Environment Protection Token

Global environmental protection ecosystem based on blockchain technology

EPT International Environmental Protection Foundation • 2022

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chapter II

Project development background

1.1 Global market status quo of environmental protection industry

The impact of human life on the natural environment has been more important than we can imagine.Since the Industrial Revolution, the problem of environmental pollution has increased and has an increasing impact on our lives.At present, we face environmental pollution problems: global warming, biodiversity reduction, ozone layer destruction, air pollution, water pollution and other problems, increased greenhouse gases make the global climate warm, resulting in frequent natural disasters; consumption of wildlife leads to outbreaks of infectious diseases, random waste leads to water pollution.Therefore, the public welfare undertakings of environmental protection and the restoration of a virtuous ecological cycle are the current focus of environmental protection undertakings.

In recent years, countries around the world have paid more and more attention to environmental protection and sustainable development, and the scale of the environmental protection industry has been growing steadily.In 2021, the global environmental protection industry reached US $1,168.2 billion.With the widespread popularization of the concept of environmental protection and sustainable development, the world environmental protection market has shown a momentum of rapid development. Countries around the world, especially the developed countries, have issued relevant policies and increased capital investment to increase the support for the environmental protection market.It is expected that the global environmental protection market will continue to maintain a steady development trend in the future, and the total global scale will reach US $1,388.580 billion by 2022.At present, the environmental industry and industry are the most representative developments in the United States, Europe and Japan.The United States is the largest country in the environmental protection market today, accounting for more than one-third of the global environmental protection market scale, and Europe is in the world's second position in the field of environmental protection.

With the refinement of environmental protection technology, high-end demand and application scenarios, in the current widely used water treatment, atmospheric treatment, solid waste technology, focus with emerging technology, environmental protection technology innovation, with modern biotechnology, new

materials, a new generation of information technology as the core driving force, further improve the processing capacity of environmental protection products, promote environmental technology innovation breakthrough bottleneck, accelerate the transformation and upgrading of environmental protection industry.

In the context of tighter global resource constraints and intensified environmental pollution, timely and accurate environmental monitoring and testing data will become an important basis for auxiliary environmental management and scientific decision-making, as well as an important basis for the evaluation of environmental quality and pollution control effectiveness.Environmental protection technology and equipment are accelerating the development of high-end and precision, to further improve the reliability, accuracy and stability of environmental protection data.Big data, artificial intelligence, Internet of things and other technologies in the global scope, intelligent technology into the field of environmental protection, through online monitoring equipment monitoring pollution data information, and with the network transmission to data center for summary analysis, realize real-time monitoring, emergency response and scientific decision-making functions, will be the main development trend of environmental protection technology application and supervision and management.

1.2 Pain points in environmental protection industry

The increasingly serious environmental protection problem requires the joint efforts of all mankind.However, there are many disadvantages to the current environmental protection:

1) The level of high-end technology in the energy-saving and environmental protection industry needs to be improved

At present, the field of energy-saving and environmental protection upstream equipment is a market close to full competition, and a large number of small and medium-sized enterprises compete on price, product and service quality. The overall industry concentration in the field of global energy conservation and

environmental protection upstream equipment is relatively poor, and the degree of marketization is low. Conventional technology products for energy conservation and environmental protection are relatively mature, but they are still lacking in high-end technology products. Companies are generally small in scale and low-level operations are more common.

2) The midstream financing capacity is weak, and the industrial operation model needs to be improved

Due to the long investment cycle, large capital demand, slower investment returns, and greater policy impacts, and the current service market order is not standardized, most energy conservation and environmental protection service companies are small in scale and low in service levels. Therefore, companies They are generally faced with the dilemma of "difficult financing and expensive financing".

3) Unreasonable enterprise scale and product structure

First, the scale structure of environmental protection enterprises is unreasonable, their scale is small, and a number of large-scale backbone enterprises or enterprise groups have not yet been formed, and they lack market competitiveness. Second, the structure of environmental protection products is unreasonable, the level of complete, serialization, standardization, and localization of environmental protection equipment is low, and the phenomenon of low-level repeated construction is serious.

4) Centralized operation

Although the Internet of Things technology has been widely used under ICT technology, the APP of each brand is formed into a system, and they are all operated in a centralized manner. They cannot operate across platforms, and they cannot manage energy in a unified manner, resulting in energy waste.

5) The integrity of the data cannot be guaranteed, and it is easy to be tampered with

Environmental data may be damaged or overwritten during the recording process.

6) Data cannot be transparent

It is not possible to know and verify how the data content changes over time.

7) Unable to protect privacy

The user's ID on the centralized platform is completely real-named, and privacy is unobserved.

8) Lack of trust

Due to trust issues, the data between various platforms and devices cannot be communicated, resulting in unnecessary energy waste, and it is not conducive to the detection and analysis of the overall environment; for example, the detection data of various instruments cannot be exchanged due to the lack of a "consensus mechanism". To meet the review requirements, data can only be collected and analyzed in each centralized local area network.

9) Unorganized community construction

Non-profit organizations are unable to organize environmental protection activities in a reasonable and coordinated manner, and users have a weak sense of participation. As a result, non-profit activities only pursue quantity and lack quality, which results in a waste of resources.

Many problems in the field of environmental protection need to be solved urgently, and the emergence of new technologies and new models has provided new ideas for solving such problems, especially blockchain technology. The birth and development of blockchain technology have brought global environmental protection. The new changes have also laid the foundation for the global environmental protection industry upgrade and value circulation innovation.

1.3 Blockchain technology and application

Blockchain is the use of block chain data structure to verify and store data, the use of distributed node consensus algorithm to generate and update data, the use of cryptography technology to ensure the security of data transmission and access control, the use of intelligence composed of automated script code A new distributed infrastructure and computing paradigm in which contracts are used to program and manipulate data. The existing blockchain technology mainly includes the following four characteristics:

- Decentralization: No need for a third party to intervene to achieve peer-to-peer transactions, coordination and collaboration. In the blockchain system, no organization or individual can achieve control of global data, and any node stop working will not affect the overall operation of the system. This decentralized network will greatly improve data security.

- Immutable modification: Blockchain uses encryption technology to verify and store data, and uses distributed consensus algorithms to add and update data. Blockchain requires nodes to participate in verifying transactions and generating blocks; modifying any data requires changing all subsequent It is extremely difficult to record and modify the data of a single node.

- Openness, transparency and traceability: the written block content will be backed up to each node, each node has the latest complete database copy and all record information is public, anyone can query through the public interface Block data. Each transaction in the blockchain is solidified into the block data through chain storage, and at the same time, all transaction records of all blocks are processed by superimposing HASH summary processing through cryptographic algorithms, so it can be traced back to any transaction history.

- Collective maintainability: The decentralization of the blockchain determines its collective maintainability. Traditional centralized institutions usually have three roles: data store, data manager, and data analyst. The blockchain is maintained by all parties in a reciprocal manner, and each party has clear rights and responsibilities, and there is no need to report to a third-party

organization. Transfer rights and realize joint cooperation.

At present, the blockchain is regarded by many large organizations as a major breakthrough technology that completely changes the business and even the operation mode of the organization. In the fields of finance, Internet of Things, charity, medical and health, agriculture, supply chain, environmental protection, etc., more and more enterprises are beginning to explore the application prospects of blockchain in the industry, and plan data circulation routes based on blockchain technology picture.

Specific to the field of environmental protection, blockchain technology has huge advantages.

- The use of blockchain technology can complete the construction of an autonomous renewable resource collaboration platform and build a global collaborative sharing platform. Through digital token mining, everyone is encouraged to take the initiative to participate in the cause of environmental protection and solve the difficult problems of environmental protection, thereby helping the world to reduce environmental pollution.

- Use the distributed, trustworthy, and non-tamperable blockchain to record the relevant data of all renewable resources, covering the complete information of all links of environmental protection undertakings and public welfare, and then have an accurate assessment of the value of the goods for transactions. The blockchain encryption algorithm creates secure transactions, which can be used to send and receive digital assets, realize direct and fast transfers, and ensure transaction security.

- Use blockchain distributed, trustworthy, and non-tamperable to record all relevant data of environmentally friendly renewable resources, including the complete information of items from raw material procurement, to processing and production, to transportation and sales, to the use of scrap, and so on. The value of the item is accurately judged to facilitate the transaction. The blockchain encryption algorithm creates secure transactions. The platform can be used to send and receive digital assets, realize direct and fast transfers, and ensure transaction security.

1.4 The birth of the EPT project

To be precise, "blockchain +" should be "blockchain and Internet +"."Blockchain +" is based on the existing Internet, multi-center, decentralized, self-organized, data sharing trusted network, compared with the pure "Internet +" mode, we think the most important difference is that the "Internet +" is the change of productivity, and the "blockchain +" is the change of production relations!

Blockchain can solve the problem of information asymmetry, eliminate many intermediate links, and clearly divide the rights and responsibilities of all parties to the ecosystem.Under a reasonable incentive mechanism, blockchain can promote all parties to cooperate spontaneously, change the mutual relationship in the production process, and form a large cooperation network, which brings endless imagination space.In addition, blockchain technology can better protect users' privacy.The "Internet +" mode requires users to grant credit to data to Internet enterprises, which are often analyzed, used or even sold by Internet companies to tap their traffic and value. These behaviors do not even need to pass the consent of users.Blockchain uses asymmetric encryption, authorization and more technologies, which can only be accessed by the data owner, which solves this problem well.

At the same time, we can see that today's world in response to climate change, have made a solemn commitment, at the same time in various ways to promote the sustainable development of many projects, especially in carbon trading, carbon trading is to promote global greenhouse gas emissions, reduce global carbon dioxide emissions market mechanism, energy structure optimization, new energy technology is a lot of adopted and developed countries low energy efficiency, emission reduction space, low cost in sharp contrast.This directly leads to the different cost of the same emission reduction in different countries, forming a price difference.This creates a carbon trading market.

For the above reasons, we have created the EPT (full name of Environment Protection Token) project, aiming to improve the status quo of global warming and environmental pollution, and to create new development opportunities for environmental protection undertakings.

chapter II
Overview of the EPT project

2.1 EPT Project Introduction

EPT, its full name is Environment Protection Token, which means environmental protection.Our vision is to use blockchain technology to promote environmental protection, garbage classification, and reduce environmental pollution.

EPT is building the world's top environmental chain, will through blockchain technology to solve the storage and processing of environmental protection data, through EPT generated digital assets to establish the "Token" incentive mechanism, for people's garbage classification and environmental protection behavior, to provide substantial incentives to encourage hundreds of millions of people to participate in the activities against environmental deterioration.As more people participate in the environmental protection chain EPT ecology, EPT will promote the continuous improvement of the global ecological environment, and people will enjoy a more superior living environment.

EPT believes that the transactions of tens of thousands of blockchain projects across platforms and their cumbersome, efficiency and inferiority, so that user traffic cannot be exchanged and shared between cross-platforms, thus directly leading to the lack of breadth and depth of blockchain applications.EPT takes solving the problems of the traditional environmental protection industry as its own responsibility, and is committed to providing new solutions for the environmental protection industry, and providing an exclusive environmental protection community platform for environmental protection enthusiasts.At the same time, blockchain technology is adopted to solve the platform restrictions of users, get through the limitations of each platform, realize cross-platform payment, cross-platform application, jointly build blockchain environmental protection alliance, and realize community exchange, payment exchange, technology unification and traffic sharing.In addition, EPT will also connect through offline entity and online virtual reality technology, let everyone anytime and anywhere convenient use of EPT, rich block chain technology and digital currency offline entity and online environmental protection chain swim, mall system, borrowing plate, the plate, and other application scenarios, promote its service in new environmental protection industry progress and social development.

The commercial implementation of EPT will cooperate with the government and social organizations to do it effectively, acting as a powerful tool to establish a global unified market and build an ecological civilization society.Therefore, EPT is based on international consensus and international behavior, not a person or an organization of unilateral behavior, can help enterprises more convenient self-regulation and improve the mode of production, to help the government more effectively regulate and guide enterprises and individuals, help environmental public welfare forces remove trust concerns, aggregate the whole society of the environmental protection force in the same direction, create a green earth.

In order to achieve the above goals, in technology, EPT relying on currency Ann intelligent chain BSC, build a practical global environmental protection block chain infrastructure, a general, support function, high performance, easy to use, good user experience, scalable based on strengthening the map of directional block chain 4.0 infrastructure, to support all kinds of chain application block chain 4.0 ecosystem.

In terms of the project governance structure, EPT is not a system under the control of a certain company or organization, but exerting the decentralized values of blockchain, and combining the DAO governance form under the DeFi mode to complete the project governance.The advantage of blockchain distributed autonomous community created by DeFi field lies in the openness and transparency that cannot be tampered with. EPT will promote the progress of blockchain industry and the further development of public welfare undertakings of garbage classification and environmental protection, and aspire to build the world's largest DeFi field internationalization

2.2 EPT environmental protection solutions

With the support of the full-stack technical architecture of Binan intelligent chain, EPT has a super exchange protocol to support decentralized applications with practical commercial value. Developers around the world can develop payment, transaction, settlement, games and other applications.

Based on blockchain technology, EPT can create a global block industry application scenario with environmental protection as the core extension, such as

environmental protection industry development, environmental protection community development, environmental protection activities, garbage recycling, garbage treatment, garbage traceability, etc.; extension industry such as the realization of entertainment mall and user payment industry data, which industries include but not limited to chain tour entertainment, financial lending, payment, mall, crowdfunding, etc.Like the application model of building blocks, adopt global business data, step by step digital to blockchain, so as to form a kingdom of commercial assets.

EPT can provide value media in the environmental protection industry, with EPT tokens as the trading media, to realize the circulation of online services, so as to solve the traditional pain points of the industry.At the same time, we will develop commercial scenarios to solve the fundamental problems of price chaos and difficult to distinguish between true and false, and ensure that information circulation and transactions are open and fair.In the trading environment of commercial service products, users can pay for the commercial products and services of the mall through EPT, and share the ecology, source and information of resources.

EPT will use the distributed technology of blockchain to promote green environmental protection into every community that is troubled by pollution problems, and bring distributed waste management and recycling technology to our ordinary people, and contribute to the construction of green ecological community.At the same time, every transaction in the EPT platform has a public welfare contribution. The mission of EPT is not only to create a green and environmental protection environment, but also to build a mutual aid and public welfare platform.Similarly, with the help of block chain technology, EPT system on the basis of the Internet, to all kinds of major environmental problems, help the general public improve environmental habits, establish energy saving consciousness, reduce enterprise "three waste" emissions, improve waste regeneration efficiency, and can comprehensive monitoring, analysis of all the known, valuable energy use, resource recycling, waste regeneration, and the important data of global ecological change.

On the incentive way, we will issue EPT token, to encourage economic model of all the participants, drive the existing environmental economic business model of digital, certification, asset chain, solve the problem of business model innovation, and as an opportunity to drive users, merchants and platform between tripartite win-win, let more people, institutions, enterprises and other sharing technology

development brings convenience and dividends.Let every participant in the EPT economic value chain must get long-term development opportunities, so that every user and organization can effectively integrate into the whole layer of environmental protection economy, and obtain more value benefits through practicing the concept of green environmental protection.

In addition, EPT will also open a special environmental protection public welfare fund, aiming to promote the development of environmental protection undertakings globally, through environmental protection activities, to make the awareness of environmental protection deeply rooted in the hearts of the people, and to strive for the sustainable development of the environment.Each transaction of EPT will participate in a public welfare part, and a certain proportion of funds will be drawn to hold environmental public welfare activities. Through environmental public welfare activities, it will publicize environmental awareness and create EPT environmental public welfare products

2.3 EPT basic technology system

In the early stage, with the support of Binan intelligent chain, the EPT system has a Turing-complete de-center database and an open environmental protection data through the API interface.The EPT system can accommodate the existing global environmental protection resource exchanges, digital asset circulation platform, environmental protection application institutions, etc., forming a block ecological platform with the landing of environmental protection application solutions as the core, extending the application of other offline entity industries in the environmental protection industry and the online circulation and trading of environmental protection assets.

1) Technical application system

- Decentralization: Make everything in the EPT ecosystem originate from users and nodes, and based on the core chain of the EPT ecosystem, make environmental protection traceable and return environmental protection to everyone.

- Distributed accounting and storage: to ensure the authenticity, completeness and traceability of the offline environmental processing information of the EPT ecosystem.

- Anti-tampering technology: in non-ecological or abnormal situations, such as when the increase in environmental protection data is not proportional to the decrease in effective energy, prevent or eliminate the interaction of material flow or information flow.

- Anonymity system: Allow all data and information in the EPT ecosystem to be transformed into each other under the state of blockchain technology encryption. Each converted data information has a unique identification ID, including data information generation, use, verification, storage and verification, etc., which is convenient for other systems in the ecosystem or outside the system to call.

- Value transfer: Offline environmental protection processing information and data in the EPT ecosystem can all be transformed into each other, exchange value, and make full use of it.

2) EPT characteristics

Through the EPT system, it can provide environmental protection supporters in a variety of environmental protection application scenarios, while providing unified management of multi-blockchain assets, realizing transaction application payment interoperability, technology unification, and flow sharing. It has the following characteristics:

- One-stop management: EPT manages multiple digital currencies in a unified platform, not only supports the storage and management of mainstream assets such as Bitcoin and Ethereum, but also supports the standard protocols of smart contract platforms such as Ethereum, and quickly expands based on each platform Storage and management services of issued tokens.

- Multiple security guarantees: EPT provides multiple signature technical guarantees and two-step authorization verification for platform digital asset management. Users can choose to perform fingerprint and live verification methods during service transactions to ensure the security of user assets in all aspects.

- Multi-language support: EPT supports multiple languages in mainstream digital currency markets such as Chinese, English, Japanese, and Korean, and is suitable for the transaction needs of people in different countries and different languages in different scenarios, creating multi-national interoperability, and creating world-class carbon emissions The exchange platform application clears language barriers.

- Digital currency exchange and trading: EPT uses the distributed storage technology of the blockchain to create EPT's original exchange network, which comprehensively upgrades the security level of EPT's trading environment; docks with the API of international exchanges, and always feedbacks the latest information on international mainstream currencies , Which truly embodies the characteristics of blockchain transactions, and provides users with simple, convenient and safe exchange and transaction services.

- Risk-free currency exchange: EPT develops an exchange network based on the Binance smart chain smart contract, and realizes risk-free digital currency exchange services through smart contracts and chain gateways and cross-smart contract technologies. Users exchange digital currencies through EPT. Platform parties or other third parties create smart contracts for exchange. The contract mechanism monitors and executes the exchange process, avoiding the risk of default by all parties involved in the transaction. Compared with centralized platform services, smart contracts avoid the subjective risk of default or objective attacks on the platform and bring losses to users. Even for tokens issued by new projects in the blockchain industry, as long as the EPT platform supports it, risk-free exchange transactions can be carried out through the exchange platform services. On the EPT chain, there are standard various digital asset exchange services, and various digital assets can be freely exchanged.

- Simple and convenient trading: There are certain entry barriers and learning costs to buy and sell digital currencies through exchanges. EPT provides users with the best market price and simple operation experience through the docking exchange API. Through the optimized screening mechanism, EPT presents users with simple buying and selling prices. Users only need to enter the quantity to be like Complete transactions as easily as on the e-commerce platform.

2.4 Value creation of the EPT

In addition to the environmental sector, EPT will also make full use in the supply chain, shopping mall, chain travel, lending, crowdfunding, payment, data security, and consumer entertainment.

1) Payment system will effectively reduce payment costs

The decentralized feature of EPT will provide technical support for multi-scenario payments. As an intermediary between the buyer and the seller, the third-party payment platform will temporarily reserve money and charge a service fee (about 2-3%) for each transaction to establish a seller’ s reputation evaluation system. The new payment system based on EPT can realize direct transactions. The transaction is based on cryptographic principles and not based on trust, so that any parties who reach an agreement can directly pay for the transaction without the participation of a third party, saving all parties’ fees.

2) Build a complete blockchain supply chain system

E-commerce is a complex structure that is composed of logistics, information flow, and capital flow, and connects suppliers, manufacturers, distributors, and users in the industry. EPT is based on blockchain technology and can be used as a large-scale collaboration tool to adapt to supply chain management. In the supply chain, many types of data can be transmitted through the blockchain, including insurance, invoices, consignment and transportation, and bills of lading.

3) Based on blockchain technology to effectively realize data security

In the environment-friendly transaction scenario, the user's personal data and payment data are stored in one of the few centralized databases after being handed over to the platform or company. This makes these centralized databases easy to become the target of malicious attacks, and the risk of data leakage is high. Therefore, switching to the EPT decentralized system eliminates the need to store the personal data and payment data of tens of millions of users, allowing consumers to store and control their own data in this decentralized system, thereby eliminating the need Potential data leakage risk.

4) Drive transaction transparency and build a trusted future for environmental protection

The opacity of the transaction process is the biggest problem facing the platform now. EPT can improve the transparency of the transaction, thereby promoting trust. Every transaction is recorded in a shared ledger and cannot be modified by anyone. Shared distributed ledgers provide security, transparency, and traceability. Therefore, EPT will effectively drive the transparency of the various processes of environmentally friendly business transactions and establish an era of trust in the sharing economy.

2.5 Why choose BSC as the bottom of the system

BINANCE SMART CHAIN, referred to as BSC, is a main chain in the dual public chain mechanism of Binance, the world's largest digital currency exchange. BSC can be regarded as a blockchain parallel to Binance Chain. It mainly serves the Binance DeFi ecosystem, and at the same time makes Binance's dual public chain model more complete.

BSC has a certain innovation in the consensus algorithm. It uses the PoSA (Proof of Stake Authority) consensus algorithm, which combines the functions of the Delegated Proof of Stake (DPoS) and Proof of Authority (PoA) mechanism, and is built on a network of 21 verification nodes , The second-level block time can establish a high-speed infrastructure for the DeFi protocol.

The word smart in BSC is reflected in the functions related to smart contracts: BSC supports smart contract writing functions, compatible with the existing Ethereum virtual machine EVM (Ethereum Virtual Machine) and all applications and tools under its ecosystem , Developers can easily implement the migration and deployment of Ethereum DApp, saving development effort. Finally, as a parallel chain that can interact with BC, BSC natively supports cross-chain communication and transactions. Overall, the technical advantages of BSC are more obvious, which are reflected in the following aspects:

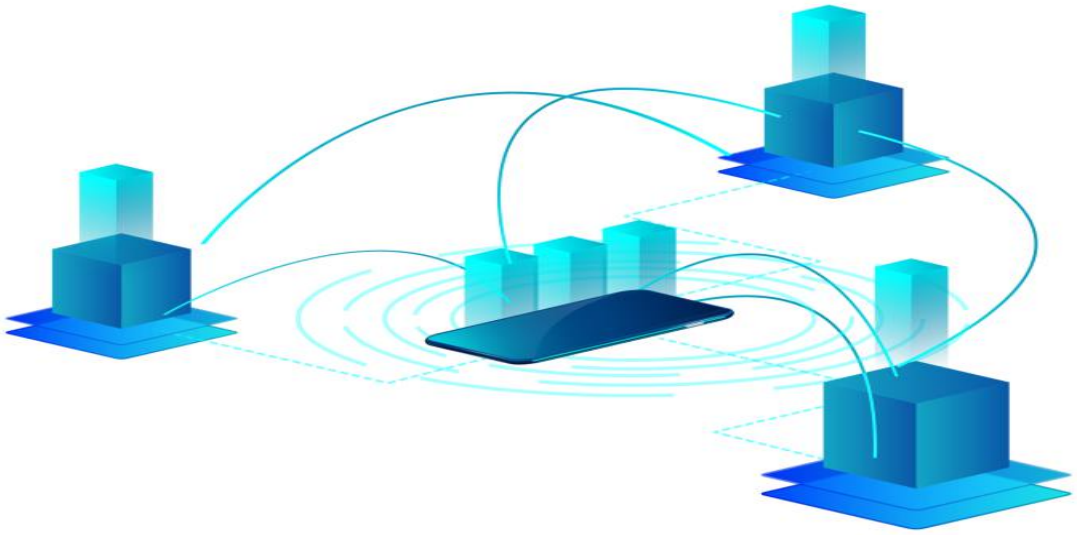
- Smart contracts. BSC has the function of writing smart contracts. DApps with

different functions are the basic elements of the DeFi ecosystem, and smart contracts represent the underlying rules and operating logic of DApps. At the same time, the programmability greatly increases the scalability of BSC and realizes the diversification of DApp functions. Therefore, smart contracts are the cornerstone of the Binance DeFi ecological "building".

• Compatible with EVM. BSC is compatible with the existing Ethereum Virtual Machine (EVM) and all applications and tools under its ecosystem, which greatly reduces the threshold for developers to develop DApps. Developers can easily implement the migration and deployment of Ethereum DApp, saving development effort. The significance of compatibility with EVM is that it can be compatible with the current hottest Ethereum ecosystem to the greatest extent, attracting developers and the overflow of funds on Ethereum.

• Cross-chain function. The significance of cross-chain is to enrich the currency of the DeFi ecosystem and increase liquidity. Up to now, Binance’ s “Token Canal” has completed the development of BTC, ERC20 on Ethereum (ETH, LINK, USDT, DAI, etc.), XRP, BCH, LTC, ADA, DOT, XTZ, BSC, ONT and other assets. Cross-chain interoperability. This means that these assets can be migrated to the Binance Smart Chain and become liquidity for DEFI operations.

Based on the above reasons, we chose BSC as the basic chain for EPT issuance. BSC will create more imaginable space for the system construction of the EPT platform and the compatibility of cross-chain ecology.



chapter III
EPT system architecture system

3.1 EPT The underlying system architecture

With the support of BSC public chain technology, EPT develops its own system architecture with six layers of data layer, network layer, consensus layer, incentive layer, contract layer, and application layer.

1) Data layer

Based on the high redundancy storage mechanism of the blockchain, blockchain storage has a certain impact on the scalability and performance of the blockchain. The EPT framework is designed with a multi-level node system, and different storage options are selected according to different node applications. Strategy (distributed accounting).

2) Network layer

P2P Protocol (P2P Protocol) supports the data transmission and signaling exchange of each node in the blockchain network. It is an important communication guarantee for data distribution or consensus mechanism. The EPT system design supports multiple P2P protocols, communication mechanisms and serialization mechanisms. According to different scenarios, flexible protocol usage is required. In terms of communication security, it flexibly supports protocols such as HTTPS, TLS, and WSS. On the need to establish external service interfaces for platform applications, it can be extended to support OAuth authentication integration.

3) Consensus layer

The EPT consensus algorithm is divided into two stages. In version 1.0 of EPT, the consensus mechanism used by EPT is a two-layer consensus mechanism that combines basic DAG consensus and BA-VRF consensus. Starting from the EPT2.0 version, the basic DAG consensus will be replaced by the HashNet-based DAG consensus. The EPT consensus mechanism is a two-layer consensus mechanism that combines the HashNet DAG consensus and the BA-VRF consensus mechanism. Therefore, EPT has the characteristics of high performance and high consistency, which is suitable for financial payment, digital transaction data is frequently generated, and weak central upper-level applications with high real-time accounting requirements.

4) Incentive layer

EPT not only has airdrops for creation consensus rewards, but also liquid mining pools for long-term network value maintenance. Because of EPT's unique consensus mechanism, performance is not affected by the number of nodes, so EPT's consensus nodes do not set an upper limit, and it happens dynamically, anyone can join to earn rewards at any time.

5) Contract layer

For each smart contract, as an EPT financial asset operation full life cycle management, complete and controllable process management of the submission, deployment, use, and cancellation of smart contracts, and integrated authority management mechanism for each operation of the smart contract This mechanism carries out comprehensive safety management.

6) Application layer

The application layer will provide general transaction protocols, support multi-language integration and function expansion, and support multiple languages such as Java, JavaScript, Python, etc., and is fully applicable to EPT network expansion.

3.2 Anonymous communication technology based on P2P

The EPT underlying communication network adopts a P2P architecture, and then an anonymous access mechanism between nodes is added to it to ensure the privacy protection of information services. EPT's P2P network anonymous communication is mainly realized in the following ways:

- Run a proxy server on this machine. This proxy server periodically communicates with other EPTs and maintains a TLS link to form a virtual link in the EPT network. Specifically, each user runs its own agent program: obtains the directory, establishes the path, and handles the connection. These agents accept TCP data streams and multiplex them on the same line.

- EPT is encrypted at the application layer, and the transmission between each relay node is encrypted with a point-to-point key to form a hierarchical structure. All the nodes passing by it wrap the client in it, so that the communication security can be maintained between the relay nodes. Specifically, each EPT relay node maintains a long-term verification key and a short-term session key. The verification key is used to sign the TLS certificate, sign the relay node's descriptor, and is also used by the directory server to sign the directory. The session key is used to decode the request sent by the user in order to establish a path while negotiating a temporary key. The TLS protocol also uses a short-term connection key between the communicating relay nodes, which changes periodically and independently to reduce the impact of key leakage.

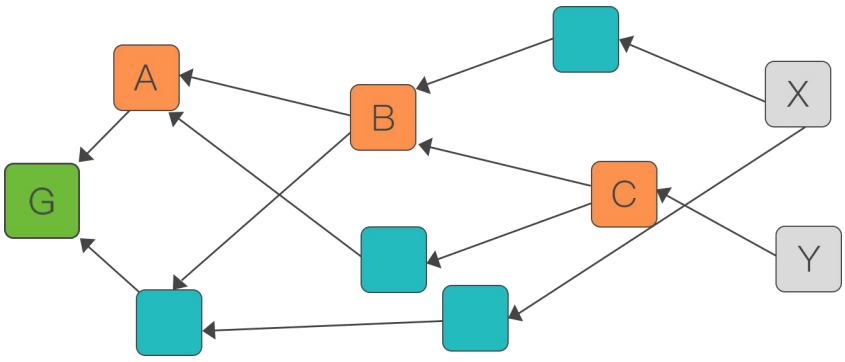
- The data packets in the EPT network use random paths to cover their footprints, so that the observer at a certain point does not know where the data really comes from and where the real destination is. The client incrementally establishes an encrypted line in the EPT network. This line only expands one hop at a time, and the relay node that expands each time only knows which relay node the data comes from and which relay node the data will be sent to. No relay node knows the entire line. The client negotiates a set of independent keys with each hop to ensure that each hop cannot track the relay point it has passed. Once a line is established, it can be used for data exchange.

The rationale of the anonymous communication network for the EPT is shown in the figure above.The directory server is the core of its network, collecting relay node information in EPT network and publishing to EPT agents as node snapshots and node description; relay nodes are the basis of the EPT network; anonymous communication traffic in the network is forwarded through anonymous communication links composed of multiple relay nodes; the agent runs on EPT user and is responsible for establishing anonymous links and transferring network traffic between user's network application and EPT anonymous links.In the figure, an EPT anonymous communication link is formed by three relay nodes that are entrance, middle and exit positions according to their positions.

3.3 EPT underlying data structure

1) Basic DAG data structure

The EPT uses the underlying DAG structure to store the transaction data in Phase 1.At present, several projects such as IOTA and Byteball have successfully used DAG to build public chains with stable operation of DAG, proving the technical advancement and performance of D A G chain.In EPT, transaction information is encapsulated into units (Unit) and combined into a DAG diagram.Because the unit can be linked to any one or more than before the unit, do not need to pay more computing cost and time cost for consensus problem, also do not have to wait for strong data synchronization between nodes, not even the concept of multiple data unit assembly block, so can greatly improve the transaction, and reduce the confirmation time to a minimum.



The DAG data structure of EPT is shown in the figure. The directed edge between the units indicates that there is a reference relationship between the two units. In the figure, there is a directed edge from B to A, which means that B refers to A, and A is the parent of B. Unit, B is a child unit of A. At the same time, we call unit C indirectly refer to A, which is the ancestor unit of C; unit G does not have any parent unit, which is called the creation unit, and the creation unit is unique; unit X , Y does not have any sub-units, this type of unit is called the top unit.

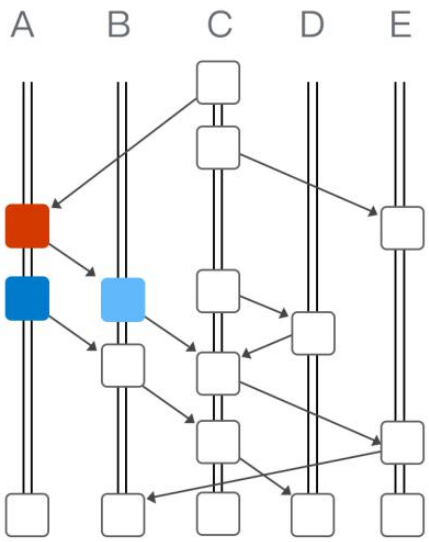
The unit is composed of two parts: the unit header and the unit message. The unit header mainly contains the following fields:

- Unit version;
- Token identifier;
- Signature of unit creator: a single signature or a common signature by multiple creators;
- Parent unit hash: the hash of the referenced single or multiple parent units;
- Witness list: the hash of other units (usually the parent unit or ancestor unit) with the same witness.

The unit message part is used to store transaction information. EPT has multiple types of transactions, including payment, data storage, voting, and so on. Similar to the fact that each new block in the blockchain needs to confirm all previous blocks, each new child unit in the DAG needs to confirm its parent unit, and all parent units of the parent unit. If you try to modify the past records in the EPT, you need to coordinate with a large and growing number of other users, most of whom are anonymous strangers. Therefore, immutability is based on the complexity of coordinating with such a large number of strangers who have difficulty reaching agreement, are not interested in cooperation, and everyone can veto revisions. After the unit is released, the confirmation starts immediately, and the confirmation can come from a new unit released by anyone at any time. Users help each other: by adding a new unit, the publisher also confirms all previous units.

2) The HashNet data structure based on the enhanced DAG

HashNet is a directed acyclic graph (DAG) composed of numerous vertices and connected vertices.as shown in the figure.



The graph records at what time and in what order all nodes send to other nodes in the whole network, and each node has a copy of such a HashNet in memory.In the figure above, there are five computer nodes A, B, C, D, and E, each having a column with the vertex vertex (also called event) placed.The latest event, will be placed at the top of the figure, HashNet is up the over time.

3.4 Trade anonymous protection

EPT ensures anonymous protection of transaction information from two aspects of unrelated and untraceable nature of transactions, and constantly iteratively improves anonymous protection capabilities.EPT standardizes the definition of transaction unaffiliated unlinkability and untraceable untraceablility. Unaffiliated means that for any two external transactions, it cannot be proved to be sent to the same person, and untraceable means that all possible senders are equal in probability for each internal transaction.

Uncorrelation and untracker are properties that a blockchain with strong

privacy protection must satisfy, and EPT achieves support for uncorrelation and untracker by adopting one-key one-time secret key and ring signature ring signature technologies.At the same time, EPT designs and implements a rigorous zero-knowledge proof of the zero-knowledge proof model as a selectable function to further enhance transaction anonymity.

1) One time key

EPT uses one-time key technology to realize the unrelatedness of transactions. One-time key means that the sender uses a separate key to sign each transaction. Unlike a normal blockchain transaction, the receiver only uses a pair of public and private keys. In a key scheme, the receiver needs to use two pairs of public and private keys in each transaction. When the transaction is initiated, the transaction sender uses the transaction acceptance The two public keys and random numbers of the party generate a temporary public key. The sender uses the temporary key as an address for transactions. The receiver performs a Diue-Hellman exchange and combines one of his private key information to obtain the temporary private key.

Since the one-time key can only be verified by the recipient, the correctness of the transaction is guaranteed. At the same time, each transaction uses a different random number. Even if multiple transactions are performed with the same receiver, they cannot be associated because of different primary keys, which ensures the non-relevance of the transaction.

2) Ring signature

The one-time key mainly guarantees the privacy of the transaction receiver. In order to ensure the privacy of the transaction sender at the same time, Internet uses ring signature technology. Ring signature is a multi-user signature technology derived from group signature technology. This signature gets rid of many drawbacks of group signatures, such as no longer requiring group administrators and untraceability.

In the ring signature technology, the message is signed by a group of signers, and the verifier cannot know who the specific signer is. Therefore, the ring signature can solve the problem of privacy protection of the signer's identity and realize the untraceability of transactions. On the other hand, since the general ring signature technology hides the signer among a group of users, it will cause double spending (double spending). The linkable ring signature technology can be used to

solve this problem.

3) Zero knowledge proof

The zero-knowledge proof technology was proposed by S.Goldwasser, S.Micali and C.Rackou in 1985. It was originally designed to allow the verifier to correctly authenticate the verifier without providing any useful information to the verifier. the goal of.

Zero-knowledge proof is essentially an interactive proof system that introduces randomness and interaction elements into traditional mathematical proofs, and uses question-and-answer methods for proof. Later, non-interactive methods have been developed, which has a profound impact in the fields of computer science and cryptography. In practical applications, zero-knowledge proof requires that the verifier cannot obtain new knowledge during the verification process, that is, a malicious verifier, which makes verification errors and prevents verification errors caused by technology.

The encrypted digital currency Zcash uses zero-knowledge proof for the first time to realize the privacy of its transactions. It is different from the way that the sender’ s transaction block is deleted. Zcash uses a void list to identify the block sent by the trader, and absenteeism only verifies the transaction block. The hash value of, realizes the complete anonymity of the transaction.

4) Anonymous transactions and privacy protection

As a blockchain innovation technology, EPT realizes anonymous transactions and privacy protection through confidential transactions. Version 1.0 to 3.0 of EPT draw on the privacy protection methods of multiple cryptocurrencies, and use one-time key and ring signature technology to realize confidential transactions. .

The latest version of EPT draws on the current Zcash anonymity protection method, adds a strictly designed non-interactive zero-knowledge proof based on the previous version, takes non-interactive zero-knowledge proof as an optional function, supports the realization of complete anonymity of transactions, and effectively resists malicious verifiers , To meet the privacy protection needs of different application scenarios.

3.5 Smart contract

Blockchain technology provides a safe and reliable execution environment for smart contracts, contributing to the implementation of the smart contract concept.Smart contracts are event-driven, state and run on a replicable, shareable ledger and capable of keeping assets on the ledger, designed to make a complex set of digital commitments with trigger conditions properly executed at the will of the participants.Smart contracts can not only receive and store value, but also send information and value to the outside world. The whole process can be automated and intelligently executed under the premise of no center and no trust.

Smart contracts are designed to strike a balance between security and functionality.The existing blockchain projects mainly focus on the design of a single type of smart contract, seeking a balance between security and functionality under the conditions of limited types of smart contracts, and often failing to meet the ideal effect of meeting the use experience of diversified user groups and the diversified trading needs of users.Bitcoin block chain transaction script is the prototype of the smart contract, belongs to the Turing complete smart contract, has low complexity and lightweight advantages, and in the bitcoin block chain network running for nearly ten years, no security problems, but the Bitcoin transaction verification script support function is very limited, only used for payment verification.Ethereum block chain support using Solidity advanced language of Turing complete intelligent contract, greatly enriched the function of intelligent contract, expand the application of blockchain technology, but write Ethereum intelligent contract prone to security vulnerabilities, The DAO event is because of writing Ethereum intelligent contract security vulnerabilities cause Ethereum community split.

EPT adopts the hierarchical concept of similar computer storage architecture in the implementation of smart contract functions, including Moses Virtual Machine (MVM), which supports declarative non-Turing complete smart contracts and advanced Turing complete smart contracts.Users choose to use these two types of contracts based on the use experience and transaction needs, balancing computing security and computing functions with calculation costs and computing complexity to meet the diversified transaction needs.Declarative smart contract is simple to deploy, has high security and is closer to legal contract language; Advanced Turing

complete smart contract is relatively difficult, mainly used to develop smart contract with more complex DApp program logic.The commission mechanism of the two types of smart contracts is different. The fee of the declarative smart contract is calculated according to the bytes occupied by the contract, while the advanced Turing complete smart contract takes the EPT Token consumed when the program is run as the fee.



3.6 Multiple support of technology

EPT will be the underlying API of the development chain of the environmental protection data industry and derivatives, realize the docking of application scenarios and realize the superposition of digital assets, so as to solve the relevant practical problems existing in the environmental protection system.EPT hopes to build a bridge application platform that can connect to the real world assets.To achieve this vision, EPT has made the corresponding layout in the underlying design and top-level applications.

1) Fast transaction verification in seconds

By optimizing key links such as signature algorithm, ledger structure, data operation, serialization, consensus mechanism, message diffusion, etc., EPT will achieve rapid transaction verification in seconds. Meet the user experience of environmental protection scenarios in most blockchain applications.

2) Storage of massive data

The double-entry accounting model of the blockchain has been continuously used in the system, accumulating a large amount of data, resulting in a decrease in operating speed. EPT will realize a separate storage and table storage mechanism to realize mass storage of data.

3) Increase in transaction throughput

The essence of blockchain is a distributed shared accounting technology, and its distributed characteristics are mainly reflected in distributed consistency rather than distributed concurrent processing. In order to ensure data consistency and prevent the Byzantine Generals problem, certain specific links can only be executed serially, but not in parallel. Through long-term testing and optimization practices, the processing performance of EPT will further greatly increase transaction throughput.

4) Fast synchronization of node data

EPT will develop a mirroring mechanism, which can regularly mirror local ledgers and implement a convenient rollback mechanism. Under a unified consensus, mirror tags can be designated for rollback. At the same time, shorten the cycle of adding new nodes to join the operation, and only need to synchronize the latest mirroring and a small number of recent transaction collections to integrate into the network and participate in consensus verification.

5) Data access control strategy

EPT provides two types of permission control strategies for data information writing and reading. Data information write permissions, multiple users are set up under the same account, and corresponding permissions are set for different operations to meet the use scenarios of multi-party signature control. Data information read permission, users can grant and revoke single user or user group operation permissions on data, and user groups can be flexibly configured by users. The data includes user account information, transaction information, etc., and the granularity can be refined to each attribute field of the transaction or account.

6) Diversified and expandable development

EPT's blockchain structure can meet the needs of different business fields and improve the scalability and maintenance efficiency of the system. It can be used to mark assets and asset transfers, can also provide non-tamperable multi-dimensional event records, and can also be used for traceability to track the circulation process of assets.

7) Multiple privacy protection

In order to facilitate users to use EPT products and services, in addition to the traditional client-side generation and storage mechanism, EPT also provides two solutions: network hosting access and private key hardware access (U-key). Web hosting access, that is, the user name and password are mapped into a private key through a specific algorithm and stored on the server. The private keys stored on the server side are all encrypted data, and the private keys can only be decrypted on the user side; the hardware private keys are used to meet the needs of the environmental protection industry. At the same time, it provides multiple privacy protection functions. First of all, the bottom layer of EPT provides homomorphic encryption, all user data is encrypted and stored, and only the user can see it. Secondly, to provide encryption middleware services, users can choose according to business needs. Finally, the upper-level application can encrypt the data during input, and the EPT is responsible for writing and reading the encrypted data generated by the user.

8) Visual operation and maintenance support

EPT will provide the visualization tools needed for operation and maintenance management. System monitoring services deployed on EPT nodes: support business (blocks, transactions, contracts, consensus, etc.), network (networking, delay, throughput, etc.), system level (CPU, memory, disk, etc.) data information monitoring . At the same time, it provides a complete log, alarm and notification mechanism to facilitate the maintenance of financial commercial systems.

chapter IV
Example of the EPT ecologìcal plate

4.1 Environmental protection class chain tour application

On the basis of our technology and resource accumulation, as well as the integration of blockchain + games and other modes, we will launch EPT environmental protection chain games to create value for global ecological and environmental protection, and lead the new blockchain + environmental protection + game experience. trend.

EPT environmental protection chain games will play a key role in promoting the development of environmental protection, reducing environmental pollution, realizing scientific environmental protection and innovative asset transactions that integrate the token incentive model. As a global ecological civilization construction space that uses blockchain technology to solve the current pain points of the environmental protection industry, in the EPT environmental protection chain game, the environmental conditions of each area in the virtual parallel world can be effectively monitored through big data, and environmental protection can not be tampered with. Data, the platform token EPT is used to incentivize environmental protection behaviors, and at the same time, a linkage with offline environmental protection rewards is formed according to the amount of token holdings. Users participate in EPT to achieve environmental protection while creating more revenue value.

EPT will also connect offline entities with online virtual reality technology, allowing everyone to conveniently use EPT tokens anytime and anywhere, enriching blockchain technology and digital currency offline entities and online blocks, self-financing, Supply chain, transaction, payment and other application scenarios promote the development of new environmental protection industries. In addition, the EPT environmental protection chain game perfectly integrates elements such as NFT, meta universe and play to earn. In the game, you can achieve:

- Create a foundation for NFT, Metaverse and diversified EPT environmental protection chain game functions;

- Assets are controlled by individuals, and through the application of the aggregation tools provided by the EPT platform, more users can freely shuttle

between the NFT and the meta universe world;

- EPT environmental protection chain game clearing and settlement is completed in real time through smart contracts, realizing more efficient, convenient and safe clearing and settlement;

- EPT environmental protection chain games reduce the trust cost between individuals by minimizing dependence on trust;

- Promote the in-depth development of the play to earn model, making it more convenient for users to "play while earning" in the process of participating in EPT environmental protection chain games.

EPT environmental protection chain games expect everyone to be their own master, everyone can freely schedule their own assets, and will not be peeped, supervised, and blocked by centralized institutions. Therefore, EPT environmental protection chain games will build a game ecology on the basis of decentralization, privacy, and fairness, ensuring safety and fairness of each player’ s participation, while stripping away the harm of centralization and building a true decentralized ecology The closed loop of circle and value establishes a connection between virtual and reality, allowing NFT and Metaverse to promote the progress of EPT environmental protection chain games while creating personal value.

4.2 EPT Mall ecology

The mall is one of the important landing circulation scenarios of the blockchain, and EPT will work with many physical merchants to build a blockchain mall. Various commodities (environmentally friendly commodities, daily commodities) can be exchanged directly through EPT. Let more users enjoy better quality and more favorable products through the mall.

EPT Mall combines the consumption needs of clothing, food, housing, transportation and entertainment to create a multi-scenario, fun, and social shopping experience for users, so as to obtain richer user portraits, build a member ecology, improve user stickiness, and make user portrait data more accurate . In the

process of building an ecosystem, blockchain technology is used to collect user personal information under the premise of ensuring privacy, and to open up information barriers between multiple applications, and provide services under the constraints of smart contracts:

• Consumers, retailers, suppliers, etc. all join the EPT blockchain network and define behaviors that meet their needs based on related smart contracts;

• Retailers establish a platform to assist the operation of the blockchain network. According to the functions defined by its smart contract, it obtains tradable consumer data from the blockchain, obtains the data consumption demand issued by the supplier from the platform, and matches data transactions.

EPT will create an open and innovative space for the new gameplay of the mall through infrastructure construction such as the underlying system, EPT tokens, and online and offline digital payments. At the same time, it will link global supply chains, games, communities, exchanges, etc., to allow more people In the process of shopping, get ecological incentives. Our overall business goal is to achieve:

• Create a convenient space that includes environmentally friendly products and daily consumer products of all categories;

• Build a consensus on global shopping behavior;

• Speed up the research and development of decentralized ecological bottom technology;

• Increase the application of digitization and tokenization in people's daily life;

• Drive online and offline digital payments based on EPT tokens, which are convenient, fast, transparent and open.

Specifically, through the underlying infrastructure, EPT provides the mall with underlying infrastructure support based on blockchain technology, and achieves a panoramic landing of ecological applications. In addition, EPT will integrate big data, algorithm models, natural language processing and other technical means to create an ecosystem on the chain and empower the development of the real economy. Commercial platforms based on the EPT underlying system (such as smart wallets, mall APPs), service demanders, service providers, service

communicators, service witnesses and other roles, participate in and assume corresponding social functions, and break organizational and national boundaries. Form a globalized, multi-party collaborative ecosystem.

Use the EPT token economic model to incentivize all participants in the ecosystem, drive the digitization and tokenization of the existing mall incentive model, asset chaining, and solve business model innovation issues, and use this as an opportunity to drive users, businesses, and The tripartite win-win between the platforms allows more people, institutions, and enterprises to share the convenience and dividends brought about by the development of science and technology.

While ensuring the use of disruptive technologies and improving the efficiency of e-commerce sharing economic growth, EPT Mall hopes that through technological innovation and mechanism innovation, each participant in the chain business economic value chain will have long-term development opportunities, and each A user and organization can efficiently integrate into the entire e-commerce economy, and obtain more value benefits by practicing innovative consumption concepts.

4.3 EPT lending ecology

The EPT target market is to serve global financial players (both digital and non-digital currency players), provide lending solutions for financial people interested in investing around the world.To this end, EPT will give intangible digital assets the same status as real estate, and conduct mortgaged short-term lending and financing lending within a controllable value.

1) Implementation details of EPT lending

The loan contract must be completed on the EPT platform. First, both the borrower and the lender need to register the platform account on the EPT, and then log on to the platform; the lending advertisements posted by the borrower and the lender on the EPT are all open and transparent and have strong personal privacy. Both borrowers and lenders can publish advertisements for borrowing or lending according to their own circumstances. The content includes information such as interest rate, loan period, maximum loan amount, and the name of the mortgaged digital asset. The digital assets of both borrowers and lenders have huge price volatility, so EPT officials do not bear the investment risks caused by price fluctuations. Both parties conduct transactions and lending within their respective capabilities. The EPT platform only endorses the security of the assets of both parties, and does not endorse the risks. Sex as a guarantee.

2) Mortgage loan business process

- Both the fund borrower and the lender have registered platform accounts and logged into the EPT platform.

- The lender publishes loan advertisements based on the scope of business, including interest rates, loan periods, maximum loan amounts, and the names of digital assets that accept mortgages. Borrowers issue loan advertisements according to their own funding needs, including the amount, loan repayment period, maximum loan amount, and the name of the digital asset to be mortgaged.

- The borrower and lender see each other’ s advertisements, choose products that meet their needs, and conduct anonymous chats and sign electronic contracts on the platform.

- The borrower pledges the corresponding digital assets to the corresponding asset pool of the platform.
- After the platform receives the pledged assets, it informs the lender that it can make a loan.
- The lender grants the corresponding amount to the borrower, and provides corresponding vouchers, and the contract is finally established after verification by the system.

3) Repayment business process

- The borrower's platform checks the principal and interest of the loan.
- According to the required repayment of funds, handling fees and interest.
- The platform confirms the receipt of the platform currency, based on the borrower's trustworthiness and normal repayment, the platform rewards the corresponding platform currency, and the contract ends.
- The system calculates platform handling fees and credit handling fees based on the payment voucher time.
- The platform pays the corresponding value of platform currency as needed and pays it to the lender, and the contract ends.

4) Renewal or early repayment process

- The borrower issues an application 3 days in advance and waits for the lender to reply.
- If the lender does not agree to renew the loan, it will proceed in accordance with the original contract.
- If the lender agrees to the loan renewal request, the contract time and maturity interest will be extended on the original basis.
- Early repayment requires the borrower to apply in advance. If the lender agrees, the contract can be terminated early, if not, the original contract must be followed.

5) Overdue business process

- The pledged digital asset reaches the repayment period of 5 days, triggering the risk warning system.
- The platform system automatically informs the borrower to carry out the repayment business.
- If the debt is not repaid when the repayment period expires.
- The platform directly deducts the digital assets pledged by the borrower to the lender.

6) Credit big data sharing model and credit loans

The EPT platform itself is a credit-based digital asset pledge loan platform. Users of the platform themselves accumulate corresponding credit value through business transactions. Credit value is an important judgment attribute of a user, which is conducive to accumulating high-quality customer data, thereby converting high-quality data into accurate customer resources.

- Users accumulate credit by participating in lending behavior on the platform.
- EPT users can make unsecured or low-secured credit loans based on their credit factor.
- EPT high-quality users can participate in high-quality financial platform projects connected to the platform and enjoy the best qualifications for participation.
- High-quality credit users have the opportunity to participate in the management of the fund.

4.4 A DeFi-based crowdfunding system

Based on the team's experience in the field of crowdfunding, we will build the world's leading crowdfunding ecosystem with blockchain technology as the foundation and EPT tokens as the medium.

With the support of the crowdfunding model, EPT tokens, as an incentive side chain and cross-chain financial application system in the ecosystem, solve many problems existing in the traditional financial field and the existing physical business and mall model through DeFi, NFT model and DAPP application.The EPT crowdfunding ecosystem, as an application built by a strong open financial protocol, will enable financial data applications to get the most flexible deployment on the platform.

Under the support of the underlying technology, EPT will subvert the traditional financial operation structure, build an open, innovative global distributed business and financial system, build perfect distributed financial infrastructure, massive distributed financial applications, quickly link the user groups, can flow to products and ecological, break the traditional platform barriers, reduce economic losses, optimize the benefit chain, point out the direction for the development of intelligent finance!

1) Crowdfunding activities

Many event creators do not need to create their own cryptocurrency or tokens. For example, the creator finances the production of a drama or records an album. All they can do is promise a certain return to their funders. In most cases, funders get nothing but promises, because their interests are not guaranteed. The EPT crowdfunding ecosystem provides funders with their own currency EPT, thus solving this problem. Therefore, when they use funds to support crowdfunding activities, funders not only get promises (this is the same as other crowdfunding platforms), but they also get a real valuable asset — EPT as a reward.

EPT not only increases in value over time, it can also be used for payment on the EPT platform. This will make EPT liquid and practical. EPT owners will be able to use these digital assets to initiate crowdfunding activities, obtain professional help in designing crowdfunding activities, and various services of payment consultants,

crowdfunding escrow activities reviewers, translators, architects, and other funders around the world.

2) Crowdfunding activities

Currently, there is no popular crowdfunding platform that allows creators to carry out crowdfunding activities. This is due to the lack of relevant legal structures that allow funders from many different countries/regions to become beneficiaries of a startup company. However, BSC technology allows us to ignore such problems. Code can solve problems that cannot be solved by the legal system. We now have the opportunity not only to organize crowd-investing events for residents of one country, but also for people all over the world, regardless of their place of residence, jurisdiction, nationality, and other bureaucratic obstacles. Tokens give it meaning in terms of company ownership or profit share, or other valuable things determined by the creator of the event (different from event to event).

With the above characteristics, EPT has established a collaborative place for different audiences who have never interacted before, the creators of cryptocurrency projects and their funders, or the creators of traditional crowdfunding activities and their funders and projects who have never dealt with cryptocurrency before. Sponsor, and experienced consultants, reviewers, architects, translators and other expert teams all over the world. All parties benefit from EPT's new system: the creators have access to new audiences and funding sources, as well as the help of different consultants, which also greatly reduces management costs. For the first time, funders receive project failure protection, have the opportunity to receive value assets as a return on investment, and can reach a wider range of projects. Participants from all over the world have the opportunity to receive the return value of their investment.

Therefore, in the EPT crowdfunding ecosystem, it is very important to form mutually beneficial and strong relationships among sponsors, funders and communities. The EPT crowdfunding ecosystem also extends the platform framework and creates a transparent ecosystem to unite communities, funders and projects.

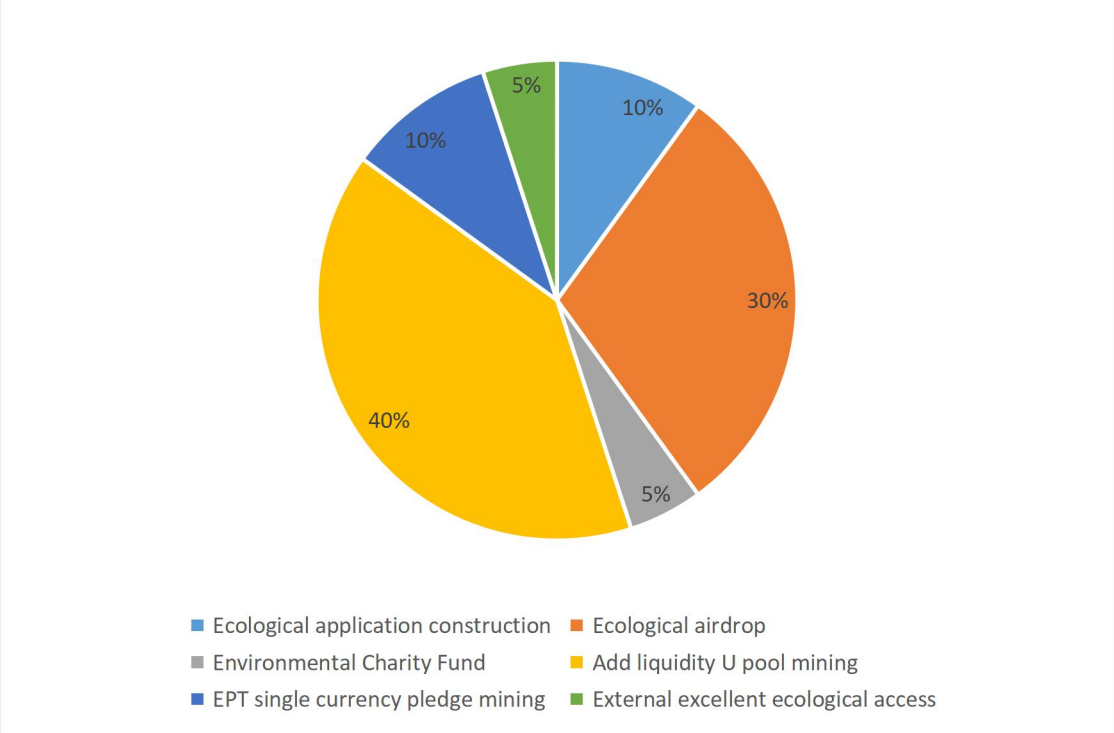
Chapter V
EPT is certified economic model

5.1 EPT Token Economics

EPT is a blockchain-based settlement digital asset, issued with the Binance Smart Chain protocol, and used for exchange, settlement, trading, liquidity mining, pledge lending, chain entertainment, consumer payment, etc. on the EPT system. The "Token" incentive mechanism established by users through the digital assets generated by the environmental protection chain EPT provides substantive rewards for people's garbage classification and environmental protection behaviors to encourage hundreds of millions of people to participate in activities against environmental degradation.

Total EPT issuance: 300 million

EPT distribution plan:



• 10% is used for the ecological development of environmental protection chain games, mall systems, lending and crowdfunding sectors;

• 30% is used for ecological airdrop to support the development of market communities;

• 5% of the environmental protection fund for public welfare, used for environmental protection and public welfare undertakings and the development of the public chain of EPT in the future to build ecological development;

• 40% added liquidity U pool mining, used for the creation of EPTswap exchange U pool, by adding EPT/USDT capital pool, pledge LP for liquid mining output;

• 10% EPT single currency pledge mining;

• 5% of the external outstanding ecology will be connected to EPTswap, and more Token will be airdropped to the cardholders of the EPT environmental protection community. The development of EPTswap will be decided by the proposal of all community members.

EPT will be used for the incubation and co-construction of high-quality blockchain projects. For high-quality projects connected to the community, liquid mining is used to support the community to build an EPT/XXX fund pool. As a benchmark, a certain share of airdrops will be given to cardholders. shareholder. Through smart contract EPT single currency pledge mining and adding liquidity EPT/USDT LP pledge mining, these two methods are automatically reduced by 10% every year.

5.2 Value properties of the EPT

1) Property rights

In the EPR platform, users with EPT enjoy the ownership and disposal rights of the proxy, that is, enjoy the property rights of the token, and can dispose of the proxy arbitrarily within the scope prescribed by law.

2) Currency attributes

The API centered on encrypted goods can realize data flow and proxy circulation. On the platform created by EPT, user behavior data, electronic goods, and consumption can all be recorded on the chain, and effective behaviors can be further transformed into generations. Each member has an independent node and shares ledger data, which effectively enhances the transparency of token usage. In other words, generations build a bridge of "value exchange".

3) Equity attributes

EPT is a digital generation in which the platform is one of its usage scenarios, and users who hold this generation own equity in the platform. That is, holding EPT up to a certain amount is manifested as holding currency dividends, but it needs to be explained that generation is not an investment.

4) Decentralized governance model

In a decentralized governance system, any decision must be voted on within a fixed time, and this time varies according to the content of the proposal. The proposal will be implemented if and only if a sufficiently high stake vote is collected, otherwise the proposal will be closed. In a decentralized autonomous system, it is not a single decision made by those with high equity. Those with low equity can join forces to check and balance those with high equity. The content of decentralized autonomy includes, but is not limited to, user registration, statistical functions, range of mortgage tokens, etc. These upgrades can be decided by the participants of the autonomous system through voting together.

5.3 Liquidity mining model

Liquidity mining in the DeFi field refers to the process of depositing or lending designated token assets in accordance with requirements through DeFi products with a mining mechanism to provide liquidity for the product's fund pool to obtain benefits. On the EPT platform, the proceeds are the project’ s native token EPT token, which represents the governance rights of the future platform.

We developed the EPT liquidity mining protocol. This agreement is based on an agreement on the BSC, used to establish a fund pool based on changes in the supply and demand of assets and calculate the interest rate by algorithm. The supplier and borrower of the asset interact directly with the agreement to earn or pay floating interest rates. When we design a liquid mining plan, an important step is to determine the exact goal of the plan. The following are our general goals:

- Incentivize long-term, sticky liquidity;

- Attract a lot of hot money to create momentum and increase product visibility;

- Distribute tokens without ICO and decentralize the governance of the protocol.

In order to achieve the goal of protocol decentralized governance, many protocols inject governance rights into their tokens. However, if the ownership of governance tokens is highly concentrated, it is difficult to ensure the decentralization of protocol governance. One of the main challenges facing the protocol team is how to distribute their governance tokens to users. In solving this problem, the EPT liquidity mining we designed can be used as a powerful tool (compared to other methods, such as directional airdrops).

1) Supply of assets

In a peer-to-peer platform, a user’ s assets are loaned to another user. Unlike the peer-to-peer platform of an exchange, the agreement summarizes the supply of each user, provides more liquidity, and maintains the balance of the funding system. Borrowers and lenders can receive rewards (interests) by complying with the corresponding agreements while circulating digital currency. At the same time, the exchange can increase the agreement or reward users by "clearing" the balance,

which may unlock a new business model for the Ethereum ecosystem.

2) Borrowed assets

The EPT protocol allows users to use a Token as collateral and effortlessly borrow from the protocol for use anywhere in the BSC ecosystem. Every money market has a floating interest rate set by market forces, which determines the borrowing cost of each asset. The assets held by the agreement have a mortgage factor ranging from 0 to 1. The liquidity and value of the underlying assets determine the size of the mortgage factor. The collateral and multiplied by the collateral factor are equal to the user's loanable amount.

3) Interest rate model

The agreement does not need to negotiate with suppliers, borrowers, terms, and interest rates. Instead, it uses an interest rate model that achieves interest rate equilibrium based on supply and demand. According to economic theory, interest rates (the "price" of currency) should increase with demand; when demand is low, interest rates should be low, and vice versa. The utilization rate U of each market a unifies supply and demand into one variable:

$$U_a = \frac{Borrows_a}{Cash_a + Borrows_a}$$

Demand curves are encoded by governance and expressed as a function of utilization.For example, the lending rate may be similar to:

Borrowing Interest Batea=2.5%+Ua*20%

The rate earned by the supplier is implied and equal to borrowing rate multiplication utilization.

4) Liquidity incentive structure

The EPT protocol does not have liquidity, but instead relies on the interest rate model to motivate it.During periods of extreme demand for assets, agreement liquidity (token available for extraction or borrowing) will decrease; when this occurs, interest rates will rise, thereby stimulating supply and suppressing borrowing.

5.4 Pledge lending model

In the EPT pledge lending agreement, users realize continuous financing through the risk classification of the pledge target.After the platform provides the initial liquidity, the market maker locks the LP Token as a pledge in the EPT agreement, so as to continuously obtain the liquidity purchase.When the user provides liquidity in the EPT and sets a large range, the value fluctuation of the liquidity target based on the standard currency is small.

If the supplier edges the LP Token in the EPT, the pledge will be significantly improved in the extreme market, which will also make the booster pool system more stable: reasonable risk warning when the project token is rising sharply, and good risk buffer when the token falls sharply.EPT can eventually allow high-quality assets to rise for the long term, and non-performing assets will gradually decline and are eliminated.

In the platform, in order to achieve more accurate risk pricing, it is necessary to grade the risks, so as to form a fixed income classification fund.In addition to the project sponsor (IP), two types of major roles are required, divided into significant participants (GP) and fixed income (LP).Both roles will provide continuous capital input for the project. GP, as the direct investor of the project, will exchange all the principal into project tokens, and LP funds will be used as leverage for GP to help the project achieve greater value growth.

EPT allows IP to pledge high-quality assets, which adds a layer of security for GP and encourages large amounts of GP capital inflows.Each GP capital inflow is injected into Vault to store the LP's risk reserves and profits.With the increase of Vault capital volume, LP's willingness to invest has also been gradually enlarged.as follows:

$$LPw \propto Vault \propto IPcol * GPturnover * IPltv$$

$$GPturnover \propto GPw$$

in:

- IPcol is the pledge of IP
- IPltv is the current pledge rate of IP

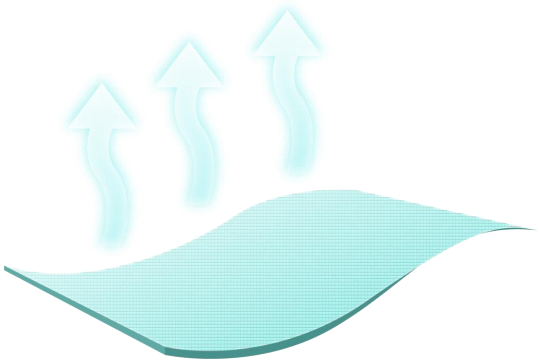
- GPturnover is the turnover rate of GP
- GPw is the investment willingness of GP
- LPw is the investment willingness of LP
- Vault is the reserve

It can be seen that through effective signal transmission, the underlying assets with lower IP pledge volatility effectively drive the capital capacity of LP, and LP capital, as the most important part of the market feedback loop, will exert a positive multiplier effect. If the project is a non-performing asset, because GP participants have replaced their base currency with project tokens, the volatility of GP's leverage will be much higher than the volatility of IP pledges. At this time, GP may fall due to the price of project assets. And was the first to be cleared out. The remaining GPs are more willing to enjoy the pledge after the IP is cleared, thereby reducing the turnover rate. This time directly led to the shrinking of Vault's increments, which greatly reduced the LP's investment willingness, which in turn caused inferior projects to be gradually cleared.

$$LPw \propto IPcol * GPturnover$$

$$GPturnover \downarrow \Rightarrow LPw \downarrow$$

Such transmission mechanism can not only make EPT operate healthily, become a scavenger of non-performing assets, but also transmit a large amount of effective market information, as the external feeding data of EPT risk pricing, to provide decision feedback to investors and liquidity providers.



chapter VI

Global Team and DAO governance

6.1 The EPT Global Team

EPT core architects and R and D personnel come from top technology companies, which are all technology giants with more than 10 years of experience in research and development. From the blockchain 1.0 stage, they are well versed in the application of blockchain distributed systems.

Aymeric Izard——Blockchain technical experts.In 2015, I began to study the digital asset trading network and capital docking. In 2016, I first proposed the most advanced digital wallet concept. The international senior blockchain technology researcher and advocates have rich experience and keen sense of smell in the field of digital assets and finance.Focusing on global investment in new markets, covering emerging industries and high-tech industries, including finance, technology development, Internet of Things, new retail life, consumer community, etc.

Rick Fishbune——Having been engaged in blockchain technology research for more than 10 years, the most influential internationally renowned blockchain expert in the United States has participated in the development of a number of famous blockchain projects.Famous data scientist, with rich international experience.Extensive experience in strategic design, data infrastructure construction, and processes in multiple industries around the world.

Jay Lim——Global foreign exchange trading and technology implementation consultant expert, more than 20 years of experience, has served a number of Deutsche Bank, ING Bank, Bank of Holland and other multinational banks.Bitcoin, an early investor and a well-known opinion leader in the currency circle, has 8 years of futures and international derivatives trading experience. In 2013, he began to invest in digital currency, is familiar with various capital operation techniques, and is good at trend technology analysis and macro strategy research.

Richard Dobrow——Senior blockchain field practitioners, more than 5 years of experience in the blockchain industry, familiar with various blockchain underlying and architecture technologies.It is one of the earliest people engaged in mobile Internet products. It is engaged in combining big data with blockchain, and it has rich experience in product design.

Justin Drake — — Blockchain senior engineer, with practical experience in blockchain, encryption algorithm, digital wallet, has more than ten years of C / C + + programming and development experience in Linux / windows environment, proficient in network programming under Linux, POSIX multi-threaded programming and STL programming, writing shell scripts and Makefile, proficient in data structure, commonly used algorithms, depth, breadth, genetics and other artificial intelligence algorithms.

Maaghul Clinton — — Master in Computer Application, over 10 years of experience in the IT & ICT industry.Specialized in software project management, team building, mobile Internet solution design, software algorithms, and ICT consulting services.With working experience in the world's top 500 enterprises, I leads the team members to solve the problems of carbon emission resources distribution industry and reach the industry-leading level.

Matthew Walther——World-renowned blockchain application expert, global blockchain technology commercial application leader.He served as a director of the US Business Council, a PhD in sociology at Columbia University and a researcher at the Center for Financial Research. He is an authority in the application of smart finance technology.

6.2 Community DAO governance

DAO (DAO, Decentralized Autonomous Organization) is a decentralized self-governing organization. The relevant concept was first proposed by its founder, Vitalik Buterin. The first DAO project is The DAO (a decentralized Foundation to invest in potential Ethereum projects).To understand, DAO needs to meet three characteristics: decentralization, autonomy and organization.

Decentralization refers to the monopoly and absolute discourse power brought by DAO that needs to be structured on the public blockchain to avoid the centralization of power from the technical level.Autonomy means that the development and rules of projects are completely controlled by community members.Community members can initiate proposals for certain things that are automatically enforced once the proposal is voted through, and all members have

the power to govern the project.Organization is a social group in which DAO does not need to be operated by companies or institutions, people gather together through community consensus, and people work towards a common goal.

One of the biggest values of DAO lies in decentralized governance.The combination of DAO and DeFi concepts can create more valuable projects.DeFi, like DAO, has a decentralized quality, and many liquidity mining decisions and fees in DeFi need to solicit regular advice from community members, and DAO is used as a governance tool.

On the integration of DeFi + DAO, the design of EPT is full of innovation and attractions. From the governance of a single capital pool, to the governance of Swap sub-protocol, to the governance of the whole project ecology, EPT integrates DAO elements into every corner of the ecology.

1）EPT DAO

EPT is a completely autonomous community-led project. Under the leadership of DAO, it has achieved complete decentralization and a high degree of community consensus. The new decentralized autonomous organization initiated by EPT belongs to the category of dedicated DAO. The community has a strong consensus and 100% of the community manages itself. After the project goes live, the community will vote to develop its own decentralized applications and DAPPs.

EPT DAO's global community construction follows a high degree of decentralization, and is carried out through a combination of on-chain and off-chain models. After all the programs of EPT DAO are set successfully, it can start to operate according to the original rules. In the course of its operation, it can continue to maintain and upgrade itself according to the actual situation. Through the continuous self-improvement mechanism, it not only eliminates the trust problem, but also achieves an unprecedented level of collective coordination, thus forming the technical foundation of EPT DAO.

- Smart contracts enable technical implementation of EPT DAO rules;

- The EPT token economic model provides a realistic incentive basis for the distribution of benefits of EPT DAO;

- The blockchain itself connects individuals or organizations around the world,

allowing the expansion of EPT DAO to break through geographical restrictions.

EPT tokens are used as value circulation proof and incentive means, and then smart contracts are used to determine the cooperative relationship and benefit distribution mode of members. There is no clear identity division among members. For example, investors, developers, collaborators, operators, consumers, etc., will become part of the community because of their token holdings. Members can continue to optimize the contract structure by themselves, constantly seek the shortest path, maintain efficient synergy and better development direction.

2) The value of the EPT DAO

As a decentralized autonomous organization, EPT DAO is a technical tool written in code and running on the blockchain. It is also a new type of governance institution that can achieve openness and justice, unmanned intervention and autonomous operation, and there is no law. entity.

• Maximize the use of resources: EPT DAO stores all content in a decentralized storage network, which is open and transparent and cannot be tampered with. Anyone can review project rule changes, etc., and schedule resources in time, without the need for time-consuming review.

• Realize innovative development: People in EPT DAO can put forward their opinions on the blockchain at any time and be seen by others. Users can more conveniently and timely participate in the development of EPT DAO and promote the innovative development of projects.

• Improve the credibility of the results: The use of the EPT DAO distributed ledger will make every vote of the voter be recorded on the blockchain in a true and open manner, without the need for manual vote counting to generate election results, which is timely and credible.

EPT DAO will be the core driving force of EPT ecological governance and development. EPT hopes to stimulate the subjective initiative of the community in a democratic, collaborative, and transparent manner, mobilize high-quality resources in the community, and promote the construction of a decentralized and positively-driven EPT autonomous system. At the same time, the EPT DAO Management Committee was established to be responsible for the promotion of EPT DAO's various affairs.

The members of the EPT DAO management committee can not only contribute to the development of EPT, but also obtain additional profits through the implementation of the proposal. The EPT DAO management committee does not have a hierarchical structure. All members are equal, and the interest goals are the same. Only by jointly promoting the value growth of the EPT ecology can it conform to the interests of all members and form a virtuous cycle of EPT governance ecology.

Chapter VII

EPT International Foundation for Environmental Protection

EPT International Environmental Protection Foundation is the advocate and initiator of the EPT project. The foundation is a multinational non-profit organization that is supervised by the International Environmental Protection Foundation and provides environmental asset management. The foundation will create sustainable prosperity under the user consensus mechanism, use scenarios as the driving force to solve practical pain points, and promote environmental protection technology to serve industrial progress and social development. The foundation has multiple self-operated asset management teams, operating more than 1,000 traders and technical teams in Europe, North America and Southeast Asia.

- Vision: Use blockchain technology to promote the development of environmental protection, garbage classification, and environmental pollution reduction

- Mission: Create a low-carbon and environmentally friendly world and solve the problem of social governance of waste sorting

- Value: environmental protection public welfare value, circulation application value

The foundation's development goals are as follows:

With the EPT project as the core, the foundation is committed to providing "connected value" services. This service has three levels of meaning:

The first is to connect reality with the future. As one of the most potential technological development directions for human beings at this stage, blockchain technology means that the future is infinite. But at this stage, there are contradictions and conflicts between the realistic pressure of green ecology and the future of blockchain. The foundation hopes that through EPT's innovative consensus mechanism, it can find a balance between the two and unify the opposition between reality and the future.

The second is to connect people and nature. Eco-environmental protection is an urgent practical need, but it is also the foundation of the long-term development of mankind. Reducing energy consumption and advancing a green earth is a major issue about the harmonious development of man and nature. EPT must serve mankind as well as nature.

The third is to connect users with the blockchain. At this stage, digital currency is the most concentrated embodiment of the charm of blockchain technology. When the initial digital currency system represented by Bitcoin suffered major setbacks, EPT has the responsibility to take over the predecessor's banner and assume the historical responsibility of exploring the future of digital currency and blockchain.

In the future, the foundation will be committed to the development, construction, operation and maintenance of the EPT project to ensure the safe and harmonious development of the ecology. In order to avoid incidents that violate the design concept of the blockchain, the foundation will help manage the general issues and privileges of community projects by formulating a good governance structure and system. The establishment of the foundation refers to the operation of traditional entities, and various functional committees will be established, including the strategic decision-making committee, the technical review committee, the remuneration and nomination committee, and the public relations committee.

As an innovative technology, blockchain is not only a subversive breakthrough in the core computer technology, but also an innovation in an industry field. Therefore, the importance of the risk management system is self-evident. The design objectives of the foundation's governance structure mainly consider the sustainability of project development, the effectiveness of strategy formulation, the effectiveness of management, risk management and control, and the efficient operation of the project.

Therefore, the foundation upholds the establishment of a risk-oriented and sustainable blockchain community. The foundation will carry out continuous risk management for the operation of the foundation. Including a series of activities such as the establishment of risk system, risk assessment, and risk response. For major risks, it is necessary for the Foundation's Strategic Decision Committee to discuss and make decisions.

The foundation will classify events according to the characteristics of the event, such as the degree of impact of the event, the scope of influence, the amount of affected tokens, and the probability of occurrence, and make decisions based on priority. For events with high priority, the relevant committee of the foundation will be organized to make decisions as soon as possible.

Chapter VIII
disclaimer

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The community and its affiliates and team members are not responsible or liable for the value, transferability, liquidity of Token, and any market that provides EPT through a third party or other means;

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ii. The law prohibits access to and participation in the sale of Tokens or countries and regions where Tokens are prohibited by laws, policies, regulations, treaties or administrative regulations.

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