Protocol &Token WhitePaper - BTCH

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https://www.bitcoinhemp.com/
marketing@futureheadgroup.com

Contents

OVERVIEW

Futurehead Group is a holding corporation that owns a number of firms that specialise in both financial technology and the cannabis sector. Currently, after more than five years of experience in payment systems and blockchain, Futurehead Group provides consulting services to merchants, as well as payment solutions to help them accept cryptocurrency.

The company was founded by Ruddie Sinigaglia in Miami, back then when Ruddie first ventured into the cannabis industry, he envisioned a future with crypto and blockchain technologies that would change the way society and the banking sector work together significantly. Today, after more than 25 years of expertise cultivating cannabis, Ruddie is familiar with the issues that growers and sellers face, and understands the need for a decentralised financial solution.

The Futurehead Group's ever-growing portfolio spans many services, including those aimed at leading the medical hemp market, as well as working along with companies providing high quality medical products, manufacturing, testing, distribution, licensing, financing and international consulting across South America, United States and Europe.

VISION

From the beginning, we have strived to be industry leaders, Futurehead Group will continue to encourage and collaborate closely with each and every key part of the cannabis supply chain, supporting manufacturing, product development, branding, marketing, distribution, and retail, in order to fully realize the potential and benefits of the relatively new financial technologies and solutions.

Futurehead Group aims to make cryptocurrencies tangible by offering easy access to this technology, as an example, we have developed BITCOIN HEMP, a product integrated into our own platform, which brings the technology of digital payments, distribution and financing to the hemp community.

THE MARKET

Legal Cannabis Industry

The cannabis industry is emerging from the shadows, experiencing unprecedented growth worldwide, and establishing itself as a major economic force, driven mainly by legislative changes that decriminalise consumption and regulate the production of cannabis plant derivatives for therapeutic purposes, therefore cannabis legalization within the USA has proven to be a boon to many business stakeholders.

Source: https://www.statista.com/chart/12406/us-marijuana-market-the-grass-is-getting-greener/

Besides cryptocurrency, there is no other industry changing as rapidly as the cannabis sector. In recent years, legal cannabis sales have experienced growth rates of over 40%, according to Euromonitor International (a strategic market provider), by 2025 the legal business for this plant is expected to grow by 77 percent with sales exceeding $160 billion.

Legalization of cannabis-based products will not only benefit both medical and recreational cannabis users; its legalization has been shown to increase employment in countries with marijuana dispensaries. Cannabis growers have traditionally been forced to follow tight legislation and country-specific laws, making the monetisation of the industry difficult and time-consuming. Futurehead Group offers an entire set of financial solutions that aim to quickly and efficiently solve the problems manufacturers face, leading to numerous advantages for growers, producers, couriers, merchants, and users.

Hemp Industry

With roots reaching back to the Neolithic Age in China, industrial hemp is one of the earliest domesticated plants known, and it was once a prominent crop on the American landscape. This tough and renewable resource was refined for use in a variety of industrial applications such as paper, textiles, and cordage. Industrial hemp has grown into a wider range of products over time, including health foods, organic body care, clothes, construction materials, biofuels, plastic composites, and more. It is well known that hemp can be used to make over 25,000 different products and is highly versatile for use in new products.

Unfortunately, during World War II, farmers were prevented from cultivating hemp due to unrelated political reasons as well as false worries that industrial hemp was the same as marijuana, along with targeted persecution by government officials. The last crop was grown in Wisconsin in 1958, and by 1970 the Controlled Substances Act (CSA) formally prohibited cultivation.

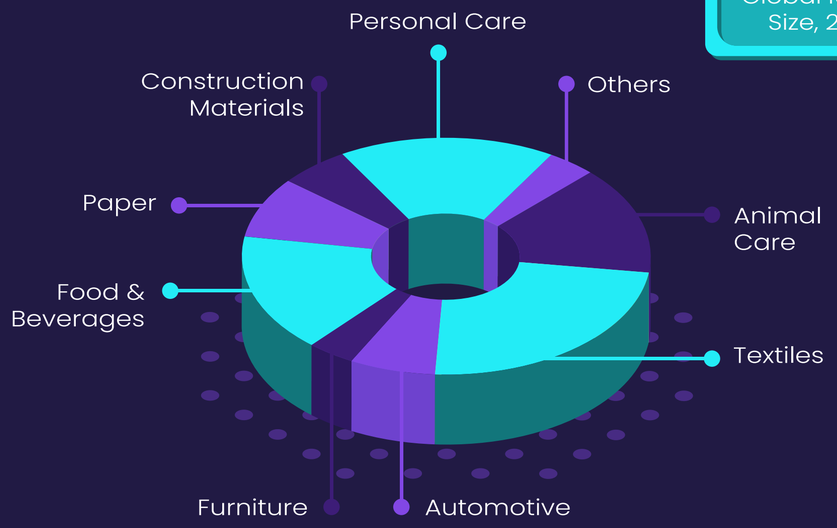
Today, the global industrial hemp market size has been estimated at USD 3.61 billion in 2020 and is expected to reach USD 4.13 billion in 2021. Canada, Britain, France, Germany, and Spain, along with over twenty other countries, cultivate and process industrial hemp without affecting the enforcement of marijuana laws.

Currently, a revision and reevaluation of hemp is flourishing, awakening to new possibilities. In the United States, public opinion is beginning to shift; additionally, over the last few decades, a politically diverse yet increasingly influential and unified group of entrepreneurs, farmers, nutritionists, activists, and green consumers have revived interest in hemp.

Global Industrial Hemp Market

Share, by application, 2020 (%)

$3.6B
Global Market Size, 2020



Source: https://www.grandviewresearch.com/industry-analysis/industrial-hemp-market

OBSTACLE

- As the cannabis industry grows, the shortage of financial services for cannabis companies has become problematic. Most financial institutions, such as banks, Visa and Mastercard, will not work with the cannabis industry, fearing federal prosecution.

- Without banks, legal cannabis businesses cannot accept credit cards, acquire loans, set up deposit accounts, write checks, run payroll or pay taxes. Business owners are forced to operate primarily in cash, opening them up to a significant risk of criminal activity, whilst struggling to pay suppliers, bills, staff and conduct general business.

- The industry does not have access to other banking services, such as lending, lines of credit, funding and other investment-related tools, cannabis companies struggle to obtain the loans necessary to grow their businesses or launch new ones.

- Last but not least, the absence of legislation protecting banks doing business with cannabis companies is adversely affecting other companies and industries as well.

SOLUTION

We propose the use of blockchain networks and technologies to replace many of the outdated processes within the current financial system. This will still allow us to carry out public traceability, and provide banking solutions to the different parties involved in the cannabis supply chain, that range from growers to consumers, addressing many of the flaws in the existing banking system, including giving the unbanked access to the financial system.

DEFI

Decentralised Finance (DeFi), which includes a wide variety of financial applications that aim at the democratisation of finance, and leverage smart contracts to automate many of the functionalities in financial services has created a significant shift in how financial transactions are viewed outside the traditional assumptions of the present, closed financial sector.

Futurehead Group's DeFi solution, **Bitcoin Hemp,** is aimed at cannabis farmers and businesses. It was created with the sole purpose of allowing access to financial products to anyone with a smartphone and an internet connection within a decentralised economy, allowing the possibility of enhancing liquidity and fundraising whilst opening up access to many more opportunities and investors.

COMPONENTS OF DEFI ECOSYSTEM

- Open Ledger Protocols
- Stablecoins
- Decentralized Exchange Platforms
- Platforms for Managing Insurance Investment

ADVANTAGES OF DEFI

- No permissions Required
- Flexible Earning opportunities
- No Need to Depend on Banks
- More Opportunities for Innovation
- Improved Open Access with Trust
- Customers are in Control with DeFi

POTENTIAL USE CASES OF DEFI

- Open lending Platforms
- Decentralized Transactions
- Stablecoins, Insurance, and Mortgages

PROTOCOL

This is focused on P2P lending strategy (direct loan relationship between Growers, Farms, Crops, Final Products, Projects, Startups and Borrowers in this case investors or simple speculators) to a different variety of pool-based strategy. The lenders provide liquidity by depositing cryptocurrencies in a pool contract. Simultaneously, in the same contract, the pooled funds can be borrowed by placing a collateral depending on the choice of the lender and their risk taste.

Each type of collateral has a different type of risk, the algorithm according to the project or crop listed according to the DAO rules define the risk level.

This enables instant loans with characteristics based on the state of the pool. A simplified scheme of the protocol is presented in figure 1 below.

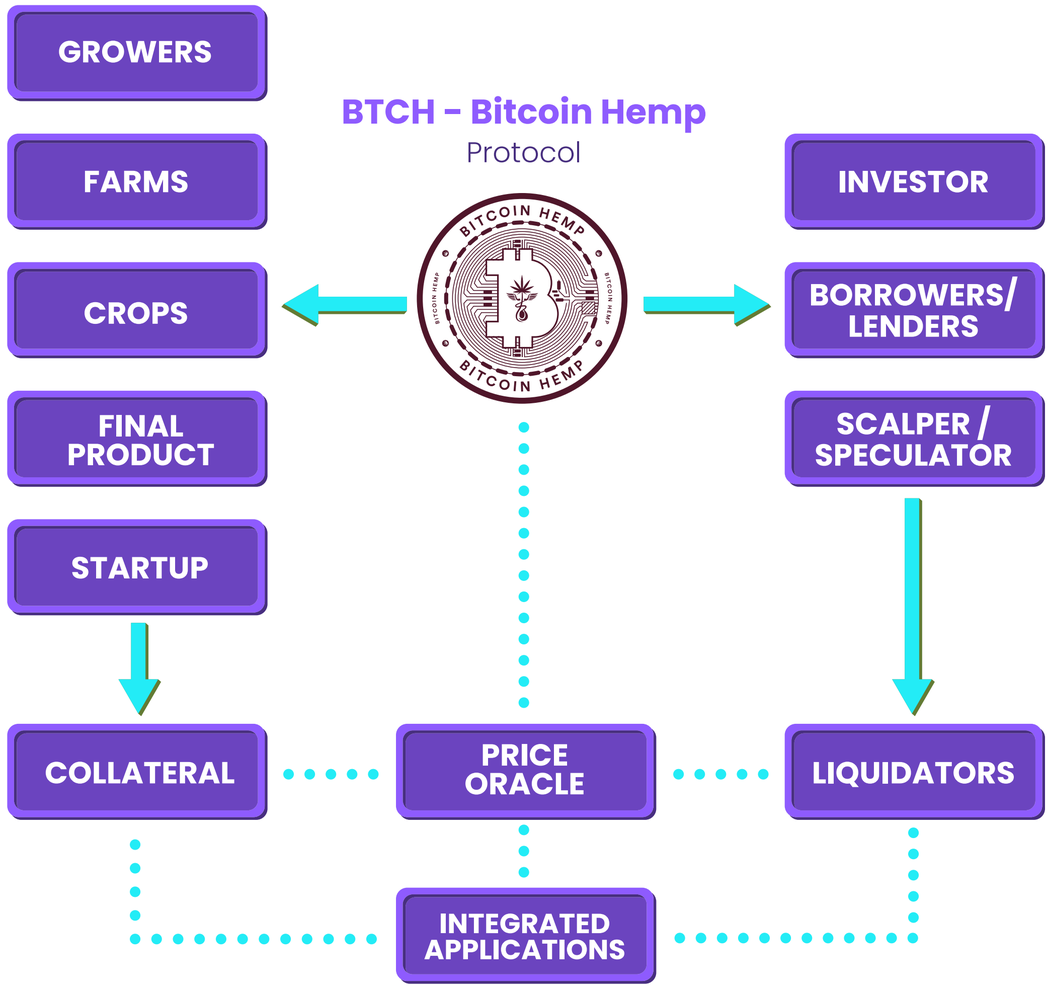
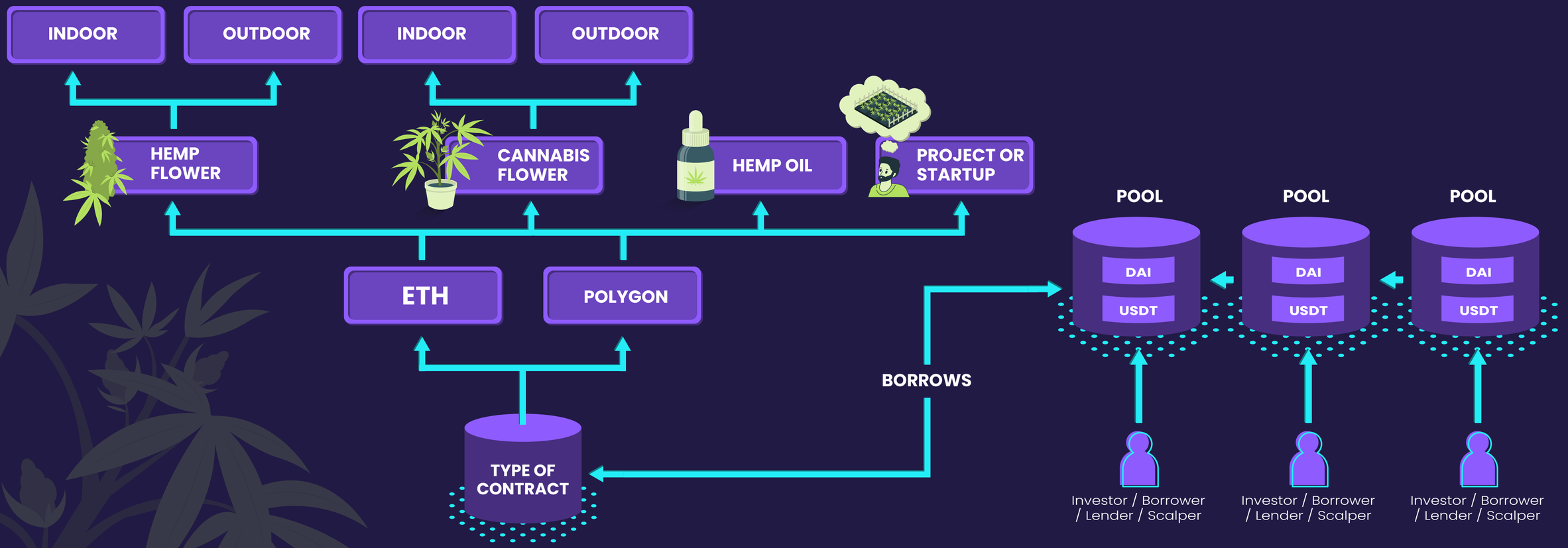


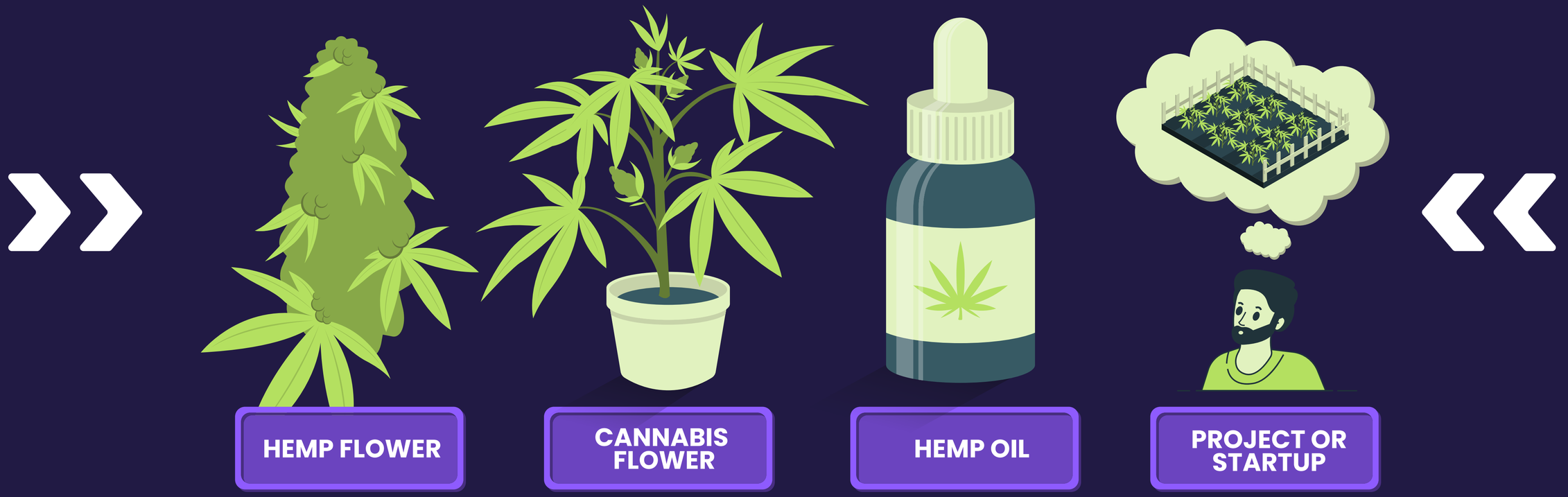
Figure 1: The Bitcoin Hemp Protocol

Basics


INDOOR
OUTDOOR
INDOOR
OUTDOOR
HEMP FLOWER
CANNABIS FLOWER
HEMP OIL
PROJECT OR STARTUP
ETH
POLYGON
TYPE OF CONTRACT
BORROWS
POOL
POOL
POOL
DAI
USDT
DAI
USDT
DAI
USDT
Investor / Borrower / Lender / Scalper
Investor / Borrower / Lender / Scalper
Investor / Borrower / Lender / Scalper

Typification of the smart contracts:

There are 4 different type of smart contracts defined by the type of flower, purpose and industry that each crop or project is related to:



**All contracts are NON-DELIVERY.

Hemp Flower.

Definition: A hemp flower is the unprocessed bud from the hemp plant. It contains the full spectrum of the plant's cannabinoids and terpenes, a hemp flower buds differ from cannabis flowers in their tetrahydrocannabinol (THC) content.

Source: https://highgradehempseed.com/blog/what-is-hemp-flower/

Cannabis Flower.

**Only available in regulated states or countries according to their laws, following their compliance.

Definition: A general term that refers to the smokable, trichome-covered part of a female cannabis plant. Flower is the most popular form of cannabis due to its versatility, offering numerous consumption methods, such as being smoked using a pipe or bong, or by rolling it in a joint or blunt. **Source:** https://www.northernlightcannabis.com/medicine/cannabis-dictionary-flower

Hemp Oil.

Definition: Also known as hemp seed oil, is made from hemp, a cannabis plant like the drug marijuana but containing little to no tetrahydrocannabinol (THC), the chemical that gets people "high." Instead of THC, hemp contains cannabidiol (CBD), a chemical that has been used to treat everything from epilepsy to anxiety. **Source:** https://www.webmd.com/diet/hemp-oil-good-for-you#1

Final Product.

Definition: a final or finished product means a cannabis product in its final form to be sold at a retail premises.

Source: https://www.lawinsider.com/dictionary/medical-cannabis-finished-product

Start Up or Project.

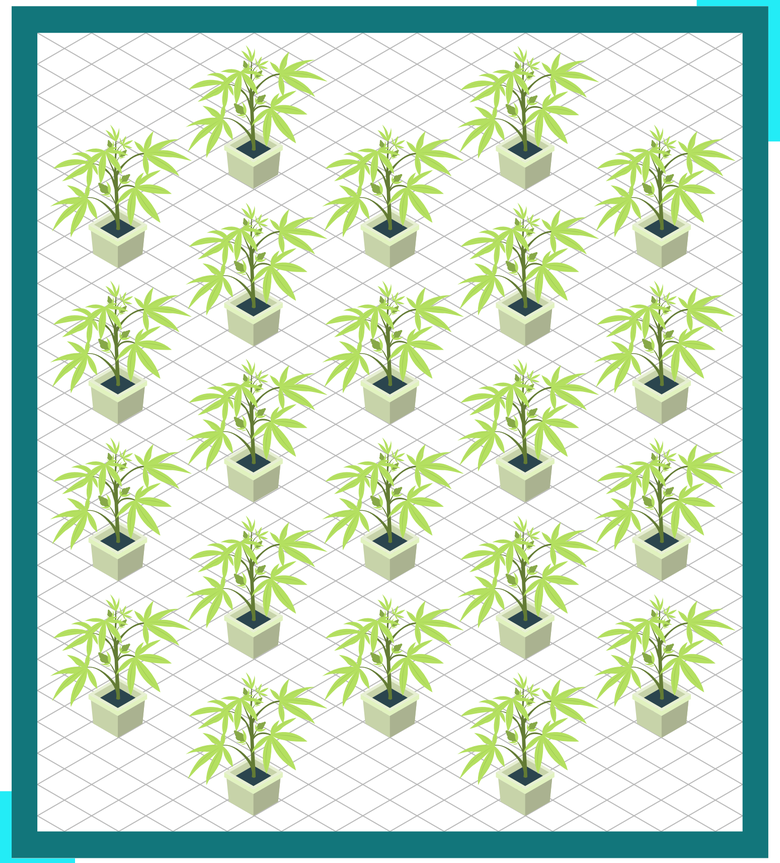
Definition: Cannabis Business Start Up or Project means the vertically integrated cannabis microbusiness consisting only of manufacturing, transportation, and distribution of Developer's products for the extraction of cannabis oils, the manufacture of cannabis edibles, the packaging of cannabis and cannabis infused products, the distribution of cannabis and cannabis infused products, and the transport of cannabis and cannabis infused products operated by Developer on the Site pursuant to the Authorized Licence.

Source: https://www.lawinsider.com/dictionary/cannabis-business-project

Types of Pools

Depending on the type of project:

Crop or Project Risk: Defined by time in business, and Size.



Time in business:

- High Risk: 0-1 Year.
- Medium Risk: 1-2 Years.
- Medium Low Risk: 2-5 Years.
- Low Risk: +5 Years.

Farm Size:

Indoor:

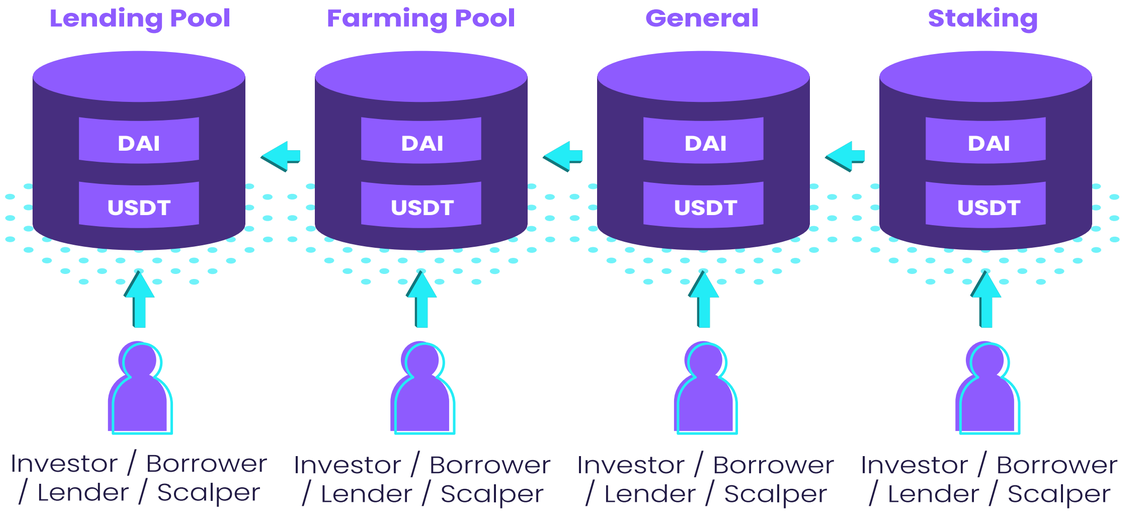
- Small: 3,000ft² - 5,000ft²
- Medium: 10,000ft² -20,000ft²
- Large: > 20,000ft²

Semi Indoor:

- Small: 3,000ft² - 5,000ft²
- Medium: 10,000ft² -20,000ft²
- Large: > 20,000ft²

Outdoor:

- Small: 5 Acres.
- Medium: 10 - 25 Acres.
- Large: >25 Acres.



- ## Lending Pool

  Definition: it serves as a central account where Investors and Lenders provide liquidity by depositing funds in a smart contract. At the same time, if a collateral is supplied, the pooled funds can be borrowed and repaid overtime, the borrower gets to choose their risk preference, this enables instant loans with characteristics based on the state of the pool. Each type of collateral has a different level of risk, which is defined by the algorithm based on the project or crop and according to the DAO regulations.

- ## Farming Pool

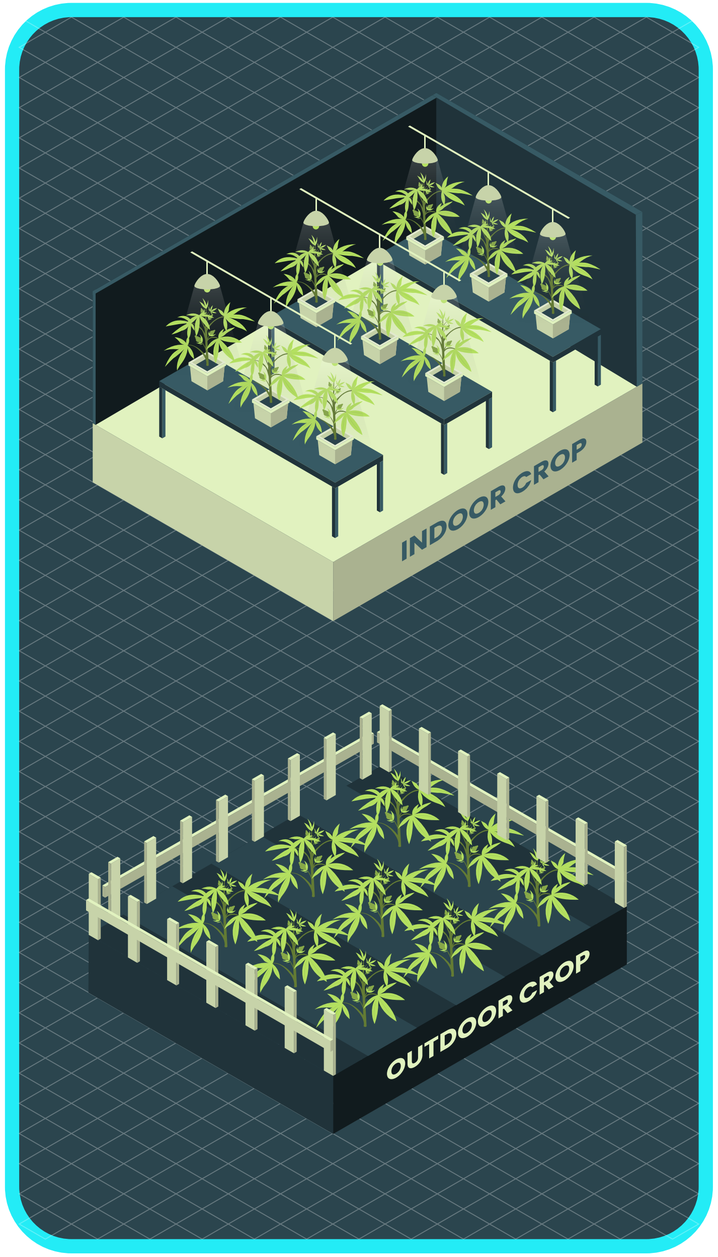
  Definition: this smart contract type is intended for specific projects such as cultivating and growing (indoor / outdoor), startups, and crowdfunding for new and small businesses. Because of the high level of risk involved, investing in these types of projects usually generate more utility.

- ## General

  Definition: this is the type of pool in which Investors provide liquidity through funds. Following that, and based on the Investor's preferred level of risk the system will automatically create a smart contract for a random project or group of projects, in this way the algorithm compensates the level of risk involved to generate a profitable return.

- ## Staking

  Definition: its primary purpose is to increase liquidity through holding funds while also generating utility and further flexibility for stakeholders, making it ideal for medium-sized to relatively large already-consolidated companies that want additional funding to keep growing their business.



Algorithm Convention

- Plant = P
- Amount of pounds per crop = AP

P = X weight / Y time

AP = P * Xft²

Typification of crops, Indoor and Outdoor

Indoor > Per plant

P = X (1,00 pound / 3 months grow) + 1 month drying

Example number one : An indoor plantation of 3,200 ft²

P = 1,00 pound / 4 months

AP = 1,00 pound / 4months * 3,200 ft²

= 3,200 pounds x ft² / 4 months

Outdoor > Per plant

P = X (8,00 pound / 6 months grow) + 1 month drying

Example number two: An outdoor plantation of 3,200 ft²

P = 1,00 pound / 4 months

AP = 8,00 pound / 4months * 3,200 ft²

= 25,600 pounds x ft² / 7 months

Contract expiration

- Indoor contract expiration date - 7 Months.
- Outdoor contract expiration date - 4 Months.

Conclusion

Execution of outdoor contracts are more profitable but take longer, Indoor contracts are fastest but are not as profitable.

Potential Use Cases

One of the many challenges that farmers face nowadays are cash-flow problems, for example the impact on the liquidity of their business when they sell any form of commodity due to not being paid immediately. Within a decentralised financial system, it will be possible to sell a cannabis crop, either by negotiating a discount for prompt payment, (where the farmer/supplier receives payment in cash, consequently, giving the seller liquidity while the buyer gets a discount on the original invoice amount) or by using futures contracts, which is a legally binding agreement to buy or sell an asset at a predetermined price and at a specified date in the future.

Decentralised Finance DeFi can be seen as a mediator and facilitator between parties. Investors can expect that their ownership stake is preserved on the blockchain ledger and proceed with certainty that their investments are backed up through smart contracts within a blockchain, as well as security tokens (digital, liquid contracts), yield farming (a process that allows cryptocurrency holders to earn rewards on their holdings) and staking (holding funds in a cryptocurrency wallet to support the security and operations of a blockchain network) within the marketplace.

Bitcoin Hemp

Bitcoin Hemp is a cryptocurrency system that was created with the intention of providing the cannabis Industry with a blockchain solution that would be both beneficial and easy to access, facilitating a superior alternative to any business struggling to open a bank account that offers the client with standard banking tools. This financial technology solution enables fast transactions with minimal costs and offers direct access to company funds through our own global ATM network via withdrawals, the option to swap to other currencies, sending and receiving funds and many other banking services common to regular markets.

With the help of our blockchain solution, we aim to bring together the many hemp companies of the world by financing projects, establishing international payment systems, and providing legal assistance, consulting, and fundraising for your project, planting or distribution.

Operation

Previously, Bitcoin Hemp used NANO BLOCKCHAIN NETWORK, but since our main goal is to provide a completely decentralised solution, Bitcoin Hemp will now operate through POLYGON MATIC NETWORK, which is the best solution for our platform of decentralised finance apps, operating both as a protocol and a framework for building and connecting Ethereum-compatible blockchain networks.

All Bitcoin Hemp facilities are tightly integrated and run flawlessly through the Polygon Matic system as its backend transaction protocol. A complete multi-chained system, a framework as well as a protocol. It connects Ethereum-compatible blockchain networks and is built to solve the scalability issues of the current Ethereum network, meaning as your company grows, we will be there to provide a solution that scales accordingly. It is a 2 layer solution; primarily, Polygon Matic works on top of Ethereum's primary blockchain, secondly Polygon uses side chains to unclog the main network in a smart and cost-effective manner.

Source: https://polygon.technology/

Bitcoin Hemp Advantages

Bitcoin Hemp's affiliation in the blockchain Industry, as well as our founder's 25 years of experience in the cannabis sector, allows us to offer the ideal solution to our client's financial needs. Accessibility in the blockchain Industry has evolved considerably since inception, these evolutionary changes have allowed Bitcoin Hemp to mature into a platform that encompasses several cutting-edge services.

Bitcoin Hemp goes far beyond the needs of cannabis growers and consumers. Bitcoin Hemp bridges the gap between the growing financial needs of the legal cannabis market and the established, yet inaccessible, conventional financial solutions, bringing security and reliability whilst surpassing traditional banking options by offering superior scalability, speed and flexibility through well established, renowned and proven technologies. The mechanisms within the ecosystem allow Bitcoin Hemp to provide our users with unmatched protection on our proof of work network backed up by cutting-edge technology & advanced security, facilitating fast transactions with minimal cost, familiar ATM withdrawals, conversion to other currencies, sending and receiving of funds and many other banking facilities and services common to regular markets.

It is undeniable that the legal cannabis market will continue to expand and thrive. Throughout this growth, the importance of adhering to the constantly evolving legislation and staying on the right side of the law are paramount, and with Bitcoin Hemp, legitimate financial transactions are taken care of. The mechanisms within the ecosystem allow Bitcoin Hemp to provide our users with unmatched protection on our proof of work network, backed up by cutting-edge technology & advanced security.

The feature set offered by Bitcoin Hemp remains unparalleled in terms of usability and scalability, rising to meet the challenges of any growing business. For example, one of the features that sets Bitcoin Hemp aside from other crypto solutions is that Bitcoin Hemp is environmentally safe. Many digital money networks have resorted to wasteful designs to secure their networks. As the world continues efforts to reduce pollution and energy consumption, Bitcoin Hemp is smartly designed to address this issue by not relying on power-hungry mining for security, but instead uses a lightweight and efficient consensus protocol called Open Representative Voting (ORV) for minimal energy usage.

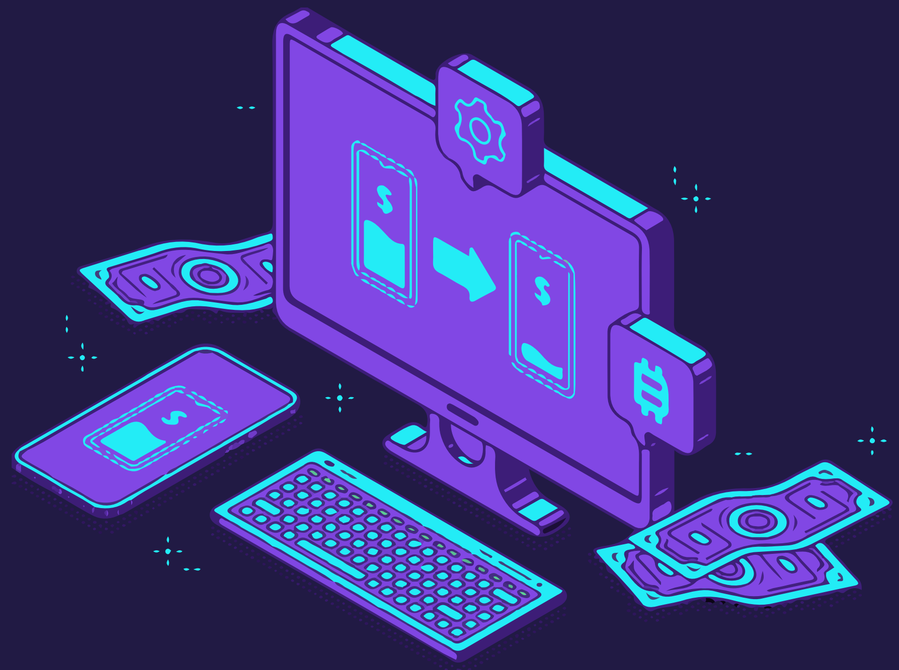
TECHNOLOGY

Polygon Matic

Polygon is a multichain and complete system that resolves the traditional Etheruem's issues of throughput, poor user experience, and scaling, unlike Polkadot, Cosmos, and Avalanche, Polygon taking the advantages of Ethereum's security, openness, and the ecosystem, the Polygon project removes the old barriers of interoperability and scaling of many blockchains, due to its compatibility with Ethereum blockchain make it more attractive for Ethereum based smart contract developers, the architecture depends on four layers, which further divided into two categories of mandatory layer and optional layer, the Polygon networks layer, and Execution layer fall into the mandatory layer.

- Ethereum layer
- Security layer
- Polygon networks layer
- Execution layer

Polygon networks layer is responsible for handling local consensus and blocks production, while Execution layer is handling the execution of the Ethereum Virtual Machine for smart contracts. The optional layer contains the Ethereum layer and the Security layer, the first one is the collection of smart contracts and providing services for transaction finality, staking, and communication between Ethereum main chain or side chain, the second one provides services for security and validation across the Polygon network.



The Polygon provides the greatest advantages over other blockchains, for example, if a chain is launched on the Polygon network that must be benefited from the capabilities of Polygon's arbitrary message passing over other blockchains as well as greater access to interoperable decentralized applications on diverse platforms.

The success of Polygon lies in its DeFi-based decentralized applications, and non-fungible tokens (NFT), developers can build and connect to any Ethereum-compatible blockchain, therefore Polygon refers to a layer 2 framework.

After the investment from billionaire Mark Cuban, the Polygon Network's native token soared by 13%, according to him the Polygon is fast and will grow exponentially. The successful applications running on Polygon are Augur, a prediction market, OpenSea NFT marketplace for arts and collectibles, Trace Network which is a DeFi-based application in the field of fashion, lifestyle, and luxury goods.

QED Model Oracle

QED is developed by origin as a decentralized oracle to connect multiple blockchains, smart contracts platforms, and off-chain data. The protocol is a successor of Delphi oracle, the software which currently powers algorithmic stable coins, prediction markets, and other applications on the EOS main net. Whereas oracle publishes a hash of the observed value together with random nonce during the commit phase, QED protocol employs a commit reveal mechanism. In the reveal phase, oracle publishes their actual value and nonce. Therefore, the smart contract can only accept the value and concatenated nonce after successfully hashing into the previously submitted commit hash.

QED's robust economic model enables oracle to provide external collateral as a bond to their smart contract, eliminating systemic risk. Oracle capital efficiency is determined by systematic and continuous reliability scoring, and naturally eliminates poor performers in the system to maximize global accuracy. The protocol operates entirely on the blockchain without failure, whereby it is economically bound by the QED token.

QED is one of the first oracle protocols that was created with commercialization in mind. Its market now scales proportionately to unlock the vast potential of decentralized economies. Hence, allowing a fair value exchange environment to allow oracle to evolve and discover pricing from true supply and demand. The protocol prioritizes protocols with high accuracy levels over the rest. QED aims to integrate with any public blockchain so that competing oracle protocols can leverage the protocol's unique economic model.

The QED is based on a UX network that runs the core smart contracts for the system, a blockchain capable of processing 20,000 transactions per second. Its trustless bridge allows QED to connect with multiple blockchains. Oracle capital efficiency is determined by systematic and protocol that cannot be taken over by a centralized entity. The UX network, launched in August 2020, is a high-performance, highly scalable, and permissionless blockchain. With its advanced resource model and market facilities, it provides long-term predictable resource costs. Therefore, oracle operations on the UX network can be performed directly through an interface with the chain.

The execution of QED is designed to be flexible and fit for purpose. Since QED is a multi-blockchain, it can effectively connect oracle to smart contracts within a risk framework that has financial and commercial logic. It can also avoid recursive congestion and seek the optimal venue for execution. Furthermore, the model can cater to customers that have selected the chain upon which they wish to operate.

TOKENOMICS

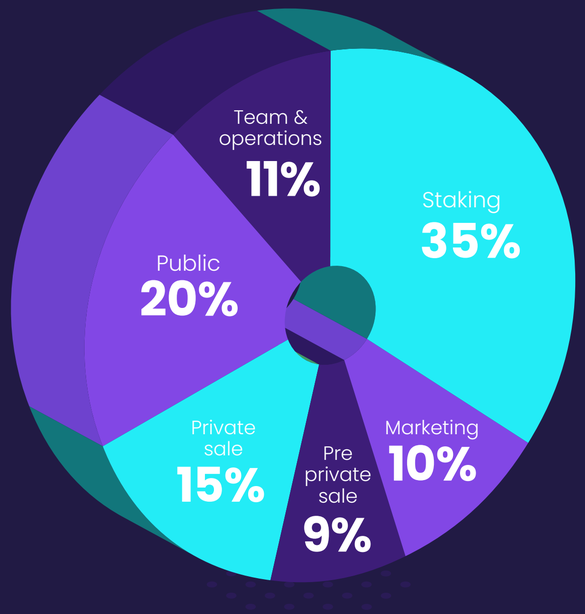
Runs on Polygon Matic ETH second layer

Pre-mined (50.000.000 token)

Environmentally Friendly

Web Wallet

Voting test



TOTAL SUPPLY
100.000.000.00 - 100%

- **Staking**
  35.000.000 - 35%
  Initial liquidity to leverage project on the system
- **Marketing**
  10.000.000 - 10%
- **Pre private sale**
  9.000.000 - 9%
  Rights for the DAO.
- **Private sale**
  15.000.000 - 15%
- **Public**
  20.000.000 - 20%
- **Team & operations**
  11.000.000 - 11%

ROADMAP

Q1-2024

- Polygon contracts
- Development
- Migration of tokens to new system
- Burn and deletion of the old NANO system
- Public listing of the actual crops and farms
- Pre private sale

Q2-2024

- Private sale
- Press release - Marketing
- First liquidity pools testing
- Pilot program crops in South America

Q3-2024

- Press release - Marketing
- Public sale
- First liquidity pools testing
- Pilot program crops in South America

Q4-2024

- Coin Listing
- Expo shows
- First returns from contracts

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