart Contract pays the BLOCKCHAIN DATA CENTER TOKEN token to the producer on the basis of a certain exchange rate agreed in the BLOCKCHAIN DATA CENTER TOKEN token pool through the BLOCKCHAIN DATA CENTER TOKEN token smart contract.

4) At the same time, the ECT token is moved to the ECT validation token pool within the electric production private chain.
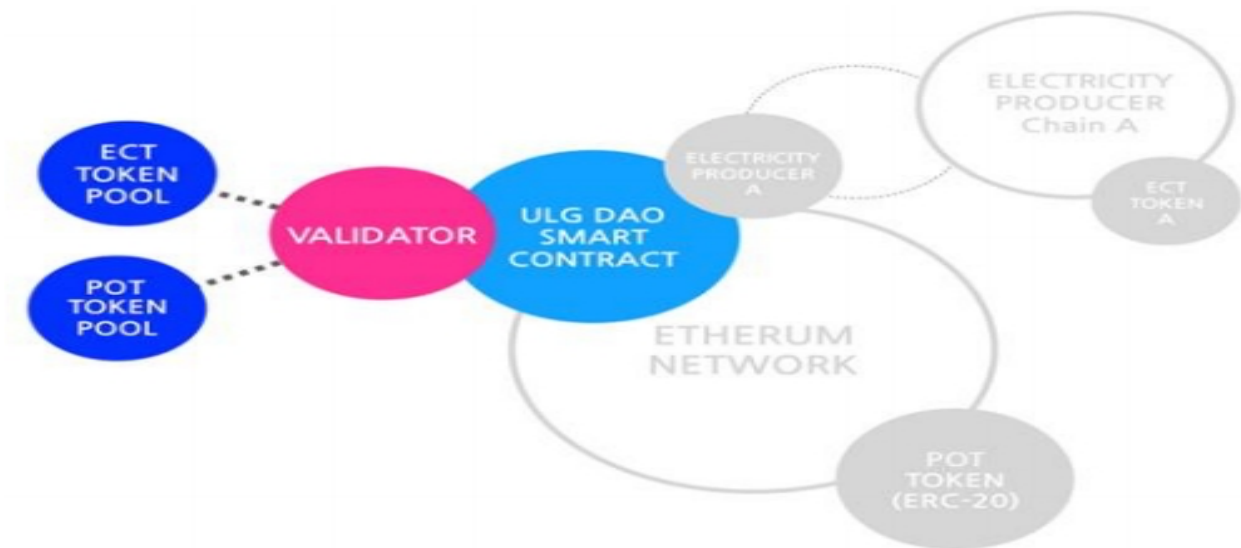
3-5. Application of Validator Engagement

The BLOCKCHAIN DATA CENTER TOKEN Project proposes innovation but acts as a complement to all existing systems.

It can also propose ways to preserve the interests of those who participated in the existing energy transactions and distribution, including power traders at the current regional level.

Existing energy participants can participate as validators or deposit BLOCKCHAIN DATA CENTER TOKEN tokens in the BLOCKCHAIN DATA CENTER TOKEN token pool to preserve profits. Using this method, it is possible to participate in the verification at the city level.

Network participants at the city level, whose energy demand growth can easily be predicted, can not only efficiently control energy production and storage transactions and distribution systems, but also receive continuous and stable returns by depositing BLOCKCHAIN DATA CENTER TOKEN tokens supported by the city rehabilitation program or through a BLOCKCHAIN DATA CENTER TOKEN token pool.

There is a concern that the BLOCKCHAIN DATA CENTER TOKEN token pool will be depleted if the amount of electric energy production continues to exceed the consumption. The BLOCKCHAIN DATA CENTER TOKEN token pool depletion will result in a shortage of BLOCKCHAIN DATA CENTER TOKEN tokens to be paid in exchange for energy producers, so there needs to be a structural design that can avoid this problem. Therefore, there is a need for a minting function.

5. BDC TOKEN

In order to reliably operate and expand T1 TESTBED, we strive to create a token BDC for the expansion of the corresponding TESTBED mining center and to continue to increase its value.

BDC TOKEN is an innovative token that can be expected to increase in value continuously due to its ability to be bought back through the accumulation of the produced BTC, as well as continuing to burn out until the total number of buyback token reaches 21 million. For this, we are launching a new concept of a trading market called the buyback market with our global exchange partners and use BDC as the key currency for that market.
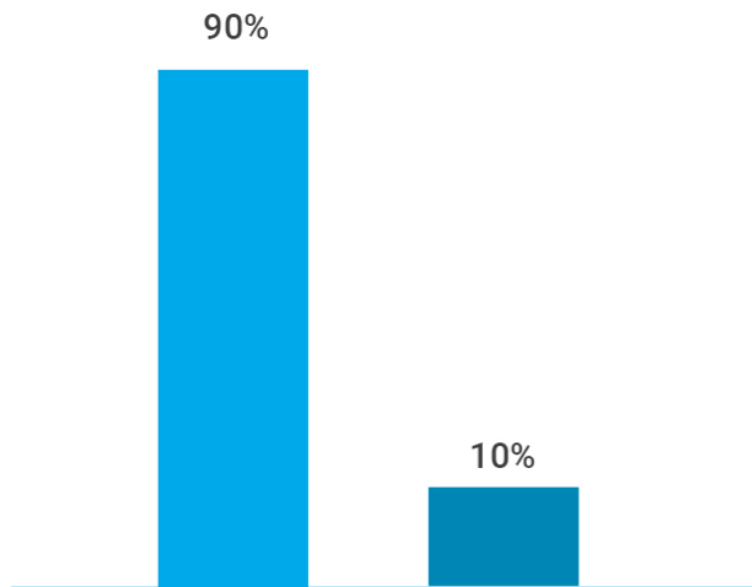
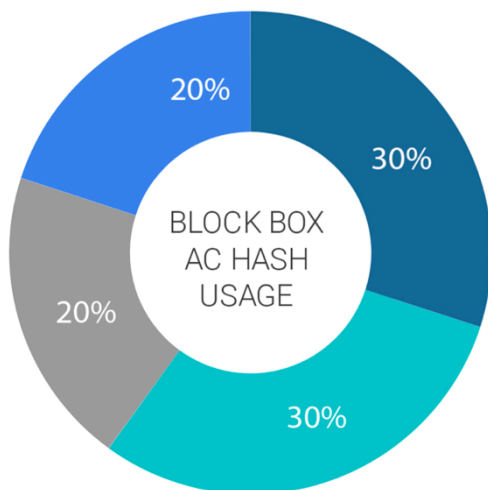| Classification		Remarks
Blockchain Data Center	10%	80 PH/s HASH
Hash Expansion	90%	

※ Initial issue price: 100 MNT

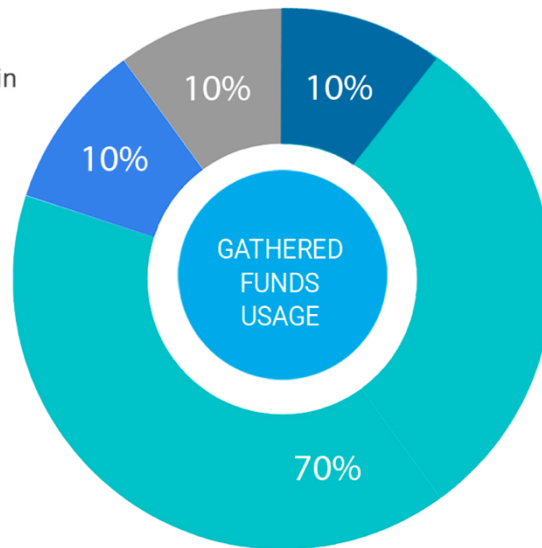# 6. Use of Funds

70% Establishment of Blockchain Data Center

10% Development Cost

10% Marketing cost

10% Company revenue

GATHERED FUNDS USAGE

10% | 10% | 10% | 70%

BLOCK BOX AC HASH USAGE

20% | 30% | 30% | 20%

30% Hash Up - Data Center Expansion

30% Bitcoin reward

20% Electricity and maintenance cost

20% Buy-Back & Burn-Out

7. Exemption Clause

There are various regulatory and legal issues surrounding the issuance of coins.

The most important of these is whether coins are defined as securities by securities law regulations in the United States and several other countries, or as coins needed to access platforms or services.

Assessing the difference between stocks and coins based on the SEC survey report on July 25, 2017,

- Shares: Available for passive valuation. In other words, the owner does not need to work to acquire a coin that evaluates its value as a purely passive means of investment.

- Coin: Coin creates value by providing access to a service platform that has unique value and evaluates potential value. Unlike goods such as gold, coins are capable of providing one-time or permanent access or service without independent value.

Our coins are issued through compensation in the process of certifying the production of sustainable clean energy. In addition, our coins may be exchanged or traded for other forms of value or services, and they may not have independent value, but may be increased or decreased depending on the value of the exchange with other coins. Therefore, it is difficult to regard them as marketable securities.

8. Regulatory Uncertainty and Risk

Nevertheless, because SEC regulations are unclear and may be changed later, the coin buyer or miner should be further aware that all value of the coin may be lost.

The roadmap presented by the BDC in the white paper is dominated by the business model currently in place and the business goals planned for the future, which includes unknown risks, uncertainties, and other factors along with the expected results or performance.
Because this white paper presupposes the implementation of the planned business model, the plan and business model may be impossible or modified when the business model is not implemented for a variety of reasons. Although roadmaps have been drawn up to be feasible in the near future based on current technical infrastructure and know-how, they may face many business and technical challenges in implementing them in the future.

This white paper contains information about BDC but cannot represent the full content of BDC. The content provided in this white paper has been prepared by MDKI LLC and some of the content may not be accurate and contain terms such as "is scheduled to be", "can be predicted", "will do", "planning", or other similar terms, and may be subject to future changes in relevant policies, laws, etc., and decisions by MDKI LLC. MDKI LLC is not responsible for the accuracy and justification of the information provided. Furthermore, there is no liability for further disclosure reflecting the updates in the white paper.

The value of BDC is highly fluid and uncertain. The MDKI LLC shall, under no circumstances, engage in any other benefits and damages to purchase BDC and shall not be held liable.

When purchasing BDC, the purchaser is essentially required to agree not to participate in money laundering, terrorist financing, and any related activities through the operation of BDC and other related derivatives.

Each purchaser must be familiar with anti-money laundering (AML) and combating the financing of terrorism (CFT), and shall not be purchased for purposes contrary to this.

If one of the risks and uncertainties inherent in the white paper develops into a real event, it could have a real adverse effect on the business, financial status and operation of MDKI LLC, in which case the person who purchased the BDC could lose all or part of the value of the BDC.

Finally, the blockchain technology that gave birth to bitcoin is still in the process of development. Like the development process of other industries, blockchain technology still has an immaturity of an industry in its initial stage of development. BDC is also not free from this risk if a technical fault factor for blockchain is found in the future.

MDKI LLC is not responsible for the technical glitches in the blockchain caused by the contributors' negligence and new IT technologies such as quantum computers, for such force majeure factors as changes in the structure of the industry.