



NEW POWER

Global Green Assets Digital Network

White Paper V1.0

11/2019



Summary



When the world is promoting and practicing “green trends”, “climate change”, “energy revolution” in the context of the green energy industry is accelerating towards the market, the development of clean, digital, wisdom of the road, so as to promote industrial upgrading and reconstruction of a green economy. For future development, how to lead and apply digital emerging technology combined with industrial digital standards and mechanisms to help the industries realize the value of digital and green mining assets which worth trillions of dollars considered as a “Golden Key”.

New Power relies on the green energy photovoltaic industry’s business foundation, the know-how of the industry, the new inflection point in the new developments and bottlenecks. In this regard, New Power researched on its industrial breakthrough and technological innovation, and joined forces to build a “**global green asset digital ecological network**”, and is committed to building a “interconnected, collaborative and complementary, safe and reliable infrastructure” to support the number of worldwide trillion level of green mining assets in the world.

By making full use of emerging digital technologies such as blockchain, Internet of Things, Big Data, Artificial Intelligence, and combining standardized chain-based assurance mechanisms, New Power is the first to open up the standard digital registration and confirmation process for green energy PV assets. It is a “trusted confirmation” that is jointly completed by different roles such as judicial regulatory agencies, monitoring agencies, financial insurance institutions, and exchanges involved in various regional businesses around the world. Penetrate its underlying assets to achieve green asset transparency, so that the value of its green underlying assets can be “reliable”. New Power also combines the transaction needs of green assets trading, asset management needs, etc., by providing a complete access and exit mechanism, risk control mechanism, incentive mechanism, and consensus mechanism to provide a good trust operation environment for all parties in the industry. Diversified scenarios are applied to build a self-trusted, self-operating global digital asset intelligent ecosystem of global assets.

Index

INDEX.....	3
1. PROJECT BACKGROUND	4
2. BIRTH AND VISION OF NEW POWER	7
2.1. BIRTH OF NEW POWER.....	8
2.2. NEW POWER VISION.....	8
3. NEW POWER ECO BUSINESS PANORAMA	8
4. NEW POWER CORE BUSINESS SOLUTION	10
4.1. GREEN ASSETS INTELLIGENT MANAGEMENT ECOLOGICAL NETWORK BUSINESS SYSTEM.....	10
5. TECHNICAL SOLUTIONS.....	32
5.1. PUBLIC CHAIN DESIGN	32
5.2. MAIN/SUBCHAIN ASYNCHRONOUS TREE	33
5.3. ECOLOGICAL GOVERNANCE	35
5.4. CONSENSUS MECHANISM	36
6. DEVELOPMENT ROADMAP AND DEVELOPMENT PLAN	45
7. NEW POWER PASS INTRODUCTION	45
7.1. NEW POWER PASS ECO MAP	45
7.2. RELEASE PLAN.....	47
8. GOVERNANCE STRUCTURE.....	48
9. CORE TEAM MEMBERS.....	55
10. ADVISORY TEAM.....	58
11. DISCLAIMER AND RISK WARNING	61
12. REFERENCE	61

1. Project Background

Green is the most desirable color of the earth. However, today's Earth has been polluted, smog, high temperature and other environmental problems forced us to pay attention to environmental protection issues. Therefore, green energy as a renewable resource has gradually replaced traditional non-renewable energy sources, such as solar photovoltaic, wind energy is replacing coal and oil, providing us with energy-saving and environmentally friendly “green energy”; new energy vehicles are also replacing fuel vehicles. To reduce carbon pollution and provide us with “green life”. The energy revolution brought about by green energy has been put on the agenda by many countries and is highly valued. The United Nations is a high-profile advocate, as proposed and to promote the "Paris agreement" at the UN Climate Change Conference, like a feast, 170 countries, the development of green energy industry has been growing by incentives (such as government subsidies) are given in their respective countries to try to respond to environmental protection, a great proposition of human survival.

Inspired by policy orientation and government subsidies in various countries, such as the photovoltaic industry, more and more entrepreneurs and practitioners choose to step into this hall. After going through multiple thresholds and multiple procedures for approval, I thought that having state subsidies would be like having a basic guarantee of stable income, and I can sit back and relax for at least a few decades. The industry has also reached a new turning point. Emerging technologies are constantly trying to innovate and reform, and the industry has gradually moved from the initial incentive period to the maturity period. “Subsidy reduction” and even “subsidy relief” are a foregone conclusion (for example, Germany has completely reduced government subsidies), accompanied by marketization. On one hand, subsidies are tightened, and on the other hand, receivables are in arrears. In the double attack, companies have no choice but to create tangible assets, intangible assets, accounts receivable, to pledge assets are made up of mortgage financing to ease the pressure on cash flow. In the face of this sudden industry baptism, the photovoltaic industry, regardless of size, has been forced to make asset trading, equity transfer, third world market transfer and other coping strategies to solve the survival problem. There are also companies that want to open up another way of life by citing emerging technologies and innovative business models, such as ours - New Power.

Based on our years of industry experience, we believe that from the perspective of marketization and from the perspective of technological innovation, the core problem that

hinders the development of the industry is that the underlying assets of green assets are poorly circulated, and on the other hand, the industry is digitized. The foundation of the transformation is unstable; on the other hand, it has made it impossible for the industry to achieve multi-channel and diversified efficient financing; it is even more difficult to achieve cross-regional and inter-regional value circulation on a global scale. To subdivide the reasons, we provide the following analysis:

Analysis 1: The green bottom assets are cumbersome and difficult to unify, resulting in the inability to form a “reliable” value flow.

In the above analysis, we just simply mentioned transaction ownership of green assets, accounts receivable debt mortgage financing right, but the value of other property rights (such as the right to future benefits), as well as other benefits of green energy industry (such as power generation rights, carbon emission rights and other emission rights), etc., have not been effectively adopted and applied by the financial market, resulting in a single industrial financing channel, and the world is facing the same problem. Although there are now some centralized emission trading electronic trading platforms, mortgage financing of emission rights, to meet the trading and financing needs of enterprises for their rights. But still due to different levels of approval authority, the injustice of the current unit price auction model (the current auction and more English auction bidders only consider using the bid, regardless of the number of emission rights required bidders, which caused little demand buyers Often do not care about the price, resulting in abnormal price increases, the flexibility of equity trading is severely limited. This also poses a great challenge to green finance.

Therefore, how to effectively exploit and utilize the value of these rights and interests are the only way to realize the rich financing channels of the green energy industry and enhance the diversified development of value circulation. But let the value of these rights are recognized and more circulation, or to bear the brunt of how to solve allowed to achieve the international level, within the regional range of standard digital is indeed the right, and then through the improvement of the operating mechanism, it can be achieved. "Digital technology + standardization mechanism setting + self-trust operation mode under the consensus within the industry chain " will be the best means to solve its problems.

Analysis 2: Green assets' equity value has not obtained standardized certification, leading to financing difficulties.

In the above analysis, we just simply mentioned transaction ownership of green assets,

accounts receivable debt mortgage financing right, but the value of other property rights (such as the right to future benefits), as well as other benefits of green energy industry (such as power generation rights, carbon emission rights and other emission rights), etc., have not been effectively adopted and applied by the financial market, resulting in a single industrial financing channel, and the world is facing the same problem . Although there are now some centralized emission trading electronic trading platforms, mortgage financing of emission rights, to meet the trading and financing needs of enterprises for their rights. But still due to different levels of approval authority, the injustice of the current unit price auction model (the current auction and more English auction bidders only consider using the bid, regardless of the number of emission rights required bidders, which caused little demand buyers Often do not care about the price, resulting in abnormal price increases, the flexibility of equity trading is severely limited. This also poses a great challenge to green finance.

Therefore, how to effectively exploit and utilize the value of these rights and interests is the only way to realize the rich financing channels of the green energy industry and enhance the diversified development of value circulation. But let the value of these rights are recognized and more circulation, or to bear the brunt of how to solve allowed to achieve the international level, within the regional range of standard digital is indeed the right, and then through the improvement of the operating mechanism, it can be achieved. "Digital technology + standardization mechanism setting + self-trust operation mode under the consensus within the industry chain " will be the best means to solve its problems.

Analysis 3: The data of the green energy industry chain has not achieved “data assetization”, resulting in its industry being undervalued.

At present, although many countries are in the process of digital country construction, due to information security issues, poor industrial data foundation, difficult data standardization, and uneven technical levels, it is difficult to upgrade the value of data in many industrial chains. That is “data assetization” which is difficult to collect. Therefore, the “Data Assets” which can bring industry-derived application service is more difficult to fail, which is undervalued and the value of data assets is inaccurate.

Therefore, how to analyze the assetization of industrial data and apply the industry's asset data, trade data, operation and maintenance operations and other data, in order to ensure its

authenticity and timeliness for the industry to achieve digital transformation, smart development and internationalization.

Analysis 4: Traditional centralized large-scale energy dispatching model, unable to achieve intelligent scheduling, hindering industrial interconnection

Under the traditional model, different energy systems in different countries are managed by different departments, and they are in a state of separation and self-control for a long time. It is difficult to achieve interconnection and interoperability, so the linkage effect of the industrial chain is extremely poor. This lacks an incentive mechanism for compatibility between different systems. For example, in terms of power systems, distribution network companies in many countries are relatively independent. This centralized planning, production, and deployment of the unified system can not only achieve coordinated industrial development nor interoperability, Its centralized energy operation structure is particularly cumbersome in the process of scheduling, operation and optimization. It is difficult to meet the scheduling optimization requirements, but it is also the culprit of resource waste, increased operating costs and increased transaction costs. It is understood that about 38% of the electricity bills paid by users are currently paid for the power transmission infrastructure and power loss. Therefore, the “floating flowering” of intelligent dispatching under industrial interconnection has become particularly important.

In summary, we believe that global green energy is developing towards marketization, cleanliness, digitization and intelligence. Digitalization should be a “quick heart saving pill” that solves the problem of enterprises embracing market-oriented benign competition and promoting the industry to achieve energy revolution and industrial upgrading. The application and innovation of digital technology, combined with the standards and mechanisms for digitalization of its industry, should be the key to support the industries to achieve digital transformation and tap the scale of the trillion-dollar green asset market. We need a strong interconnection, complementary cooperation, safe and reliable infrastructure/network to support several trillion level green economies (including green production, green consumption, green finance, green innovation, green power plants with energy generation), together with the people, goods and rights of the industry, work together to stimulate the vigorous development of the global digital economy!

2. Birth and Vision of NEW POWER

2.1. Birth of New Power

Based on what the global green energy market is facing regarding clean energy intelligence and digital transformation of the industry, NEW POWER was founded over the years in the worldwide green energy industry.

By making full use of emerging digital technologies such as blockchain, Internet of Things, Big Data, Artificial Intelligence, and combining standardized chain-based assurance mechanisms, New Power has taken the lead in opening up green energy underlying assets (such as photovoltaics) in Central Asia and Southeast Asia) standard digital and indeed the right registration process and is united in different areas of the business to be involved in different roles (including judicial regulatory organisms, monitoring agencies, financial and insurance institutions, exchanges enterprises, etc.) together to complete a “Trustful and Transparent” system. To its underlying assets penetration and to achieve on green assets the transparency and equity certification required thereby allowing the green assets to reach their real valuation.

Based on this, New Power also combines the transaction needs of green assets in various regions and their asset management to provide a good environment for all parties by setting a complete access and exit mechanism, risk control, incentive scheme and consensus mechanism. Trust the operating environment, realize diversified scenarios, and build a self-trusted, self-operating global green asset digital intelligent ecosystem.

2.2. New Power Vision

■**Vision1:** Building a self-confident and good operating environment for a green asset world.

■**Vision2:** Let the value of the green assets appreciate by multiple levels.

■**Vision3:** Utilize digital technologies such as blockchain and other emerging technologies to achieve multi-party power, reach the digital transformation of green energy, take advantage in a market of trillions in the green energy industry and create an ecological network that truly realizes the evolution of green energy industry.

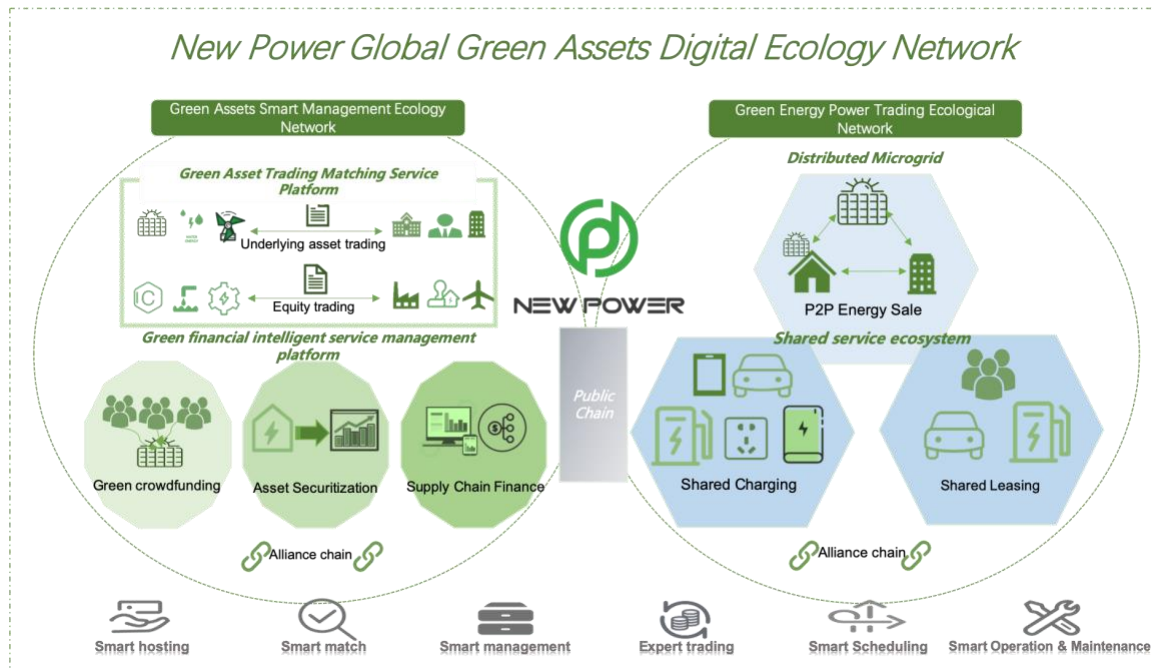
3. NEW POWER Eco Business Panorama

New Power to build the **global green digital assets ecological network** is based on the New Power ecosystem build on the public chain (backbone) of different business systems, a green value of assets consisting of mining and energy. New Power’s value in ecological

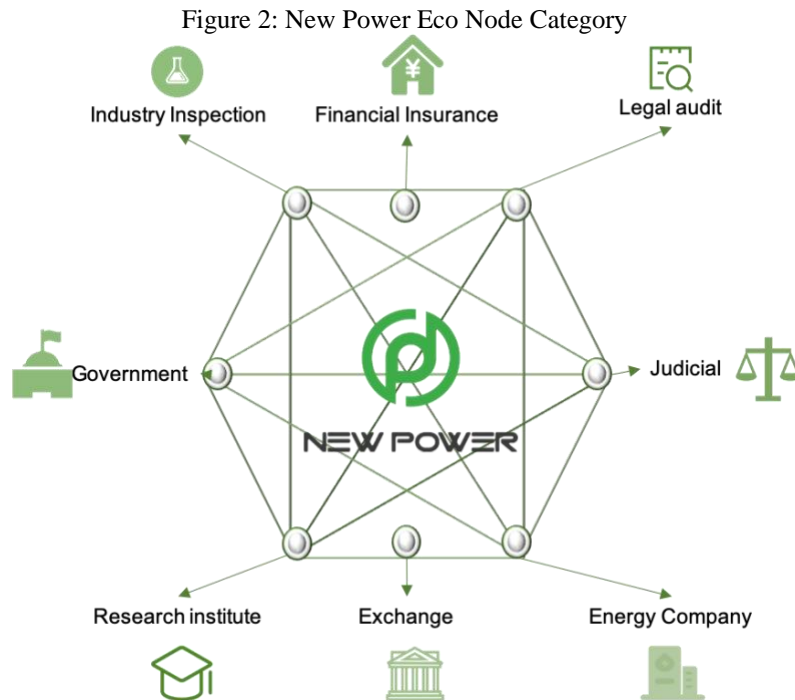
network is through the issuance of public chain (NPC) to reflect on a specific business value of the chain and through each business, an alliance with the entire value chain to be able to issue a certification of the values achieved (for specific economic model, please refer to Section 7.1 New Power Pass Eco-Figure).

According to the current business plan, the green asset intelligent management ecological network and the green energy power trading ecological network are mainly built around the two business systems of “green finance” and “green power”. In the future, New Power will support the access and construction of the alliance chain ecosystem of other business systems that digitize green assets worldwide. The New Power Foundation does not rule other types of investments

Figure 1 : New Power Eco Business Panorama



From the perspective of a role of ecological participation, New Power links the different types of nodes involved in the business in each region according to the business needs of each ecological alliance, including industry head enterprises, industry associations, and judicial supervision in each region. Testing enterprises, financial and insurance institutions, blockchain technology companies, exchanges, etc., jointly build a **world of value-** based and **circulation** based on green energy. Jointly promote the digitization, standardization and healthy development of the global green energy industry, as well as its industrial upgrading and ecological intelligent development.



4. NEW POWER Core Business Solution

4.1. Green Assets Intelligent Management Ecological Network Business System

New Power Green Assets Intelligent Management Eco-network business system is mainly composed of “Green Asset Trading Matching Service Platform” and “Green Financial Intelligent Service Management Platform”.

4.1.1 Green Asset Trading Matching Service Platform

■ Overview

New Power “Green Asset Trading Matching Service Platform” mainly addresses *the liquidity of the underlying assets of green assets*. This is also the most fundamental and core part of realizing the whole industry of green assets and the transfer of all-ecological values.

New Power “Green Assets Dealmakers Service Platform” business mainly is related to solar photovoltaic power plants, hydropower, wind power and other trading transactions underlying green assets also include things like carbon emissions and other emission rights

interests, such as energy generation rights transactions. The platform itself will be through a series of standardized system is indeed the right and most effective mechanism, combined with innovative technology platform and disruptive business model, to achieve assets of **increase trust is indeed the right option**.

■ Solutions

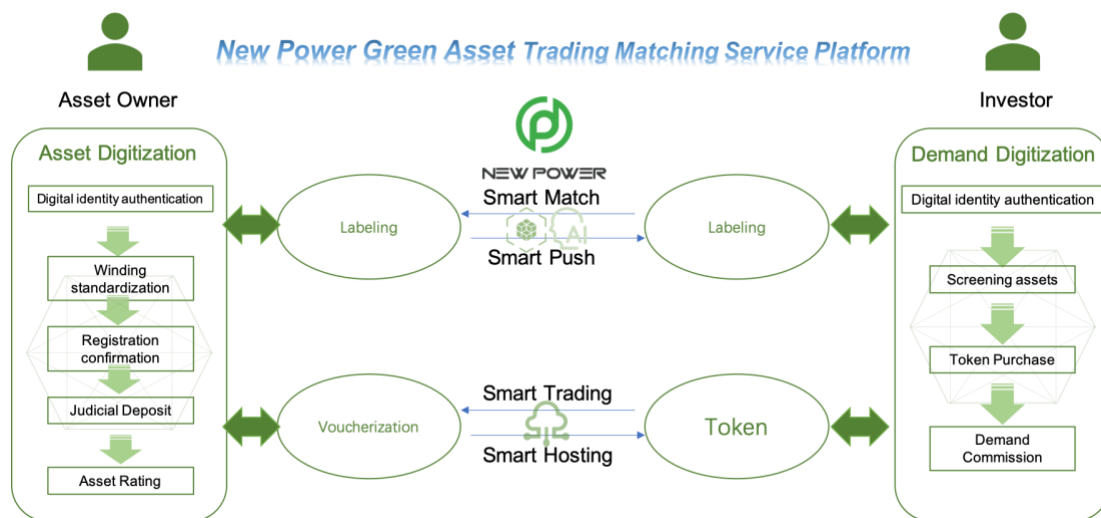
Overall, New Power works through blockchain, big data, cloud computing digital technology means, green energy underlying asset (e.g., PV power plants, etc.) to achieve the transmissive management, the asset itself is allowed to achieve and to ensure authenticity of the data. The process of confirming the rights is based on a set of standardized credit enhancement processes and mechanisms, which can achieve the authenticity certification and chain verification of all parties involved in the transaction. Based on this, New Power trading matching services platform takes full advantage of big data, artificial intelligence and other technologies; the seller (owner of the assets) on the chain of digital assets and the buyer's purchase needs accurate label of **smart match** and **intelligent recommendation** in order to help asset buyer screening of high-quality green assets, while helping the seller of the assets safely and quickly double check the data obtained, thereby providing a green asset **intelligence service**. The goal is to achieve an efficient, safe and “reliable” delivery through the platform TOKEN (PPT) and smart contracts, which is the main function of the **intelligent payment** when is completed. And the whole process is **managed** by the platform to achieve **full lifecycle management**, support all parties to trace and collect evidence in real time, and embrace supervision.

In addition, the asset owner can be entrusted to the platform for automatic sale through the New Power platform, and the voucher assets can be automatically sold through the access mechanism, the sales conditions can be set, and a commission agreement can be signed. Similarly, the purchaser can also delegate the purchase transaction to the platform (ie, set the purchase conditions, sign a commission agreement; then the commission conditions are automatically written to the smart contract). Then you can complete the **intelligent hosting service** in the platform of green asset trading. Its access mechanisms and services delegation mechanism would buy and sellers to set deposits or full trading the platform token (PPT) to complete the formal transaction commission. As a result in line with the

smart match, buyers and sellers intelligence custody and trading commission's contracts will be triggered and automatically complete the transaction and settlement as well as the delivery of the assets in order to achieve the green assets sale by the **Expert Advisors** .

Intelligent transaction matching, intelligent payment and delivery, intelligent hosting and management functions are the “powerful foundations” for New Power to provide efficient, safe, low-cost, self-operating green underlying asset valuation. New Power is also exploring more business-level value transfers as a new “Secret weapon”.

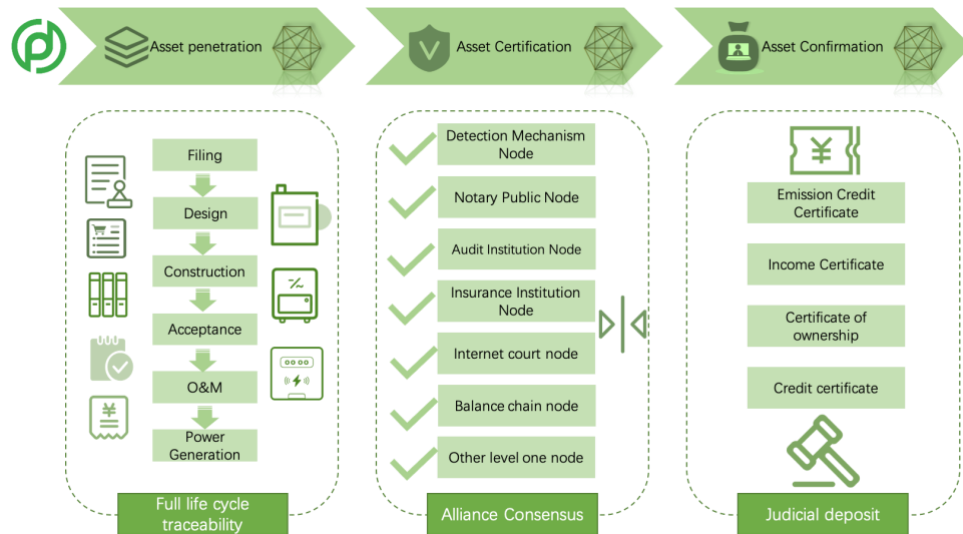
Figure 3 New Power Green Asset Trading Matching Service Platform Solution Logic Overview



■ **Core value one: “asset penetration - asset certification - asset confirmation”, The standardization mechanism on the chain, to achieve “relief” circulation**

The New Power platform uses emerging technologies such as the Internet of Things, blockchain, big data, and artificial intelligence to digitally authenticate green assets, standardize the winding process, monitor the authenticity of returns, and provide for judicial verification. The entire life of green assets begins at the source. Cycle asset value management on the chain; self-confidence management based on consensus algorithm and judicial deposit and traceability to achieve **asset penetration**, **asset certification** and **asset identification** throughout the life cycle.

Figure 4 New Power Green Asset Chain Logic Solution Logic Overview



■ Asset Certification

The New Power platform introduces a number of public trust institutions as alliance networks to perform certification, auditing, notarization, confirmation, deposit and other guarantee operations on photovoltaic assets to ensure the compliance and legality of assets.

At the same time, New Power docked the government database and the equipment of the PV asset to collect data, and dynamically compare, verify and analyze the big data technology to realize the dynamic early warning and certification of assets. New Power can build a decision analysis engine and a risk control engine to build an asset rating model through data modeling and machine learning technologies to dynamically rate photovoltaic assets and achieve the dynamic value certification of them.

“Asset Certification” is a further increase of trust in the assets on the chain, builds confidence in the use of assets, enhances the credibility of the assets in circulation, and is the basis for the rapid flow of assets.

■ Asset confirmation

The New Power platform fully grasps asset information through asset penetration and asset certification . The consensus reached through this information can clarify the ownership and share of assets, and through the blockchain technology for registration, certificate

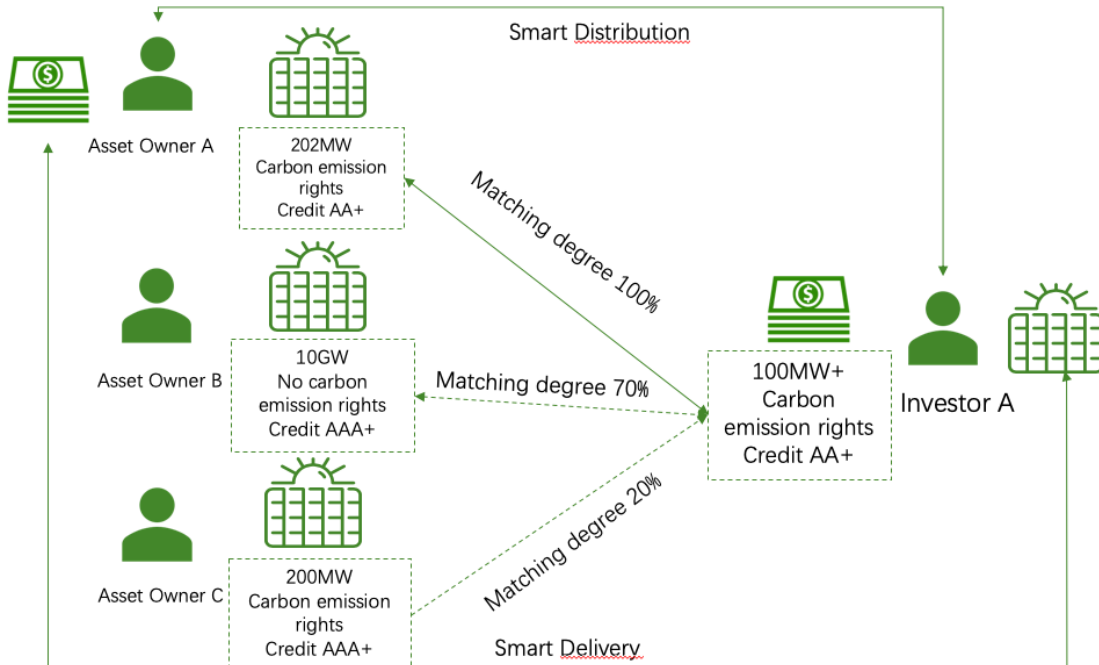
issuance and judicial deposit, to ensure the ownership of equity. Legitimacy, realizing the chain of assets.

Assurance of assets is the concept of the circulation of assets. The identification of assets on the chain is fast and convenient. Combined with the certificate, the multi-level transfer of assets and interests can be realized.

■ **Core Values 2: “Precise Tagging - precise match and recommend - Expert Advisors” the intelligence service system to achieve safe and efficient manner the delivery of assets and the right to do so.**

After completing the digitalization and value chain of photovoltaic assets, New Power analyzes the needs and habits of investors through big data and artificial intelligence technology, and accurately labels asset data. Its label will be displayed according to investors' habits. The investors are accurately screened for the assets; the platform will also push the default high-quality assets before the investors manually filter according to the investor's habit; and intelligently push through the matching degree of the labels. The two sides also can contract in advance by intelligent platform hosting, automatic trading and settlement; can also be operated as a manual asset sale. The sale transaction will be conducted through intelligent delivery platform for a rapid delivery of the assets, the chain will directly change the procedures and the registration, eliminating the traditional tedious model.

Chart 5: New Power green assets dealmakers Services Platform (PV power plant trading business)
logic series overview

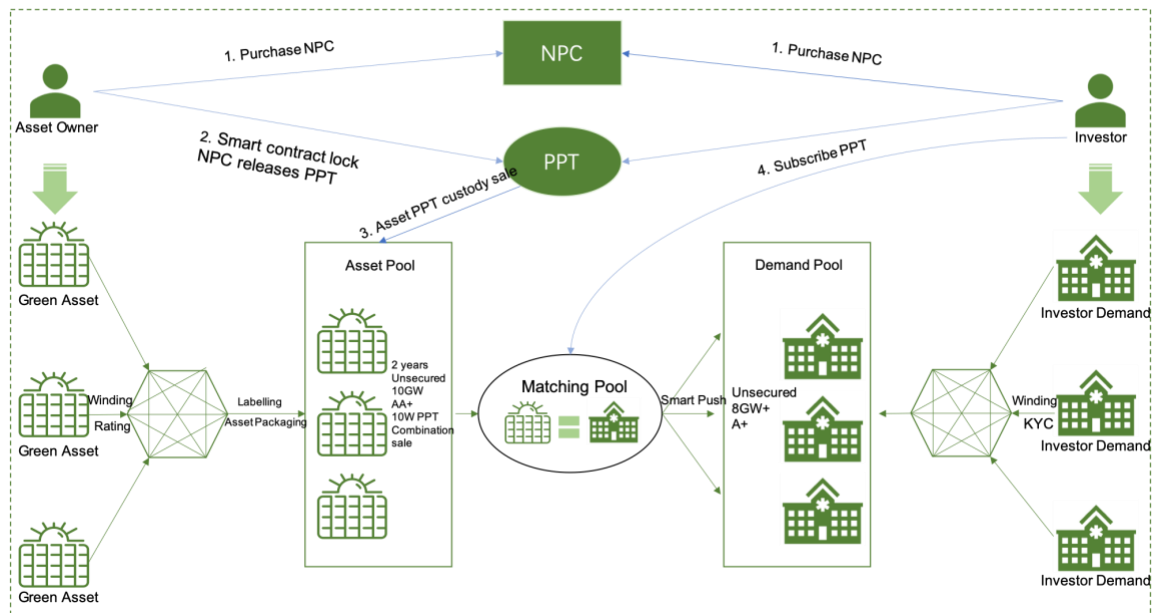


As shown in the above figure, taking the photovoltaic asset transaction as an example, after the owner's assets are registered and confirmed on the New Power Green Assets Trading Matching Service Platform, the assets will be automatically tagged on the platform. These labels will be exhibited and revealed to investors. If the investor earns a transaction commission on the platform in advance, when the matching degree between the demand label and the asset label reaches the commissioning ratio, the platform will automatically complete the transaction and delivery of the asset; if the investor did not earn a commission, the asset will, according to the matching degree of the investor's screening label, be pushed to the investor from high to low, and the investor will be free to choose and to complete the transaction. Matching the entire assets trading and asset delivery actions will be automated and intelligent execution and completion.

■ Platform Business Economic Model Design

As shown in the following figure, the economic model of the New Power Green Asset Trading Matching Service Platform, combined with its business, is roughly divided into the following four links:

Figure 6 New Power Green Asset Trading Matching Service Platform Solution and Economic Model Overview



■ Link 1: Ecological access

The asset owner and investor passed the KYC certification and purchased the NPC to join the New Power Green Asset Trading Matching Service Platform (referred to as the New Power platform).

■ Link 2: Business Admission

The asset owner locks the NPC through the smart contract provided by the New Power platform, and issues the PPT of the value ratio (usually less than the total value of the asset) corresponding to its assets. The investor makes the PPT subscription (i.e., asset purchase) through the NPC.

■ Link 3: Expert Advisors

The asset owner escrows the assets to the New Power platform, and the platform intelligently matches the escrow assets and pushes them to the investors; the investors can purchase the matching assets based on the asset transaction escrow contract, and can also manually purchase the assets recommended by the platform. After the transaction is completed, the platform performs intelligent delivery of assets and completes the change of the assets.

■ Link 4: Incentive reward

All successful completed transactions brokered on the platform are required to pay a certain percentage of fees, these fees will be automatically deducted to the platform donation pool; the platform will be used for part of the funds to repurchase the NPC, and reward contributors to the platform .

4.1.2 Green Financial Intelligence Service Management Platform

■ Overview

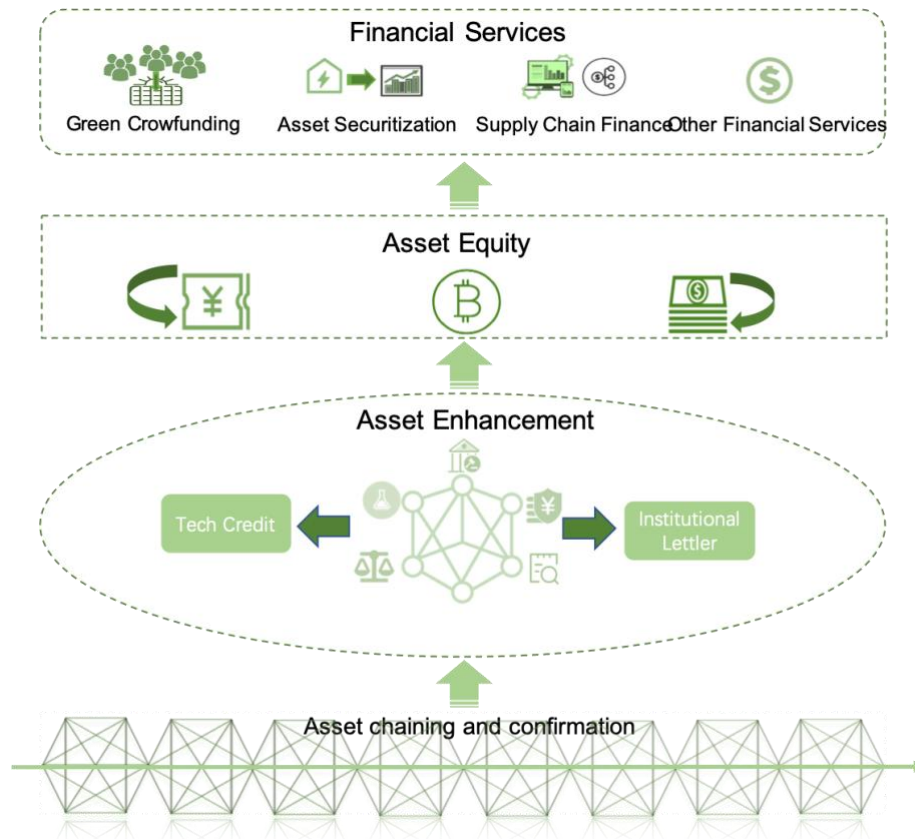
Online green financial intelligence service management platform for the New Power to provide users in the ecological network asset intelligent management and green financial diversified services, can efficiently and quickly to solve financing problems within the ecological network users, as well as to build a green energy economic infrastructure.

■ Solutions

New Power through the asset chain has the right to manage the flow of assets, as well as to determine the assets' value. On this basis, the intelligent management of green financial services platform can guide the user to the assets' equity standard to electronic documents and equity certificates carried on the platform of smart hosting. The managed asset equity voucher greatly facilitates the value transfer in the New Power network because it can be split and traced. On one hand, it can help users of financial institutions, to solve problems; on the other hand, due to the penetration of assets and transparency of information and a split of the assets, it could be coupled with the dual block chain technology to enhance trust and consensus of the alliance, It can help investors to quickly identify investment risks and choose the right assets for share and subscription, just as easy as buying stocks.

Currently, New Power green financial intelligence service management platform covering crowdfunding green asset securitization and supply chain finance with three large financial services scenes. With the opening and development of the New Power ecosystem, more financial services scenarios and applications will be accessed in a future stage.

Figure 7 New Power Green Financial Intelligence Service Management Platform Solution Logic
Overview



■ Crowdfunding

To help green energy construction side and the operating side of the business expansion and to address the deployment of construction and other financial issues, but also for New Power provide a transparent and efficient community of users can participate in investments income channels, New Power platform will build a tile-based chain technology. The green crowdfunding platform will work together to help the development of green industries and promote industrial upgrading.

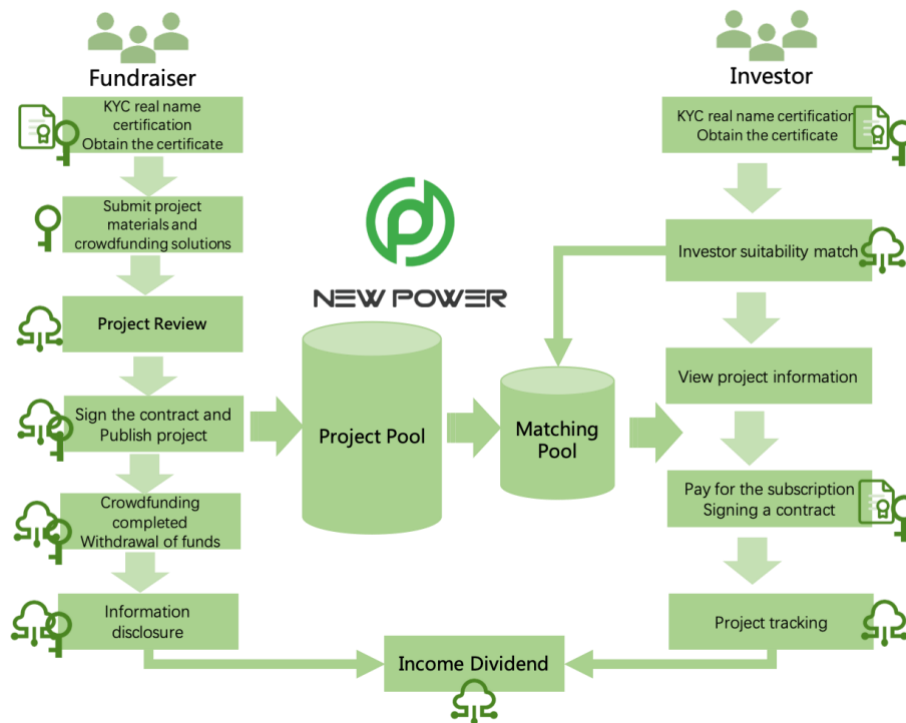
The core value of New Power green crowdfunding: the whole lifecycle management mechanism of “project auditing - investment adaptation - special earmarking - intelligent dividends”, building a fair, open and transparent self-confidence blockchain green crowdfunding service system.

Any crowdfunding project is subject to New Power strict platforms and standards of **project approval mechanism** in order to initiate the project crowdfunding. Financing for the project parties need the equity stake in the project, such as the right of return of

electronic vouchers with available feed line on sale. The project Public Offering by **"investors"** (after matching verification of intelligent contracts) the information will be provided to the corresponding investors on the platform which can be traced with complete information about the project, and by then, select a free subscription.

The green crowdfunding platform guarantees timely disclosure of project information through intelligent contracts and conducts risks red flags through big data technology. Intelligent platform through contracts will ensure that all the funds raised, capital and equity crowdfunding platform, will be transparent in the whole process. Crowdfunding project is managed by blockchain and intelligent contracts, reducing the manual intervention with high risks, and switch it to a safe and efficient solution with trust and credit worthiness investors and transactions, as well as realize the self-operation of the crowdfunding platform based on trust and credibility.

Figure 8: New Power Green Crowdfunding Business Solution Logic Overview



■ Crowdfunding Business Process

1. KYC certification

Financing and investors to join the green crowdfunding platform must first obtain a real name authentication to CA certificate.

2. Submit a Project

Obtain a financing party after project certification on the platform and then launch the crowdfunding application and complete the platform requirements in accordance with the appropriate project information to improve the materials and crowdfunding programs (materials and programs submitted all the required digital signature as evidence on the chain).

3. Project review

The platform adopts intelligent contracts to conduct a preliminary review of the project. After the intelligent contract is approved, it will be manually audited. The audit opinion needs to be digitally signed by the auditor. The platform will carry out the chain verification of the auditor's signature information and audit opinions.

4. Project Fundraising Release

After the approval, the fundraiser confirms the release of the project and signs the contract. The contract is managed through the intelligent contract system and the whole life cycle of the project operation is monitored by the intelligent contract system.

5. Investor's Suitability, Matching and Investment

After the project is released, the "Investor Appropriateness" intelligent contract system will match the investor's risk preference and investment requirements appropriately in order to push the suitable project to the investor. The investor makes an investment subscription for the project and is interested in and signing an investment agreement to obtain the asset income certificate.

6. Fund management and information disclosure

After the crowdfunding is completed, the intelligent contract system will supervise the funds raised and the funds will be paid according to the information disclosed by the project party and the real progress of the project, so the special funds will be used exclusively for that specific reason. According to the crowdfunding plan and the platform rules, the intelligent contract system will supervise the project party to disclose information, as well as carry out fund freezing and risk warning for projects that do not disclose information in time or disclose information that is not compliant or untrue in order to reduce the risk for the investor.

7. Income dividends and project end

When the platform to monitor the operation of the project circumstances satisfy the conditions crowdfunding program contract agreed upon, the platform will automatically trigger the intelligent contracts gains dividends. If the project meets the end condition agreed in the intelligent contracts, the transaction is done; if the

project does not meet the final conditions, it continues to be monitored and tracked until the project meets the required conditions.

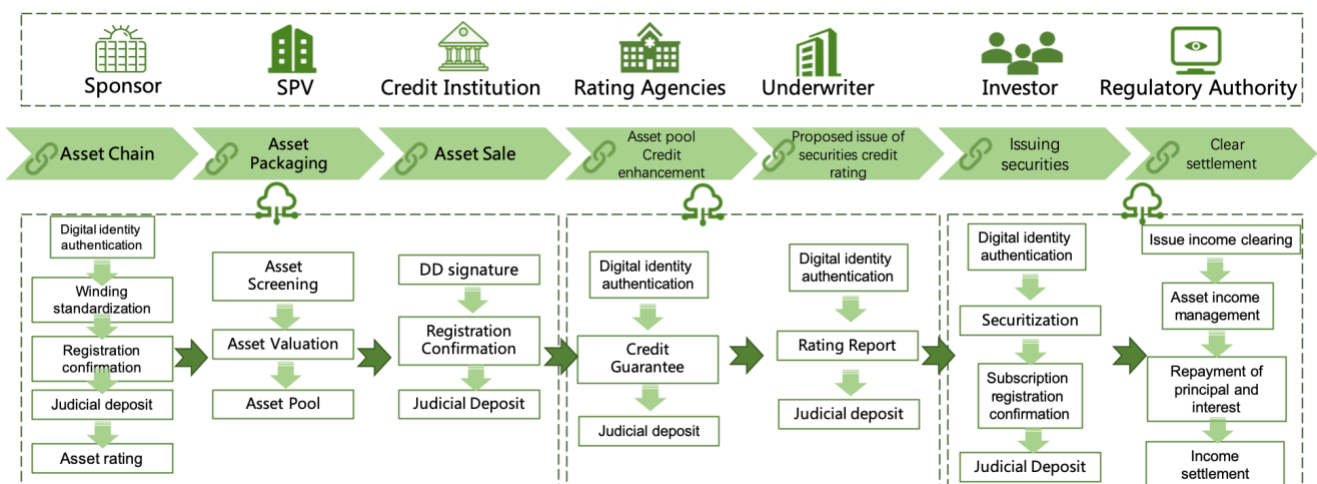
■ Asset Securitization

New Power platform based on blockchain technology where all data will be for green energy project construction, operation and maintenance as well as operations carried out as evidence for the value chain, so the chain, through networking technology and a trusted authority certification and guarantees, can ensure that the authenticity and credibility of the data; at the same time, through the blockchain distributed accounting method, the data management cost will be much lower.

Through the real and reliable green energy project data on the blockchain, it is possible to conduct accurately a supervision of the underlying assets and to ensure the quality of the same. Based on the trusted data exchange technology, the coordination of all parties is achieved at the data level and the accuracy would be guaranteed. The efficiency of cooperation between the parties would be improved as well as the cost of the transaction would be clearly reduced.

New Power authenticity of the underlying assets provided by the platform, as well as the transparency and quick combination of integrated intelligent services, are not only a convenient asset securitization of the underlying assets, as it is also a way to enhance investors' confidence and willingness to invest by this mean. With this platform, Investors and regulators can directly view and trace the asset(s) information in the chain, obtain a real-time risks red flags of assets and permits through the big data technology and intelligent contracts, realizing the symmetry and timeliness of transaction.

Figure 9: Logic overview of New Power Green Asset Securitization Solutions



New Power Green Securitization Platform by the sponsor (fund demand side), Special Purpose Vehicle (SPV), third party agencies, third parties credit rating institutions, underwriters, investors and regulatory agencies are involved in the whole value chain.

➤ **Assets on the chain**

Asset-winding is the foundation of green asset securitization. The New Power platform provides standardized processes and services to help sponsors complete asset-winding.

➤ **Asset packaging**

Assets on the chain ensure the authenticity and credibility of the underlying assets due to the technical enhancement of blockchain technology, plus the asset rating completed during the chaining process of the New Power platform (equivalent to the self-assessment report of the assets), can help the initiator to quickly filter assets to form an asset pool.

➤ **Asset sale**

The promoter sells the pool of assets he wants to securitize to SPV and the sale is completed on the chain. Both parties digitally sign the contract in the system and the transaction information is stored to ensure the real completion of the transaction.

➤ **Asset pool credit enhancement**

The promoter or third-party credit institutions have already transferred the SPV to the asset pool. On one hand, the green asset securitization platform can perform historical returns and revenues analysis as well as risks assessment to increase the trustability of the asset pool; on the other hand, increasing the trustability in order to provide the appropriate qualifications on the assets through digital identity authentication, will increase the pool of assets for all parties. A letter of credit could be required and the information would be stored in the data room to prevent payment failures. This trust mechanism can enhance the level of credibility of the asset pool.

➤ **Plans to issue securities credit rating**

A credit rating is issued by a neutral and authoritative credit rating agency for asset-backed securities to be issued by SPV. Rating agencies need to complete a digital identification and provide a credit rating for the asset(s). The digital ratings will be signed as evidence.

The distributed ledger of the blockchain can support investors and regulators for a real-time viewing and evaluation; at the same time, the non-tamperable and non-traceable features of blockchain technology ensure the validity and authenticity of credit rating results.

➤ **Issuing Asset-Backed Securities**

SPV would be structured on the basis of a specific pool of assets and the securities would be issued through underwriters using public offerings or private allocations. After the digital identity authentication, investors can purchase securities to invest. The subscription of shares and corresponding rights would be managed through intelligent contracts which would be verified by blockchain technology.

➤ **Clearing and settlement**

Funds raised by issuing securities would be automatically paid to the sponsor through intelligent contracts and asset pool management so the revenues could be also regulated through intelligent contracts. The earnings will follow the issuance of securities in the intelligent contracts according to the automatic sorting from investors' securities to be held for obtaining financing. After all principal and interests repayment, the remaining will be automatically settled to the sponsors of the contracts.

➤ **Chain Finance**

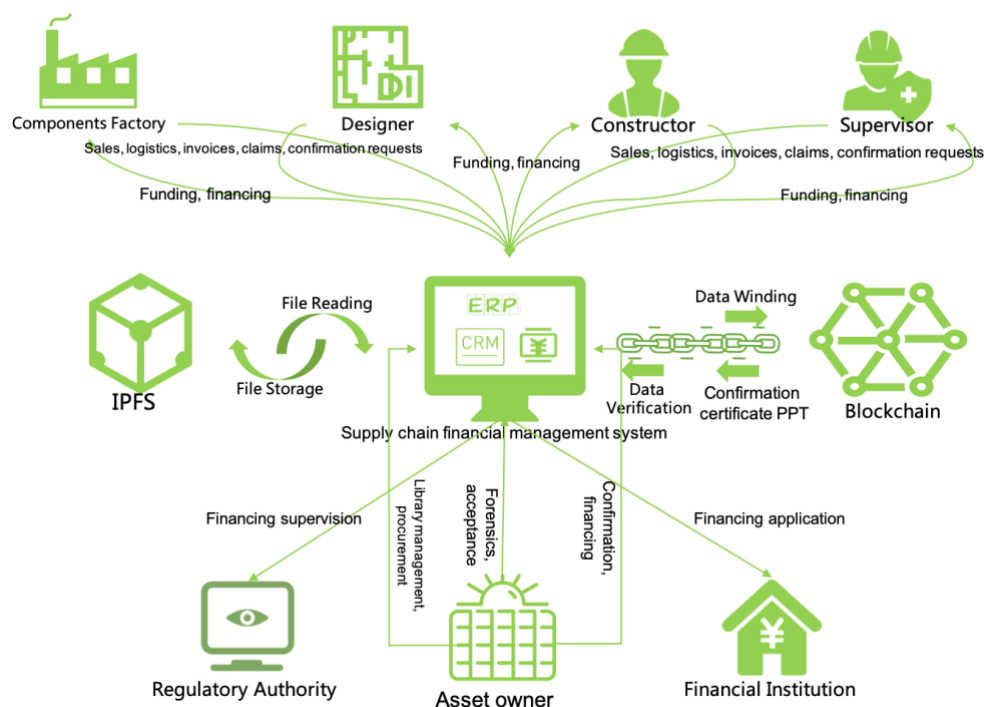
Relying on the strong credit rating of the core enterprises in the supply chain (high corporate credit and high bank credit), supply chain finance has become one of the effective ways to solve the financing difficulties and financing problems of upstream and downstream enterprises in the supply chain. However, due to the decentralization of information and the centralization of management, the traditional supply chain financial system cannot guarantee the authenticity of information, resulting in business risks and frequently many red flags. The traditional supply chain financial system lacks a credit value evaluation which makes the core enterprise's credit unable to cover the small and medium-sized enterprises at the upstream level, therefore, it cannot solve the upstream enterprise financing problems so far for these core enterprise.

The NEW POWER supply chain financial platform is based on the “asset chain” and the upstream and downstream enterprises in the supply chain, as well as logistics, financial

institutions, regulatory agencies and other business related parties are included in the alliance chain node through the blockchain distributed accounting method. Business systems such as ERP, CRM and financial systems of upstream and downstream enterprises are connected to the NEW POWER supply chain financial platform to ensure that the trade information, logistics information, financial information and other business data are stored correctly; New Power through the four-in-one verification of business flow, logistics, capital flow, and information flow can achieve the penetration of its underlying assets and ensure the authenticity of information exchanged in the platform.

The core enterprise can carry out a confirmation and issue electronic vouchers for the financing needs of suppliers as well as issuing the PPT. Based on the electronic certificates issued by PPT, a chain of ecological applications that can be carried out through the supply chain and can be a multi-level circulation achieved by the delivery of core enterprise credit. It is indeed the right to open the electrical sub-certificates records with information about credit and debt where holding companies can hold electronic documents transferred to the financial institutions since the electronic documents will carried out by the issuance and redemption of the core business, its certificate holders can quickly approach the financial institutions to obtain low cost financing.

Exhibit 10: Logic Overview of New Power Supply Chain Financial Business Solutions



■ Platform business economic model design

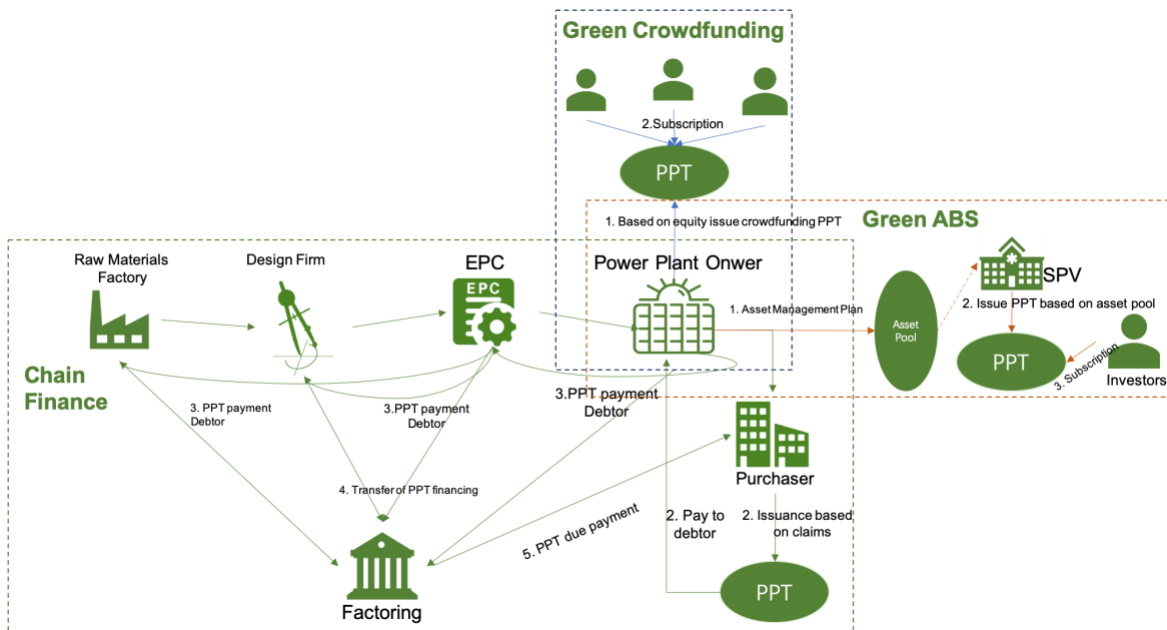
New Power's green financial intelligent service management platform is focus on “financial services” and is composed by other financial services such as green crowdfunding, green asset securitization and supply chain financing.

All participants who use the platform financial services need to hold the NPC to join NEW POWER as an eco-member / user.

On the financing side, PPT is an asset-based financing (such as debt vs future income rights) a certain percentage of the value (less than the full value of the assets) could be financed; investors by subscribing to PPT for investment, can subscribe to PPT and NPC at the same time with the same value (based on the NPC price at the time of the transaction). Financing needs from the parties can be sold on an exchange to carry out immediate drawdowns.

PPT can only be transferred within the chain of business alliances it is issued. For a successful financing on the demand side, the necessity to donate a certain percentage of the PPT as a platform service fee for the profit of the platform and the different parties (such as a financial institutions), is also required to donate a certain percentage of PPT as a service fee. These PPTs will be remitted to NEW POWER donation pool and part will be used for repurchase of NPCs. Some of the repurchased NPCs will be used to reward eco-network co-constructors and contributors.

Exhibit 11: Overview of New Power Green Financial Intelligence Service Management Platform
Solutions and Economic Models



4.2. Green energy power trading ecological network business system

Power New “Green energy power trading ecological network” around “green power” service for business ecological network, through the use of mobile Internet, blockchain, big data, networking and other micro-grid technologies relying on shared and social economy models as well as other models to achieve optimal allocation and utilization of resources.

The Green Energy Power Eco Network includes “Distributed Microgrid” and “Shared Service Eco Network”. Third-party developers or co-constructors can develop application services on the infrastructure of NEW POWER (digital ecosystem such as microgrid and chain assets, as well as technical services such as public and alliance chains) to realize the co-construction and benefits of green . Sharing and jointly promoting the development of a global green economy.

4.2.1 Distributed Microgrid

■ Overview

New Power Green Energy Power Trading and the ecological network by linking green energy producers, energy storage, end users, intelligent scheduling and intelligent matching of supply and demand at both ends, in order to build a smarter distributed generation of microgrid business system.

■ Solutions

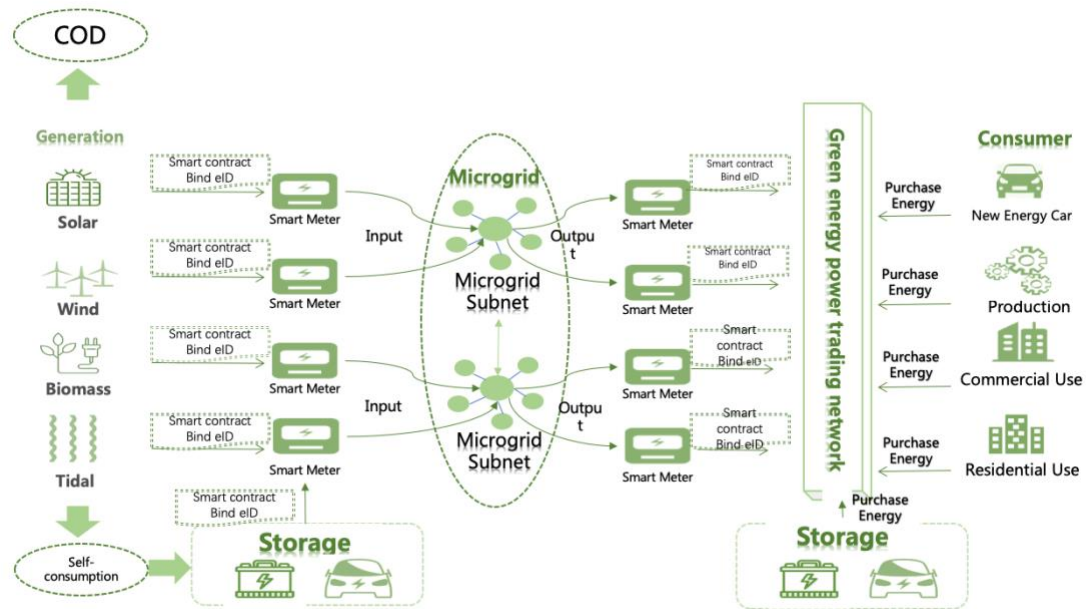
Through core technologies such as Internet of Things, big data, blockchain, and artificial intelligence, NEW POWER builds an intelligent matching and intelligent scheduling based on the geographical location, buying and selling demand information of the energy suppliers and off-takers. Distributed micro-grid for services such as intelligent clearing and settlement (micro-network and the branch network of the distributed micro-grid) can be further subdivided according to the distance. A self-sufficient regional small energy network ecosystem can be realized in each branch / micro network. It will not only cause problems such as waste of resources and time-consuming inefficiency due to distance and other factors; it can also create a strong complementary relationship with the power grid operator and basically achieve a balance between local energy production and energy use, as well as promotion of green energy, industrial upgrading of electricity grid parity, cost reduction and energy efficiency.

NEW POWER builds a new intelligent green energy self-production and self-consumption scenario by linking and integrating the energy production, energy storage and consumption terminals in the distributed microgrid of each region to generate self-sufficient energy in the region.

The end of green energy generation, energy storage and end users are required to get a digital authentication and smart meters ready to join the grid and small businesses. Smart meter real-time generation, energy storage and power consumption data stored in the system and through a business-oriented data can trigger the system to complete the operation,

Distributed Generation, according to the needs of micro-grid power purchase as well as the physical location of both supply and demand, prices and other conditions, will provide energy scheduling and a smart match with the recommendations of maximizing the consumption of green energy and reducing low energy efficiency utilization; on the other hand, through the Internet of Things and big data technology to collect and to analyze the grid operation data, through the continuous deep learning of artificial intelligence technology, the rapid positioning and diagnosis of microgrid equipment, this can become a real **intelligent operation and maintenance** of the power grid.

Figure 12: New Power Microgrid Business Solution Overview



Distributed micro-grid generation through the intermediation of peer-to-peer transaction methods, can improve the economic benefits of producers and sellers, reduce the cost of electricity users and create new possibilities for the realization of affordable or free Internet access.

■ Power of Digital Assets

Smart meter is the hub within the microgrid power trading, as the chain data on the device and the user's identity logo, responsible for the chain of power data and from the power of production and consumption statistics ; also responsible for the power assets of ownership of the registration is right and as evidence To realize the digitization of power assets . The digitization of electronic assets is the basis for the rapid trading of power assets within the microgrid.

■ Point-to-point transaction

NEW POWER smart microgrid network contract can allow supply and demand from both sides to be provided with an application service platform and submission requirements to trade, NEW POWER Physical Layer and licensing procedures of intelligent matching system platform work together to generate trading contracts. Once the conditions of the intelligent contracts is reached, the blockchain system will automatically execute the

contract, complete the power dispatch, consumption and clear settlement, as well as realize the point-to-point transaction of the power resources.

■ **Clear settlement**

The micro-grid is a peer-to-peer trading network. It is cleared by the digital currency PPT (stable currency) and the consumer holds the funds. When the transaction is done, the automatic settlement can be completed.

■ **Scheduling Operation and Maintenance**

NEW POWER analysis of electrical equipment and usage of Big Data technologies to adjust dynamically the power generation and transmission through the oracles, intelligent contracts and intelligent scheduling of power resources. The blockchain technology records the whole process of equipment operation data with big data technology and artificial intelligence technology, which can quickly detect the location of the failure as well as suggest potential solutions from a solutions library of operation and maintenance. This intelligent scheduling and operation and maintenance can greatly improve the efficiency of micro-grid and reduce operating costs.

4.2.2 Shared Service Ecological Network

■ **Overview**

The Shared Service Ecosystem is NEW POWER's quick development through the global sharing economy and the integration of high-quality new energy vehicles, shared charging stations, shared charging outlets and other shared service operators / service providers. The charging user (demand side) will be provided with a fast, efficient, low-cost intelligent matching and recommendation services, thus creating a global and optimal shared service ecological network to promote global green and low carbon development. Through the core technology advantages, resource advantages and intelligent services of NEW POWER, we can quickly solve the problems of users (demand), such as car and charging, and solve the production / service relationship between the supply and demand sides.

■ **Solutions**

New Power's "Distributed Shared Services Ecological Network" is for all sizes around the world new energy service providers where the users can focus on the secure transactions by providing smart information for matching and payment for a series of integrated services

and avoiding additional high cost payments for third parties. It can also empower charging devices with “smart” and good “interconnection” to achieve a perfect combination of charging applications and solutions.

NEW POWER provides financial services such as green crowdfunding to help shared equipment service providers / operators solve the problem of capital construction or business expansion. Through infrastructure and financial support, local service providers / operators can quickly build a green energy sharing service network.

From a technical point of view, NEW POWER assigns the unique digital identity (eID) of new energy charging devices and other devices (such as new energy vehicles) in the ecological network through blockchain and cryptography, to connect them to the NEW POWER distributed microgrid. When these devices with digital identity are connected to the matching charging devices (such as charging stations) in the NEW POWER network, you can easily enjoy the services such as charging / equipment use. Each user can install on a smart device (phone, tablet, etc.) the NEW POWER app as well as utilize the charging device to search for a rental equipment or other new energy sources to use, When a user with a service provider activated, the user can enjoy the charging service or equipment rental service.

NEW POWER offers a range of smart contracts to enable self-operation of shared service networks. The shared device service provider / operator's shared device usage and operation status can be managed through real-time monitoring on the chain. Combine with big data technology for intelligent operation and maintenance and early warning, smart contracts will be traded according to the operation of the device to ensure the efficient applications of shared devices and at the same time, to provide consumers with a good user experience.

Figure 13: New Power Shared Services Eco Network Business Solution Overview



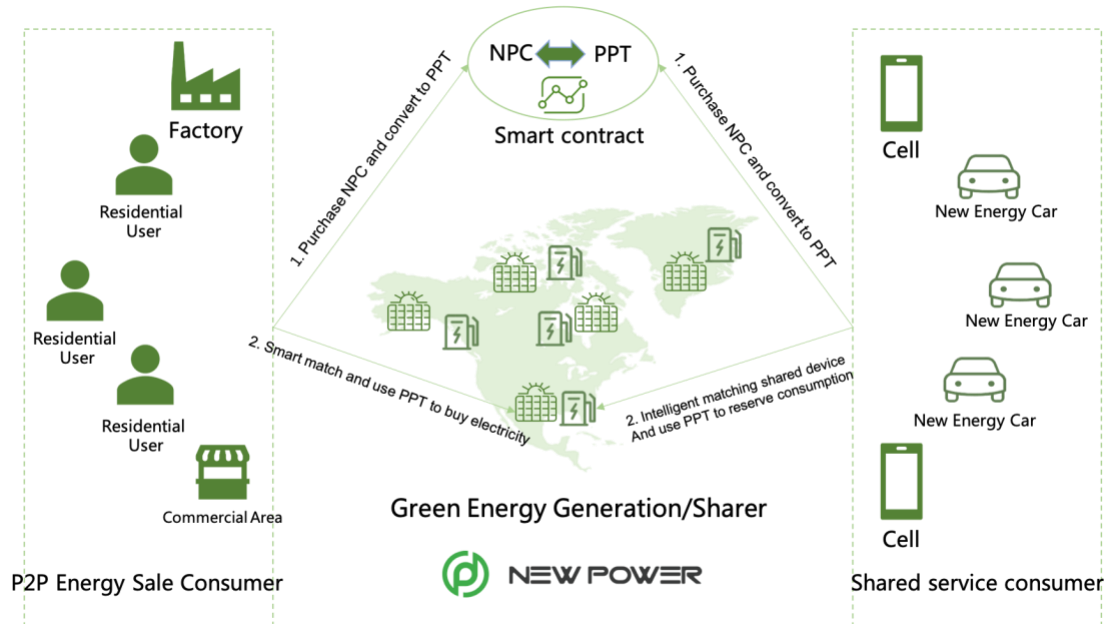
In order to ensure the stable operation of shared ecological networks, the NEW POWER app, through shared services, can allow an economic and ecological network of management of incentives. The provider (supply side) and consumer (demand side) of the shared service can also need to hold the NPC to join the shared service network. Among them, the shared service provider can provide an efficient shared service and sharing consumers through consumption, dissemination or other contribution behavior rewarding their conduct.

Sharing is the only stable currency settlement and payment through tokens in the ecological network where consumers buy NPC to redeem, and share service providers to obtained by PPT convertible NPC to re-invest or withdraw in cash.

■ Business Economic Model Design

The New Power Green Energy Power Trading Eco-Network includes point-to-point power trading based on distributed microgrids and a shared service.

Exhibit 14: Overview of the New Power Green Energy Power Trading Eco-Network Business Economic Model



NPC is also an access for the green energy power trading ecosystem. Green Energy producers and sharers can join the platform by purchasing a certain number of NPCs.

For consumers in the ecological network, the need of purchasing NPCs will convert them into a contract on the application by the intelligent service platform PPT (anchoring the stability of the local legal tender coins) to the consumer.

For service providers in the ecological networks, providing the sale of electricity or equipment rental services PPT to be converted into NPC and sell them to obtain liquidity.

The profit-seekers who sell electricity or provide shared services within the network also need to donate a certain percentage of sales PPT (as a platform service fee). New Power will use its PPT for NPC repurchase, and the repurchased NPC will be for contributors and those who built it.

5. Technical Solutions

5.1. Public Chain Design

The renewable energy industry is a relatively new emerging sector. It is still in the stage of rapid growth and development. It has different characteristics and cooperation methods from other industries. The renewable energy industry has diversified energy sources,

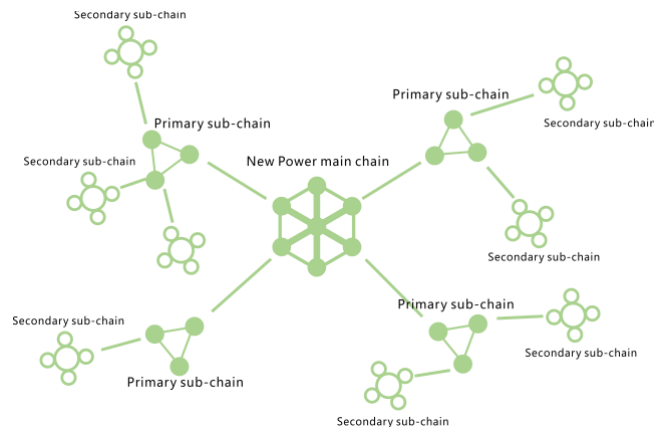
scattered, wide industrial coverage and high professional threshold. The projects have high costs, long project cycles and many participants or counterparties. In the entire new renewable energy industry, data circulation is the driving force for the development of renewable energy projects, and it is necessary to ensure the reliable, safe and efficient circulation of these data. At the same time, the decentralization of renewable energy projects and the characteristics of a global renewable energy ecological network, the use of a centralized or traditional flat blockchain network might not meet the requirements of the new renewable energy industry. It is necessary to design a blockchain technology system and network architecture to meet the needs of the new era of energy ecology.

5.2. Main/Subchain Asynchronous Tree

The renewable energy industry ecology is a cluster of huge new renewable energy networks all over the world. At the same time, due to geographical and political isolation, although in a global network, there are certain differences in each subnet. In response to this scenario, the blockchain technology needs to build a global network cluster, each sub-chain providing renewable energy network services for different regions or countries. There are a large number of cross-chain requests between different sub-chains, and the NewPower main chain coordinates communication across all sub-chains and maintains a global state machine for them.

The NewPower chain adopts the main and auxiliary chain asynchronous tree architecture, and it is similar to the social governance model which can be more in line with the specific application scenarios of the renewable energy industry based on the NewPower main chain, by setting different chain subsets for different regions and countries, building tokens and industrial ecology for the region and country, achieving regional isolation and integration with different ecosystems and architectures. All sub-chains are connected to the main chain, and cross-chain transactions are carried out through the main chain to realize the value interoperability of each sub-chain network.

Figure 15 main and auxiliary chain asynchronous tree



The primary and secondary chain asynchronous trees are composed of different subnets. Each subnet can be considered as a hierarchical partition tree. The top chain in the tree is our New Power main chain, which provides a central repository of the state transition for all sub-chains. Therefore, these are the primary and secondary sub-chains, respectively.

The primary sub-chain provides application layer logic, including transactions settlement, ledger updates and cross-chain request handler. All incoming transaction and cross-chain queuing message are encapsulated into blocks and sent to the New Power main chain for verification and finalization. While the secondary sub-chain is a separate chain customized according to the different business forms. It has higher degrees of freedom than the primary sub-chain in terms of consensus algorithm, permission settings, and governance. It's in a similar form of small independent ecology which directly corresponds to a specific business module.

Therefore, we can view the entire asynchronous tree network as a heterogeneous multichain with highly customizable usability. Regarding the implementation stage, we will first modularize the business unit of each new renewable energy ecology into secondary sub-chains. Then user can select the necessary modules based on the real use case and build the application logic on primary sub-chain.

As for the construction of the primary sub-chain, New Power also provides the most friendly development framework. Different from Ethereum and other smart contract-style public-chain platforms, we eliminated the complex programming process and instead provided two simple function interfaces. The users only need to write the implementation

logic of the block verification (validate_block) and block generation (produce_candidate) functions to complete the development of the entire sub-chain.

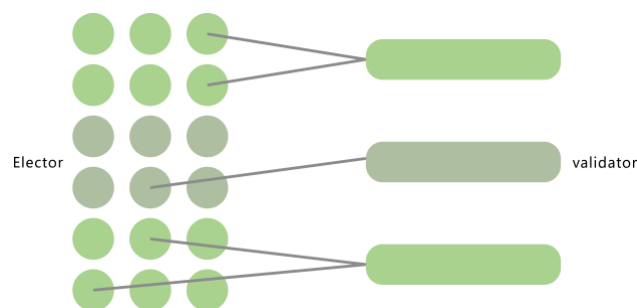
5.3. Ecological governance

In the ecology of the asynchronous tree network, there are three types of nodes: contributor, elector, and validator. In the New Power system, all nodes need to stake a certain amount of NewPowerCoin (NPC) as a credit guarantee.

The validator runs on the New Power main chain and is responsible for the validation and finalization of the block. This is the “miner” we often say, where the mining reward will be enjoyed by the miner, but the consensus algorithm is different from the Bitcoin which vote with computing power —— POW (Proof of Work), while New Power miners vote with NewPowerCoin——POS (Proof of Stake). Compared to POW, POS is much more energy efficient and faster in chain finality.

The elector is also running on the New Power main chain, responsible for electing the validator and sharing a certain percentage of the mining rewards with them. In other words, New Power's POS introduces the nomination process where it is called NPOS (Nominated Proof-of-Stake). In addition, in order to improve the security of the entire network, a periodic election mechanism was set up which will re-vote every 20 days and evaluate the reputation of the verification node. If over 50% of the nodes think that a node is dishonest, then it is excluded from the process qualification and it's NewPowerCoins will be assigned to another participating node.

Figure 16 Election mechanism

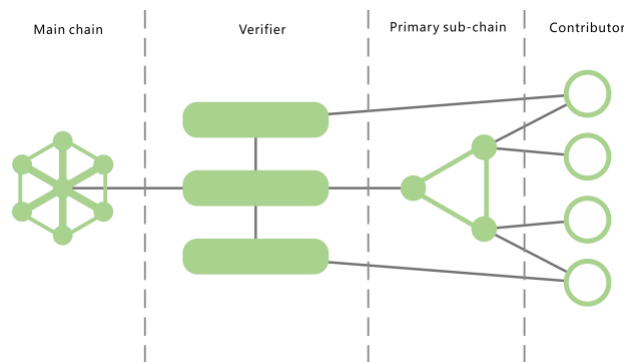


The voting method is also using NewPowerCoin. In order to ensure the electors' stake is distributed among the elected validators as evenly as possible, we apply the Phragmén ^[1]

algorithm to achieve the fair representation. Briefly speaking, the number of votes in the profit distribution is cancelled, the profit share that the nominee gain from a miner is independent from the number of votes cast. The advantage of this design is that for those “big” voters, they have enough coins on their hands to ensure a candidate can be elected, so in order to win more profits, they will split the chips on their hands. Partially vote for more people, so you can balance the votes of those candidates, and will not develop into a monopoly mining possibility.

The contributor runs on the primary sub-chain and is responsible for packaging transactions and creating blocks. The new block will be sent to the validator on New Power main chain for validation and finalization. It acts like a miner on a primary sub-chain, and is rewarded by contributing value to the network.

Figure 17 Node Ecological Diagram



5.4. Consensus Mechanism

The traditional feature of cross-chain technology is to introduce an independent blockchain between the two sovereign chains to be responsible for the interaction of the two chains, such as a bridge. Although this is a viable solution, there are two drawbacks:

Poor Scalability

Since each sovereign chain has a "bridge" between the two chains, the complexity of traversing the entire network is $O(n^2)$. For those ecosystems that need to support multiple blockchains to communicate with each other, the development cost would be much larger.

2. Poor Security

Since each “bridge” is an independent blockchain, it is necessary that another group of miners be the responsible party for the establishment of the consensus. It also means that a separate token economy needs to be introduced to motivate the miners. This creates a lot of uncertainty. Perhaps the miners' community can generate enough consensus to secure the ledger under a good token economy, but for the bad one, due to lack of miners, the blockchain is vulnerable to 51% attack that have caused the ledger to be tampered.

In response to the above issues, New Power has adopted a design architecture called "Shared Security." where the consensus algorithm layer is completely separated from the application layer, allowing users to concentrate on developing specific applications, while consensus levels such as blockchain security, scalability and decentralization can be solved by the New Power main chain. In other words, each of the primary sub-chains that have connected to the main chain will benefit from the economic security provided by the main chain validators. This design solution will greatly enhance the scalability and security of the cross-chain technology. Just like Ruby on Rails for the blockchain, the main chain is the server side and the primary sub-chain is equivalent to the client side. These two are completely independent and perform their own duties.

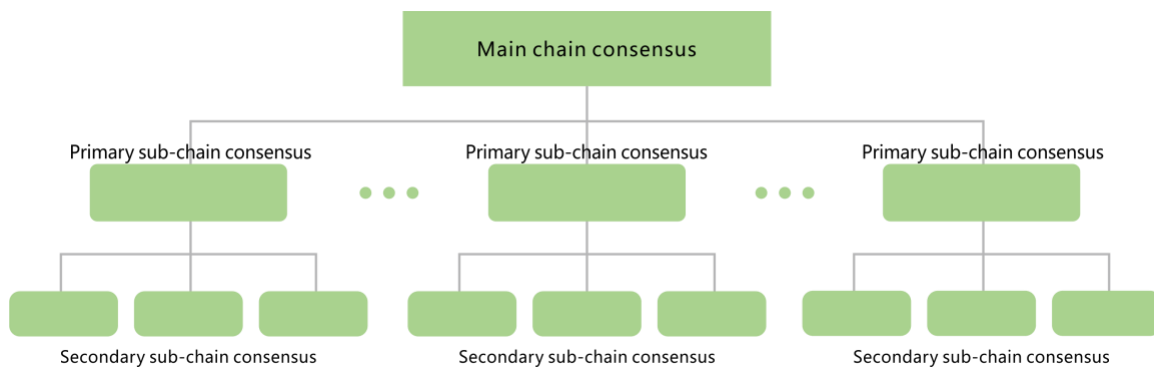
But relying on a single consensus on the main chain is unable to meet the ecological layout of the renewable energy industry. Because the renewable energy industry has multiple application scenarios such as distributed power plants construction, power plants operation and maintenance, power station transaction, P2P power purchase and self-consumption of surplus power, the requirements for consensus in each scenario are different, if only one consensus is adopted. The mechanism cannot meet the needs of various application scenarios of the renewable energy industry.

For example, due to the long period of construction , the power plant does not require high tps, but need super high level of security, so the Proof of Work (PoW) consensus algorithm should be adopted. However, in the scenario of electricity sale, high tps will be on top priority, so Delegated Proof of Stake (DPoS) consensus algorithm will be a better choice. In other cases, say if you want to ensure both performance and security, then EDA

consensus algorithm based on "micro real numbers" asynchronous sorting technology can be selected.

Our secondary sub-chain was born for the mentioned purpose. According to the specific business use case, the user can select a suitable consensus algorithm to deploy in the secondary sub-chain. You can consider this type of sub-chain as an extension of the main chain consensus algorithm. It is plugged into to the ecology of the primary sub-chain as a module.

Figure 18 Schematic diagram of consensus architecture



5.4.1 Main Chain Consensus

The traditional blockchain network lacks an active data synchronization mechanism. Each node confirms whether its own block has a consensus by comparison. If it is not consensus, it needs to synchronize the main chain block. Due to the problem of traditional consensus deposits, the efficiency of transactions confirmed on the blockchain is low. For example, it takes about 10 minutes for Bitcoin to create a new block, and after 6 blocks, it can be confirmed that the current block data has been accepted by the system; the new block in Ethereum takes about 15 seconds, but basically requires more than 20 blocks. After the completion of the project, the data of the current block can be basically confirmed.

In order to improve the efficiency of the block, we decided to adopt proof-of-stake consensus algorithm. It allows miners to take turns to produce blocks and reduce the possibility of competing with each other. In this way, the bandwidth can be effectively utilized, thereby greatly increasing the speed of the block. However, a lot of POS algorithms are vulnerable to the “grinding attack”, which attackers might be able to bias

the block creator selection. In cope with that, New Power main chain uses the Ouroboros Praos ^[2]consensus algorithm which is the first mathematically proved secure proof-of-stake. In simple terms, each miner node has a key group generated by a Verifiable Random Function (VRF), through which a random number can be generated. This random number is used to determine when the block can be produced. To avoid the risk that block producers could grind through VRF keys to bias results, VRF inputs include public randomness created only after the VRF key. We therefore have epochs in which we create fresh public on-chain randomness by hashing together all the VRF outputs revealed in block creation during the epoch. In this way, we cycle between private but verifiable randomness and collaborative public randomness.

The specific algorithm flow procedure as follows:

First, we need to determine a set of sequential and non-overlapping epochs(e_1, e_2, \dots), and define a number of sequential block production slots ($e_i = \{sl_1^i, sl_2^i, \dots, sl_t^i\}$) in every epoch. At the beginning of an epoch, we will randomly assign a leader to each of the block production slots. Due to the randomness of the VRF output, not every slot will be equipped with a Leader, and some slots may have more than one leader.

The leader is selected from the main chain miners and the probability of being selected as the leader is directly proportional to his relative stake of each party. However, since all miners have same amount of stake so their probability of being selected as slot leaders is equal. Let's assume that there are “n” miners and the relative stake of each one is $\theta = 1/n$. Then the probability of being selected is:

$$p = \phi_c(\theta) = 1 - (1 - C)^\theta$$

The method of determining whether to select or not is to compare the VRF output with a threshold, and if it is smaller than this threshold, it is selected. Let us set the threshold with the following calculation method:

$$\Gamma = 2^{\ell_{vrf}} \phi_c(\theta)$$

Where ℓ_{vrf} is the length of the VRF output.

After the Leader is assigned, the block production begins. The whole process is roughly divided into three phases:

The initial phase

The initial phase is the stage of generating the genesis block. The entire block contains a random number. This random number will be applied throughout the epoch. In addition to random numbers, the block also need to include initial stake of the stakeholders(st_1, st_2, \dots, st_n) and their corresponding public key ($pk_1^v, pk_2^v, \dots, pk_n^v$) as well as the signature ($pk_1^s, pk_2^s, \dots, pk_n^s$) .

Normal stage

At this stage, the miner selected as leader needs to create a block, and broadcast it to the entire network. Each block must contain a random number r_m . We assume that the current mining period is e_m , that the time slot is sl_k , and the new block generated is B_l . Each miner P_j has backed up a chain C_j . We have a best chain C selected in sl_{k-1} by our selection scheme, and the length of C is $l - 1$.

If P_j selected as a miner, then its VRF function output d must be less than the threshold τ . Where d is calculated as

$$VRFsk_j^v(r_m \| sl_k) \rightarrow (d, \pi)$$

In addition to r_m , the new block must also include sl_k , the hash of the previous block H_{l-1} , the output of the VRF d, π , the transaction group t_x , and P_j the signature σ . After the block is generated, P_j updates C with the new block and sends B_l .

The other miners received B_l will verify the block. The validation steps are as follows:

Verify that the signature σ is correct.

Verify that P_j it is Leader.

Verify that P_j did not generate other blocks (no double signatures) for another chain in slot sl .

Verify transaction t_x in B_l .

After the verification is passed, the miners will merge this block into his local chain, otherwise he will ignore the block. Finally, the miners update the best chain based on the longest chain selection.

Mining time update:

Before updating to a new epoch e_m , if a new miner joins at this time, he must wait for the update of this step to complete. Then, the new miner will participate in e_{m+1} time period for the block production.

Then, we generate a new random number r_m . The process of generating random numbers is simple. We first stitch together the VRF outputs of all the blocks generated in the time period e_{m-1} , assuming is ρ , then $r_m = H(m || \rho)$ where H is a cryptographic hash function.

5.4.2 Security Analysis

In this part, we mainly focus on the consensus algorithm of the main chain and carry out the mathematical analysis of security from the following two levels:

Chain Growth (CG)

Chain growth with parameters $\tau \in (0,1], s \in \mathbb{N}$, ensures that if the best chain owned by an honest party at the onset of some slot sl_u is C_u , and the best chain owned by a honest party at the onset of slot $sl_v \geq sl_u + s$ is C_v , then the difference between the length of C_v and C_u is greater or equal than/to τs .

Chain Quality (CQ)

Chain quality with parameters $\mu \in (0,1]$ and $k \in \mathbb{N}$ ensures that the ratio of honest blocks in any k length portion of an honest chain is μ .

Before starting the security analysis, we give probabilities of being selected as a slot leader or no one selected. We use the notations $sl = \perp$ if a slot sl is empty, $sl = O_L$ if sl is given to only one late honest party (Δ behind the current slot) and $sl = O_S$ if sl is given to only one synchronized honest party.

$$p_{\perp} = \Pr[sl = \perp] = \prod_{i \in P} (1 - \phi(\alpha_i)) = \prod_{i \in P} (1 - c)^{\alpha_i} = 1 - c$$

$$p_{0L} = \sum_{i \in H_L} \phi(\alpha_i) (1 - \phi(1 - \alpha_i)) = \sum_{i \in H_L} (1 - (1 - c)^{\alpha_i}) (1 - c)^{1 - \alpha_i}$$

We can also get :

$$p_{0S} = \sum_{i \in H_S} (1 - (1 - c)^{\alpha_i}) (1 - c)^{1 - \alpha_i}$$

where P is the set of indexes of all parties, H_L is the set of indexes of all late and honest parties, H_S is the set of indexes of all honest and synchronized parties.

We can bound p_{0S} and p_{0L} as $p_{0S} \geq \phi(\alpha_S)(1 - c) \geq \alpha_S c(1 - c)$ and $p_{0L} \geq \phi(\alpha_L)(1 - c) \geq \alpha_L(1 - c)$ where α_S denotes the total relative stake of synchronized and honest parties and α_L denotes the total relative stake of honest and late parties. For the rest, we

denote $\alpha = \alpha_S + \alpha_L = \gamma\alpha + \beta\alpha$ where $\gamma + \beta = 1$ and α is the relative stakes of honest parties.

In Lemma 1 and Lemma 2, we prove that a late party can be at most Δ behind of the current slot. If a late party is a slot leader then his block is added to the best chain if there are at least 2Δ consecutive empty slots because he sends his block Δ times later and his block may be received Δ times later by other honest parties because of the network delay. Having late parties influences chain growth.

Theorem 1 (CG) : Let $k, R, \Delta \in \mathbb{N}$ and let $\alpha = \alpha_S + \alpha_L = \gamma\alpha + \beta\alpha$ is the total relative stake of honest parties. Then, the probability that an adversary A violate the chain growth property with parameters $s \geq 6\Delta$ and $\tau = \lambda c \alpha (\gamma + \lambda \beta) / 6$ throughout a period of R slots, is no more than $2\Delta R c \exp(-\frac{(s-5\Delta)\lambda c \alpha (\gamma + \lambda \beta)}{16\Delta})$, where c denotes the constant $\lambda = (1 - c)^4$

Proof: We define two types of slot. We call a slot 2Δ -right isolated if the slot leader is one late party and the next $2\Delta-1$ slots are empty (no party is assigned). We call a slot Δ -right isolated if the slot leader is only one synchronized honest party (not late party) and the next consecutive $\Delta-1$ slots are empty.

Now consider a chain owned by an honest party in sl_u and a chain owned by an honest party in $sl_v \geq sl_u + s$. We need to show that honest parties' blocks are added most of times between sl_u and sl_v . Therefore, we need to find the expected number of 2Δ -right isolated slots between sl_u and sl_v given that the relative stake of late parties is $\alpha_L = \beta\alpha$ and expected number of Δ -right isolated slots given that the relative stake of synchronized honest parties is $\alpha_S = \gamma\alpha$. Remark that a slot can be either 2Δ -right isolated or Δ -right isolated or neither of them.

Consider the chains C_u and C_v in slots sl_u and sl_v owned by the honest parties, respectively where sl_u is the first slot of the epoch. We can guarantee that C_u is one of the chains of everyone in $sl_u + 2\Delta$ and the chain C_v is one of the chains of everyone if it is sent in slot $sl_v - 2\Delta$. Therefore, we are interested in slots between $sl_u + 2\Delta$ and $sl_v - 2\Delta$. Let us denote the set of these slots by $S = \{sl_u + 2\Delta, sl_u + 2\Delta + 1, \dots, sl_v - 2\Delta\}$. Remark that $|S| = s - 4\Delta$.

Now, we define a random variable $X_t \in \{0,1\}$ where $t \in S$. $X_t = 1$ if t is 2Δ or Δ -right isolated with respect to the probabilities p_\perp, p_{0L}, p_{0S} . Then

$$\mu = IE[X_t] = p_{0S}p_\perp^{\Delta-1} + p_{0L}p_\perp^{2\Delta-1} \geq \alpha sc(1-c)^\Delta + \alpha lc(1-c)^{2\Delta}$$

With $\lambda = (1-c)^4, \alpha = \alpha_S + \alpha_L = \gamma\alpha + \beta\alpha$,

$$\mu \geq \lambda c \alpha (\gamma + \lambda \beta)$$

Remark that X_t and $X_{t'}$ are independent if $|t-t'| \geq 2\Delta$. Therefore, we define $S_Z = \{t \in S : t \equiv z \pmod{2\Delta}\}$ where all X_t indexed by S_Z are independent and $|S_Z| > (s-5\Delta) / 2\Delta$.

For each S_Z , we add the Chernov Bound and then we can get:

$$\Pr\left[\sum_{t \in S_Z} X_t < |S_Z| \mu / 2\right] \leq e^{-\frac{|S_Z| \mu}{8}} \leq e^{-\frac{(s-4\Delta)\mu}{16\Delta}}$$

$$\Pr\left[H < |S| \frac{\lambda c \alpha (\gamma + \lambda \beta)}{2}\right] \leq \Pr[H < |S| \mu / 2] \leq 2\Delta \exp\left(-\frac{(s-5\Delta)\lambda c \alpha (\gamma + \lambda \beta)}{16\Delta}\right)$$

(2) We find that in the first s slot of an epoch the chain grows τs block with the probability given in (2). Now consider the chain growth from slot sl_{u+1} to sl_{v+1} . We know that the chain grows at least $\tau s - 1$ blocks between sl_{u+1} to sl_v . So, the chain grows one block for sure if sl_{v+1} is Δ or 2Δ -right isolated which with probability $\alpha c (\gamma + c\beta)$.

If we apply the same for each $sl > sl_u$ we obtain

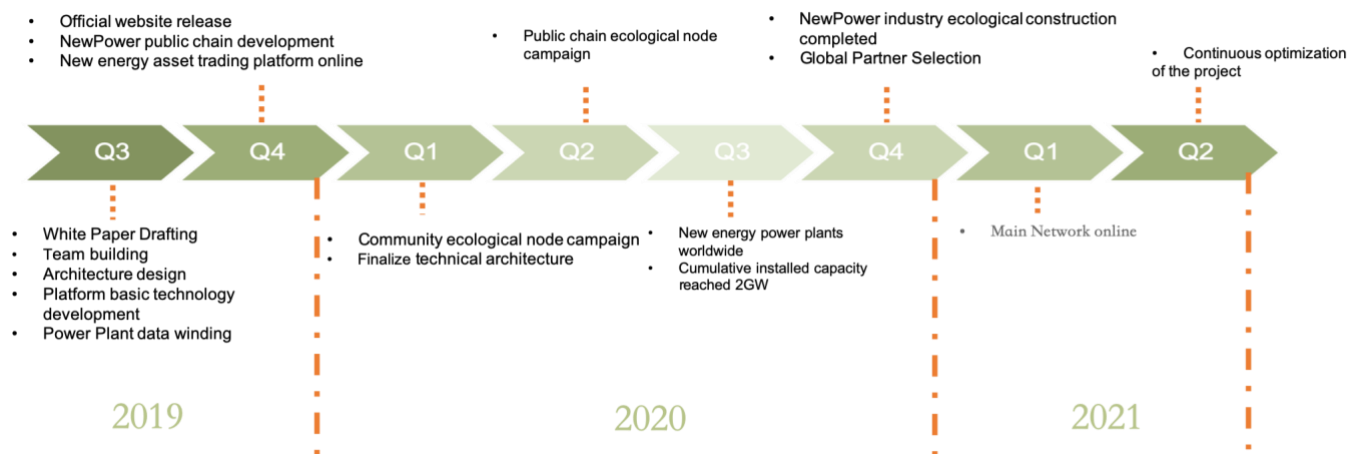
$$2\Delta R \alpha \lambda c (\gamma + \lambda \beta) \exp\left(-\frac{(s-5\Delta)\lambda c \alpha (\gamma + \lambda \beta)}{16\Delta}\right)$$

Theorem 2 (CQ): Let $k, \Delta \in \mathbb{N}$ and $\epsilon \in (0, 1)$. Let $\alpha(\gamma + (1 - c)^\Delta \beta)(1 - c)^\Delta \geq (1 + \epsilon)/2$ where $\alpha = \alpha_S + \alpha_L = \gamma\alpha + \beta\alpha$ is the relative stake of honest parties. Then, the probability of an adversary A whose relative stake is at most $1 - \alpha$ violate the chain growth property with parameters k and $\mu = 1/k$ in R slots with probability at most $Re^{-\Omega(k)}$.

Proof (sketch): The proof is very similar to the proof of CG. It is based on the fact that the number of 2Δ and Δ isolated slots are more than normal slots because of the assumption $\alpha(\gamma + (1 - c)^\Delta \beta)(1 - c)^\Delta \geq (1 + \epsilon)/2$. Remark that probability of having 2Δ -right isolated slot is $\alpha\beta(1 - c)^{2\Delta}$, having Δ -right isolated slot is $\alpha\gamma(1 - c)^\Delta$ and sum of them are greater than $1/2$ because of the assumption

6. Development Roadmap and Development Plan

Figure 19: New Power Development Roadmap and Development Plan



7. NEW POWER Pass Introduction

7.1. New Power Pass Eco Map

New Power uses “NPC + PPT” dual pass design to facilitate the value transfer within the ecosystem.

NPC is based on the ERC20 protocol where the number is constant and will never be issued, and will allocate a certain percentage to the reward pool to incentivize the eco-network contributors. NPC is entering the New Power ecological network license where it is considered a service provider. The asset or investor needs to have a certain amount of NPC to be able to join New Power network, providing / enjoy the service.

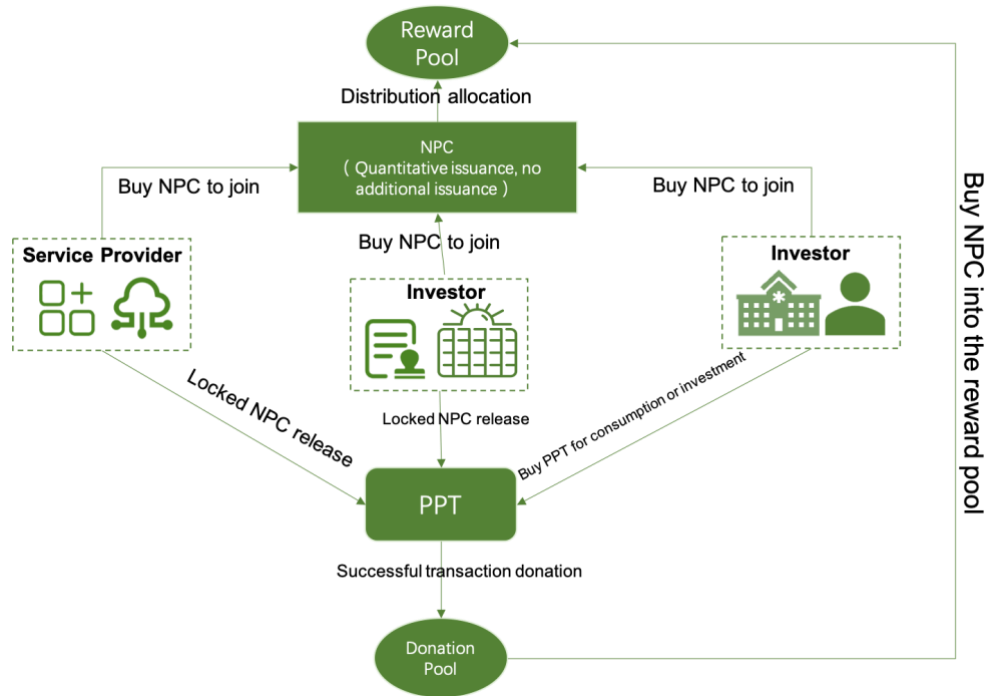
PPT is the service provider (application service provider or smart contract) based on coalition building chain locked for NPC to the issue the alliance chain platform through certificates and consumption within the network.

PPT has different values in different services. In green electricity service, PPT is a stable currency that anchors local legal currency in financial services. PPT is also an equity certificate that anchors rights such as income rights and PPT is also considered the financial certificate project income and value transfer, and PPT will eventually be converted into NPC for value redemption.

Based on PPT successful transactions, it is required to donate a certain percentage of PPT to donation pool, then the pool will use part of the PPT generated to repurchase more NPCs into the pool of incentives to motivate the contributors. The remaining portion will be the income benefits of New Power.

With the expansion of New Power's business ecosystem, more and more NPCs are needed, but the number of NPCs is fixed, which causes the value of NPC to fluctuate.

Figure 20: New Power Pass Eco Map



7.2. Release Plan

New Power Coin, referred as NPC, has a total circulation of 1 billion. The specific NPC allocation plan is as follows:

Figure 21: NPC release planning organization chart



- **20% of fundraising for sale, a total of 200 million tokens** for early community investors, global market investors, qualified institutional investors, major business participants, industry partners, commercial customers and early introduction of eco-cooperatives.
- **Ecological construction 40%, a total of 400 million tokens for** ecological construction partners including ecological construction, ecological construction of new energy investment, eco-scenes exploration, community incentives and marketing activities, the use of four-year release.
- **Founding team motivated 20%, a total of 200 million tokens** for New Power founding teams, made a lot of work for project design, resource organization, early business environment incubation, etc., and continuously invested a lot of manpower, intelligence and material resources in the process of ecological environment formation. Therefore, the founding team will reserve 20% of the New Power token share as a team as reward. Divided into 24 months to be released, each month will release 1/24.
- **Node rewards 20%, a total of 200 million tokens are** issued on a monthly basis, of which 100 million are given to the super node, 100 million are obtained from the cooperation nodes and the super nodes, and the cooperation node will be allocated according to the proportion of the current chain assets. The award will be paid in 10 years in a step-by-step manner.

8. Governance Structure

8.1. Foundation establishment

New Power Foundation Ltd (hereinafter referred to as the "Foundation") is a company set up in Singapore in the BVI company. The Foundation is committed to the development and construction of New Power and the promotion and promotion of transparent governance to promote the safe and harmonious development of its ecological society.

8.2. Organization

The design of New Power's organizational structure seeks to strike a balance between complete decentralization and centralized centralization, and adopts an organizational structure model combining "distributed decision making" and "centralized execution" for

efficient and democratic Decision-making mechanism.

Overall, the organizational structure is divided into two layers:

- **Decision-making level:** The key core personnel of the decision-making level will become community representatives through the New Power community members based on the distributed governance mechanism and voting mechanism.
- **Executive:** The day-to-day operations management team led by the day-to-day executive committee, including technical committees, operations committees, public relations committees, risk control committees, and standards development committees.

Figure 22: New Power Organizational Chart



8.3. Decision mechanism

8.3.1 Decision content

- Review of Foundation's charter;
- Modify the foundation governance structure;
- New Power strategic decision-making of eco-development;
- Foundation Secretary-General's appointment and rotation of resolution;
- Commissions responsible for the core functions of department heads and the appointment and rotation of resolution;

- New Power to change and upgrade the core technology of decision-making;
- Decision making and crisis management agenda;
- Implementation of the decision proposed by the community, etc.

8.3.2 Decision Principles

- All decisions are open and transparent;
- Decision-making is conducive to the healthy development of the New Power ecosystem;
- Obey professional ethics and laws and regulations.

8.3.3 Decision Committee Member Requirements

- Term: the members of the decision-making committee and president of the Foundation for a term of two years, in which the president of the Foundation cannot serve for more than two consecutive terms.
- Requirements:
 - Each representative is required to accept a credit investigation during his tenure and publicly pay the salary;
 - Delegate or core member may not hold more than 20% of the total NPC Token;
 - Resolution decisions made by the committee can be achieved by more than half of the core representatives represented (core members of each representative and decision-making committee have 1 vote right to vote, the president of the Foundation has the right to vote two votes).
- **New Parliamentary Member Generation Model:** After the expiration of the term of the New Power decision-making parliament, the community voted on the New Power voting system according to its consensus mechanism, thus selecting 51 important nodes to represent the New Power community public opinion representatives, and continue to select the seven core members of the decision-making committee. The selected core members will represent the New Power Foundation's important decisions in the community of people behind the various nodes to vote for the most democratic opinions.

8.3.4 Decision Mechanisms Adopted by Community Members

Proposals submitted by community members need to reach a consensus through voting mechanism and their proposals are implemented through intelligent contracts; relevant personnel in the New Power organizational structure need to be executed according to the decision line; New Power community has the power to supervise.

8.4. Voting mechanism

8.4.1 Voting principle

- Community members can participate in voting activities voluntarily and independently to influence New Power's major decisions;
- The concept of distributed governance, the wisdom of the community;
- All voting will be conducted through the New Power voting system;
- Each voting activity shall announce its rules, mechanisms and requirements in advance;
- Result of the voting must be made public within 2 working days after the end of the voting. The relevant details need to be transparent on the New Power voting service platform;
- Vote campaign core staff of the new decision of the Parliament to be at the end of his term 2 began months ago;
- To ensure a stable foundation, the existing decision-making committees core members are automatically considered a core member of the new candidates, and has the right to vote, but shall not serve for more than 3 sessions.

8.4.2 Voting system

The New Power voting system is set up to ensure the openness, fairness, and fairness of New Power's ecological voting behavior; there are four main types of voting behavior:

- For New Power campaign voting members of the Foundation, members of the Committee;
- For New Power proposed ecological system construction and operation, etc. / proposal voted in favor, resulting in the highest support rate of final results;
- Voted in favor of green energy crowdfunding projects;
- Vote for behavior on other ecosystem services (such as chain Alliance ecosystem of business systems).

8.4.3 Standards for voting

- Resolution decisions made by the Commission to be achieved by more than half of the core can be represented by and be executed.
- Community standards proposed by the need to produce more than the votes against 10% or more, while competing with other proposals. Proposals with the highest vote will be adopted and implemented, and relevant proponents will be rewarded.

8.5. Investment management

Under the premise of compliance, the New Power Foundation will invest in businesses or activities that contribute to its ecological construction, such as investments in green energy

infrastructure deployment / business layout, and investments in eco-partners; At the same time, it will also invest in clean energy construction and environmental protection.

Any investment behavior must be approved by the New Power Decision Committee, and there will be a special person and a third-party audit company to conduct supervision and information disclosure of late capital withdrawal / return.

8.6. Risk management

8.6.1 Transaction security

All transactions under the New Power ecosystem ensure user accounts and funds security through blockchain consensus, non-tamperable technologies, and digital signatures, end-user encrypted wallets, etc. New Power provides financial-grade secure data storage, networks, platforms, etc. Efficient integration of resources, integrating data, applications, and transactions into blockchain clouds to build a secure transaction network environment. Work with the most trusted trading platforms and technical experts to build secure transactions and value flows at different business levels.

8.6.2 Security Audit

New Power regularly invites a number of third-party security audit firms to conduct code audits for New Power.

8.6.3 Financial Audit

Each year, New Power invites internationally renowned third-party auditors to regularly audit and evaluate the New Power Foundation's use of funds, cost, and profit distribution; and will publicly publish third-party agency evaluation and audit results.

8.6.4 Restrictions on the use of funds

The use of New Power project assets is based on the principle of openness and transparency. According to the above distribution principles and budget, separate accounts and digital asset wallet addresses are used for use. The custodians monitor the flow of digital assets and share them regularly with the community.

Principles for the use of public sales revenue:

- Exceeding the value of 1 million RMB (or equivalent digital assets), subject to approval by the head of the Finance Department and the Secretary General;

- Over 5 million RMB (or equivalent digital assets) needs to be approved by the decision-making committee.

8.6.5 Risk assessment and legal compliance

Technological innovation takes place on the edge of human social practice, which will impact and redefine business forms, so the control of legal compliance and regulatory risks is crucial. The New Power Foundation adheres to the principle of risk management and control to establish a sustainable blockchain community and conduct continuous risk management of the operation of the foundation, including risk system establishment, risk identification and risk response. The New Power Foundation will set different levels of decision-making mechanisms based on risk ratings based on the risk level, scope of impact, and probability of occurrence.

At the legal level, the New Power project team established a foundation entity in Singapore. All operations are subject to local laws, regulations and regulatory requirements. If there is a need to seek legal advice, it needs to be confirmed by a local lawyer.

8.7. Information disclosure

The New Power Foundation will conduct regular information disclosure and publicly disclose financial management information, project progress, version management, and major events. In addition, the Foundation will disclose the incident immediately.

Figure 20: New Power Information Disclosure Mechanism

Release report	Disclosure
Quarterly report	Quarterly release quarterly reports, disclosure of each season's project progress and version upgrades; project fund use matters, market holdings at the end of the season;
Mid-year Newsletter	The mid-year report was issued, which disclosed the progress of the project and the version upgrade in the past six months; the use of project funds, the project planning and budget for the second half of the year, and the market holdings of the market in the middle of the year;
Annual report	The annual report is released at the end of the year, revealing the overall progress and version of the project in this year; the use of project funds and the plan for the next year; the overall plan and budget for the second year; the market



Release report	Disclosure
	continuity as of the end of the year;
Temporary information disclosure	Disclosure to investors and regulators in the chain when major issues such as technological developments, related party transactions, major changes in business scope, significant losses, significant losses, mergers, separations, dissolutions, bankruptcies, initiations or changes in actual controllers occur Key information such as the time of occurrence, duration of the event, and the impact of the event.

9 Core Team Members

Chief Executive Officer (CEO) : Alisa Wang

Alisa is Senior Financial and Energy Investment expert. She has served as a Senior Financial Analyst at ATC Group (a global leader in supply chain management, responsible for US energy project investments). She has also served as Senior Data Analyst at WPP (world's largest media advertising group, responsible for Latin American markets) as well as a Financial Investment Analyst at the World Bank's Sustainable Energy Projects, America's First Think Tank Brookings, JP Morgan Investment Bank, AIA and other Fortune 500 companies.

Alisa holds a CFA Certification and a Master's degree in Environmental Energy from Johns Hopkins University (Paul Nietzsche School of Advanced International Relations Studies). She has a double degree in Financial Business Administration and International Relations from the University of Miami.



Chief Technical Officer (CTO): Luo Jing

Mr. Luo Jing is a Senior Computer Programming & Development Expert with more than 10 years of experience in the sector. He serves as Senior Software Engineer at IHS Markit, a Fortune 500 company, responsible for product development throughout the financial compliance arena, providing technical advises to major clients such as Goldman Sachs, JP Morgan Chase and Barclays. He has many years of research experience in the development and application of Blockchain computer technology and has been invited to participate in forums as speaker of Blockchain topics at prestigious universities such as Columbia University, New York City University and Fordham University.

Luo Jing holds a Master's degree in Computer Science from Columbia University and a Bachelor Degree in Electronics and Communication Engineering at Shanghai Jiaotong University



Chief Financial Officer (CFO) : Andrew I. Pedvis

CFA is a senior member of the Genesis Block Advisory group. He has significant experience advising financial services clients with product strategy and implementation in the Blockchain and Artificial Intelligence spaces. Previously, Andrew led product development at both S&P Global Ratings and Fitch Ratings. At S&P Global, he also held leadership roles within Structured Finance, Credit Risk Advisory, and Fixed Income Research areas.

Andrew holds a MBA from Fordham University Business School and a Bachelor Degree from McGill University in Canada.

**Chief Operating Officer (COO) : Gaurav Bhatt**

Mr. Bhatt is a Senior Blockchain and Cryptocurrency Expert. He has vast experience in project operations and strategy design. He has initiated many start-ups of computer technology and project management where he successfully sold two self-owned technology companies to third party investors. He served as Senior Project Operations Consultant for India's well-known Polymath Advisors Investment Bank, as well as advises for product strategy, blockchain technology and artificial intelligence to many Fortune top 100 clients.

Mr. Bhatt holds a Master's degree in Financial Blockchain Technology from Massachusetts Institute of Technology, a MBA from the Business School of Peking University and a Bachelor Degree at UCLA.



Chief Marketing Officer (CMO): George Yan

Mr. Yan is a renewable energy expert with more than 12 years of experience in the energy sector. He currently serves as Vice President of Project Development & Origination for Latin America in *PowerChina* (a global renewable energy and infrastructure construction company ranked #182 in Fortune 500). He previously served as Country Manager Mexico for *Trina Solar* (top 3 global solar energy companies) and Head of Business Development for *Trina Solar Japan* where he successfully developed and constructed hundreds of MW of solar power plants. He also worked for *Solarig Spain* (a global leader in Development and Operation & Maintenance of Solar Plants) in different positions in China, Japan and Southeast Asia.

Mr. Yan holds a MBA from University of International Studies and Economics (Beijing) and a Bachelor Degree in Mechatronics Engineering from the Monterrey Institute of Technology. He speaks English, Spanish, Mandarin and Cantonese Chinese.

**Chief Legal & Regulatory Officer : Samuel E. Proctor**

Samuel E. Proctor is the co-founder and CEO of Genesis Block and an expert on the structure of financial systems and the regulation of blockchain technology with more than 10 years of experience. Prior to Genesis Block, Samuel was an attorney at Debevoise & Plimpton, one of the leading blockchain and cryptocurrency-focused law practices in the U.S., where he focused his practice on complex regulatory and transactional issues impacting financial institutions.

Samuel holds a Ph.D. from the University of Chicago and Bachelor Degree from Wharton School of Economics of the University of Pennsylvania.



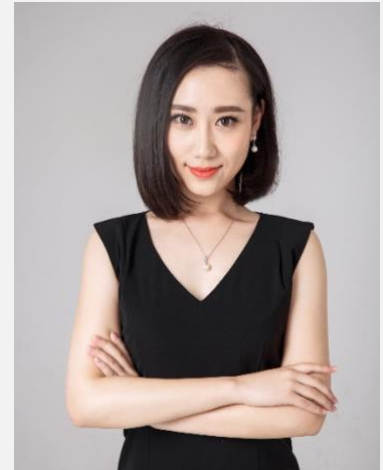
10 Advisory Team

Marketing Director: Ren Wei

Ren Wei is a Senior Market and Project Operations Specialists. Currently she serves as the Marketing Director (US Region) in one of the top 50 Blockchain projects in the world. She successfully organized around 100 Blockchain technology and market seminars, as well as invited hundreds of well-known software, financial and technological experts and companies to participate in forum or project discussions. She has vast experience in Blockchain marketing and media operations.

Ren Wei has also served as Communication Consultant at the World Bank and as Project Assistant at the United Nations Association of the United States. Previously, she worked for Caixin Media and was the co-founder of China-Africa Observatory.

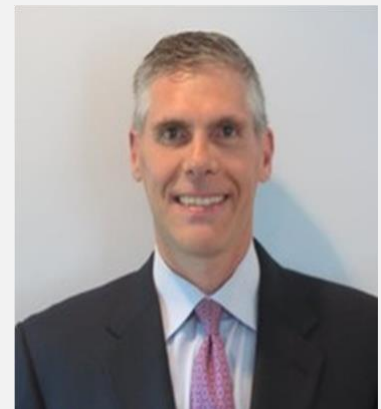
She holds a Master's Degree in International Political Economy from Johns Hopkins University (Paul Nietzsche School of Advanced International Relations) and Master's Degree in Journalism from University of Hong Kong. Her Bachelor Degree is from Communication University of China.



Financial Investment Director : Steven Harris

Steven is a Senior Financial Investment and Wealth Management expert with more than 30 years of experience in the financial investment and wealth management sector. He is a former executive at Lehman Brothers Asset Management in the US, responsible for managing the valuation, trading, hedging, risk management and other financial investments of Lehman Brothers' \$39 trillion nominal value derivatives portfolio. He has many years of experience and investment network on Wall Street. He has also served as a Senior Investment Advisor for the CME Group Chicago Mercantile Exchange Group, the world's largest financial derivatives exchange.

Steven holds a Degree in Finance and Economics from the University of Massachusetts Amherst.



Strategy Consulting Director : Julia Janks

Julia is Senior Blockchain Project & Strategy Consulting expert with many years of project execution and overseas market strategy planning experience. She has worked as a Senior Investment and Wealth Management consultant with Aaron Gray, the largest investment management company in Africa supporting many companies to finance, acquire and go public as well as helping clients to manage billions of dollars in financial management and venture capital. Julia also holds a CFA US registered financial investment license.

Julia has a major of Economics and Business Organization Psychology at Rutgers University.



Operations Director : Sean R. Hoge

Sean R. Hoge is the founder of Venture Coin and Node. He was one of the earliest investors in tokens and ICOs, and for Q2 of 2017 his personal holdings ranked among the top 1000 ERC-20 token holders in the world. Sean also founded Bay Area's first Blockchain focused coworking space. Since opening, Node has hosted over 150 blockchain events. Node's membership roster includes some of the best engineering talent in the industry.



Technical Director: Gong Zang Ye

Mr. Gong is a Senior Software Algorithm Engineer. He currently works for Google US as a Senior Software Engineer and he is Vice President at the ABC Blockchain community in Silicon Valley.

Mr Gong is an expert in data analysis and computer languages such as C++, Java, Python, PHP, Ruby, JavaScript, SQL, and Shell scripts. He also worked for Alpine Capital as a software program developer.

He holds a Master's Degree in Computer Science from New York University and a Bachelor Degree in Computer Science from Shanghai University.



Senior Technical Engineer: Ren Hao

Mr. Ren Hao is a Senior Software and Data Development expert. He is currently working for Google US, as a senior software engineer. Expert at UI technology development, React (JavaScript), CSS, Hack (PHP) and big data analytics.

He previously worked for well-known technology companies such as Facebook, Fun Plus, and RenRen as a software program developer.

Mr. Ren Hao holds a Master's Degree in Computer Science from Florida International University, a Master's Degree in Software Engineering from Beijing University of Posts and Telecommunications and a Bachelor Degree in Communications Engineering from Beijing University of Posts and Telecommunications.



11 Disclaimer and risk warning

This document is for informational purposes only and does not constitute an opinion of the sale or purchase of shares or securities. Any similar offer or solicitation will be made under a trusted term and with the applicable securities laws and other relevant laws, and the above information or analysis does not constitute investment decisions or specific recommendations.

In the course of operation, the New Power team will strictly abide by the laws and regulations of each country and region, and adopt restrictions on IP and identity verification to avoid illegal purchases. Taking into account the uncertainties and high risks of digital currency at this stage, we hereby make the following statement:

1. This document is only used to convey the use of information to specific objects who actively request information about the project. It does not constitute any future investment guidance, nor is it a contract or commitment of any kind;
2. Once a person participates in the Token distribution plan, he or she understands and accepts the risk of the project, and the individual is willing to bear all the corresponding consequences for this;
3. The Token involved in this project is an encrypted digital code used in the transaction link, and does not represent project equity, income rights or control rights;
4. This project operates in the early stage of the blockchain industry. There are many uncertainties in the future development process. Please participate rationally under the premise of fully understanding the industry situation and investment risks;
5. Due to the restrictions of the existing regulations, this project prohibits people who hold Chinese and American nationality from participating in the subscription. The legal liability caused by the violation of this statement is borne by the person.

12 References

[1] Markus Brill, et al. "Phragm'en's Voting Methods and Justified Representation"

Proceedings of the Thirty-First AAAI Conference on Artificial Intelligence (AAAI-17)

[2] Kiayias, Aggelos, et al. "Ouroboros: A provably secure proof-of-stake blockchain protocol." Annual International Cryptology Conference. Springer, Cham, 2017.