

## **DFXC – DiamonDFXCoin**

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### **Abstract**

Initially, this Whitepaper discusses the common characteristic of fiat and cryptographic currencies, which is the absence of tangible backing, and succinctly highlights the vulnerabilities and instabilities of the current financial system, which is inflationary and not backed by tangible assets. The Whitepaper proposes the DFXC project as a solution to these vulnerabilities, starting with the issuance of NFTs backed by high-value assets such as natural gemstones and lab-grown diamonds. The NFTs will be durably backed by the represented assets, and the funds raised from their sale will be used for arbitrage between fiat currencies and the production of lab-grown diamonds. The project will provide buyers with an opportunity for investment backed by tangible assets and the potential profit from the appreciation of the represented asset. In the second phase, there will be an Initial Coin Offering (ICO) of DiamondFxCoin (DFXC), which would be the cryptocurrency based on carats of lab-grown diamonds, following the main characteristic of the previously issued NFTs, which is being backed by carats of lab-grown diamonds.

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## 1- INTRODUCTION ON THE CURRENT WORLD FINANCIAL SYSTEM

After World War II, the United Nations Monetary and Financial Conference, also known as the Bretton Woods Conference, was held in Bretton Woods, New Hampshire, United States, between July 1 and 22, 1944. During this conference, rules were established for the international monetary system, which became known as the Bretton Woods Agreements. The World Bank and the IMF were created at that time. The agreements were ratified throughout 1945 and came into effect at the end of that year, with the support of 30 countries.

Under the Bretton Woods system, countries that joined the International Monetary Fund (IMF) agreed to establish a fixed, but adjustable exchange rate to correct a "fundamental imbalance," a term contained in Article IV of its charter. However, the expression was not clearly defined. In its original wording, countries were required to consult the IMF before changing their exchange rate. The process would be automatic if the variation was less than 10%. In other cases, the Fund could oppose the change, but in practice, this rarely occurred.

Each country would establish its exchange rate in relation to gold or the U.S. dollar, which had a fixed value of \$35 per troy ounce (31.10349 grams). Industrialized countries, which generally had stable exchange rates, made few changes to their rates until 1960. However, in 1949, there was a widespread realignment of values, associated with a devaluation of the British pound.

The system lasted until August 15, 1971, when the United States unilaterally ended the convertibility of the dollar into gold, making the dollar a fiat currency. This decision, referred to as the Nixon Shock, created a situation where the U.S. dollar became a reserve currency used by many countries. At the same time, other currencies that were previously fixed, such as the British pound, became floating currencies.

In addition to the exchange rate aspect, the agreement stipulated that the IMF would provide credit to countries to support temporary payment difficulties. Each country was assigned a quota in the Fund, which determined the proportion of financing it could obtain and its voting power in the deliberations of the organization.

In this way, we observe that from 1945, the world financial system was reformulated and, from 1971, the dollar ceased to be backed by gold and became a financial reserve adopted by most countries in the world. However, its value was based on trust in the issuing country.

## 2- THE CRYPTOCURRENCIES

In 2008, there was a major innovation with the launch of Bitcoin, the first successful cryptocurrency. Since then, the cryptocurrency market has been growing and becoming more popular.

Cryptocurrencies are digital currencies, which means they only exist virtually, unlike traditional currencies that we use on a daily basis, such as the dollar, real, and eur.

Virtual currencies are not controlled by any government. This factor makes cryptocurrencies a decentralized form of money as they do not rely on any government authorization or intermediation for transactions.

Cryptocurrencies have numerous uses, but their primary purpose is to serve as conventional money, meaning they function as a method of trading, purchasing, or investing for future profits.

Many investors use digital currencies precisely because of their decentralized nature. As a result, they turn to this technology to conduct virtual transactions without the need to pay fees charged by banking institutions.

Finally, like any other asset, digital currencies are also used as investments to seek profits. The high volatility of this market attracts many investors.

Volatility, which at times can generate high profits, can also lead to significant losses for investors.

This excessive volatility attracts speculators, but it discourages the use of cryptocurrencies as conventional money. After all, when a cryptocurrency is performing well, it can simply be exchanged for fiat currency, and when it is performing poorly, speculators prefer not to spend it, waiting for a better market opportunity to sell their cryptocurrencies.

Alongside the volatility, we also have low acceptance of cryptocurrencies. We can cite, for example, that very few establishments accept payment for products using cryptocurrencies.

Indeed, the arguments mentioned above can be considered the major disadvantages of cryptocurrencies.

### 3- THE NFTs

An NFT (Non-Fungible Token) is a digital asset that represents ownership of a unique or rare item, such as digital art, music, videos, tweets, or even memes. They are created using blockchain technology, a decentralized network of computers that records and verifies transactions.

The idea of creating an NFT emerged in 2017 when software developer Matt Hall created a game called CryptoKitties on the Ethereum blockchain. In this game, players can buy, sell, and trade unique virtual cats using the cryptocurrency Ether. These virtual cats are represented by non-fungible tokens, or NFTs.

The success of CryptoKitties demonstrated the potential of NFTs as a way to create and trade unique digital assets. Since then, several NFT platforms have emerged, such as OpenSea, SuperRare, and Nifty Gateway, allowing artists, musicians, and content creators to monetize their digital creations in unique ways.

NFTs are still an emerging and evolving technology, but the basic idea of using non-fungible tokens to represent unique digital assets seems to be here to stay..

### 4- THE PROBLEM

Fiat currencies, as well as cryptocurrencies, do not have any tangible value backing them. Bitcoin, due to its mining limit, is theoretically a deflationary cryptocurrency. However, its value is determined by the market, taking into account the cost of mining and the value assigned by buyers and sellers of the asset, following the laws of supply and demand. The same applies to numerous other cryptocurrencies.

To mitigate the significant price fluctuations of cryptocurrencies, Stablecoins were created. These are cryptocurrencies that are pegged to fiat currencies, such as the dollar. For example, we have Tether (USDT) and USD Coin (USDC), among others. However, these Stablecoins share several characteristics with their underlying fiat currencies. They are inflationary, meaning they lose value over time, and they are subject to the economic policies of the countries issuing their Stablecoin bases.

Nevertheless, Stablecoins offer a solution to avoid the problems associated with traditional banking systems and their transfer fees, as well as the lack of transaction privacy.

## 5- THE PHIGITAL

Phigital assets are assets that combine characteristics of physical and digital assets, creating a hybrid purchasing and user experience. The term "Phigital" is a blend of the words "physical" and "digital."

These assets are typically physical objects that have an added digital layer, which can be used to enhance the user experience or provide additional services. This can involve a variety of technologies such as augmented reality, smart sensors, IoT (Internet of Things) connectivity, mobile applications, and NFTs for tangible assets.

In summary, Phigital assets are a combination of digital technology and physical objects, creating a hybrid user experience that combines the best of both worlds. This trend has been growing in popularity as consumers seek more innovative and personalized experiences.

A digital asset can also refer to a digital object that has a physical manifestation, such as a digital artwork displayed on a screen or wall in a gallery or museum.

The concept of digital assets aligns with the increasing digitization of the economy and the growing interconnection between the physical and digital worlds. As technology advances, we can expect to see more digital assets being created and utilized across various sectors and industries.

## 6- THE PROJECT

After the brief overview of the foundations of the global financial market, as demonstrated in the introduction, the emergence of the first cryptocurrency in 2008, which gained popularity, and subsequently, other innovations like NFTs and Phigital, we can observe a common characteristic shared by fiat currencies and cryptocurrencies: the absence of a backing. In other words, there is no tangible element that attributes value to the currency. Generally, intangible factors determine the value of currencies, such as the level of trust, stability, and economic power of the issuing country in the case of fiat currencies, or the appreciation due to the project and the law of supply and demand that values cryptocurrencies.

Although the global financial system is inflationary and not backed by any tangible asset, it has served the economic fundamentals of the world. However, it is always exposed to crises of confidence and instabilities.

In the past, other currencies served as the foundation of global trade, such as the British Pound during the height of the British Empire or the Spanish Crown, backed by gold or silver. Currently, the US Dollar is the global reserve currency, but its relevance in the world market has been declining since the Bretton Woods agreements. Until now, there is still no other currency that efficiently replaces the dollar, which, nevertheless, is a fiat currency, inflationary, and subject to the economic policies of its issuing country.

To address these weaknesses, we present the DFXCoin (DFXC) project, which is divided into two phases.

In the first phase, NFTs will be issued featuring images of high-value natural gemstones, artificial diamonds for jewelry, and artificial diamonds for industrial use (nano diamonds or abrasive powder of artificial diamonds). Each NFT will serve as a certificate of the exhibited asset. The company FxDiamond, based in Dubai, will trade the NFTs, and the European company Answer Castle, based in Portugal, will be the faithful custodian of the assets represented in the NFTs.

The value of the NFTs will be equivalent to the commercial value of the represented asset, with a focus on artificial diamonds for heavy industrial use, cosmetic industry, pharmaceuticals, technology, or high-value jewelry.

The proceeds from the sale of these NFTs will be used for arbitrage between fiat currency pairs in the global market and for the production of artificial diamonds. The NFTs will always be backed by the represented asset.

Answer Castle guarantees the buyback of the NFTs plus an X% interest rate after a specified period from the initial purchase. This period, as well as the rate of return, will be defined for each NFT.

Any risk related to arbitrage activity or artificial diamond production will be backed by the asset held by Answer Castle.

The holder of any NFT can demand the physical asset at any time, bearing only the shipping costs. When this occurs, the NFT must be sent to Answer Castle, which will neutralize it by sending it to a cold wallet.

In this first phase of the project, we have NFTs backed by a high-value physical asset with increasing demand and projected profitability.

The trading of these NFTs will be in cryptocurrencies, which will need to be converted into Stable Coins. The percentage of earnings will also be linked to Stable Coins such as Tether or USD Coin, for example.

This project will offer NFT buyers an investment opportunity backed by a physical asset and a return after a specified period from the initial purchase. Additionally, there is the potential for even greater profit through the appreciation of the represented asset itself. After all, the NFT can be directly traded or exchanged for the physical asset that backs it, enabling direct market trading..

## 7- A BRIEF HISTORY ABOUT ARTIFICIAL DIAMONDS

The first evidence of scientists creating synthetic diamonds dates back to the late 1800s and 1920s. However, these early creations were analyzed but not confirmed. It was in the 1940s that scientists in the United States, Sweden, and Russia began formally producing lab-grown diamonds through HPHT and CVD processes.

Two methods of producing lab-grown diamonds under laboratory conditions were developed. HPHT stands for High Pressure, High Temperature, while CVD stands for Chemical Vapor Deposition. In both processes, diamond crystals or plates are used as seeds to initiate the growth of lab-grown diamonds.

Around 1953, the first tiny crystals of synthetic diamonds were documented. The production of artificial diamonds for jewelry making and industrial purposes began in the mid-1990s.

The percentage difference in value between natural and artificial diamonds can range from 20% to 50%, depending on the size and quality of the diamond in question. Larger and higher-quality natural diamonds focused on jewelry tend to have a greater variation in value compared to artificial or synthetic diamonds.

Lab-grown diamonds are becoming popular among those concerned with ethical issues, particularly regarding aspects of natural diamond mining. After all, the carbon footprint associated with producing an artificial or synthetic diamond is much lower than that caused by mining natural diamonds. One of the issues is the movement of matter required for mining a natural diamond, which causes significant environmental impact and degradation of mining areas.

Artificial diamonds also do not carry the risk of being a "blood diamond," meaning a gem used to finance conflicts or motivate crimes, as is the case in many regions in Africa.

## 8- DIFFERENCES BETWEEN LABORATORY CREATED DIAMONDS AND IMITATION DIAMONDS

There is some confusion between artificial or synthetic diamonds and diamond simulants, but the simple answer to this question is: no, they are not the same. Simulated diamonds do not have the same physical properties as natural diamonds.

Artificial diamonds, on the other hand, have the same properties and material elements as natural diamonds, even though they are created in a laboratory rather than in the Earth's mantle. Lab-grown diamonds are artificial diamonds composed of carbon atoms arranged in the same way that natural diamonds form, giving them the characteristic crystalline structure of a diamond.

Diamond simulants, such as cubic zirconia and moissanite, may look like diamonds. They resemble natural diamonds in appearance but have a different chemical structure than real diamonds, so they are not true carbon crystals; they merely imitate the appearance of diamonds.

Qualified gemologists are able to distinguish natural and synthetic diamonds from diamond simulants, primarily through visual inspection.

Artificial or synthetic diamonds are generally purer, brighter, and more flawless than natural diamonds, often without contaminants such as nitrogen and other substances, unless specific elements are intentionally added for a specific purpose. For example, boron can be added to create synthetic diamonds with a blue color.

## 9- GROWING WORLD DEMAND FOR ARTIFICIAL OR SYNTHETIC DIAMONDS

In recent decades, the hardness of artificial diamond has sparked interest in the industrial use of this mineral, which is currently employed in various applications such as water treatment, microelectronics, bone prosthetics, liquid crystal displays, cutting and drilling tools, solar cells, and more. Due to the wide range of diamond applications, it is difficult to assess the value of a diamond once it becomes relative.

In nature, diamonds are formed from carbon at great depths and high temperatures, reaching the surface through specific volcanic emissions. However, the increased demand for diamonds for industrial use has led to the development of various production techniques, such as the formation of diamond films or coatings through vapor deposition – a method initially developed for use in cellphone screens.

The general properties of artificial diamonds are similar to those of natural diamonds, ensuring their utilization in diverse applications.



Artificial diamonds are manufactured for specific purposes, so aside from the demand in jewelry, the majority of production is geared towards industrial needs. In general, abrasive products, sandpapers, drills, and so on, where hardness is the primary concern. However, new uses for artificial nanodiamonds in industries such as cosmetics, pharmaceuticals, and high technology are gaining momentum.

## 10- THE ISSUE OF THE PRODUCTION OF TANGIBLE VALUE BALLAST

Cryptocurrencies require "mining" in order to be created or made available, as is the case with Bitcoin, where thousands of dollars are spent on specialized computers and graphics cards, and a significant amount of electrical energy is consumed in the mining process, which involves solving a hash function through trial and error.



This process is so challenging that the only way to solve the problem is through trial and error. As a result, obtaining Bitcoins requires a high cost of equipment and energy, with the energy often being derived from dirty sources with a high carbon footprint.

Even with all the expenditure and investment, the value of Bitcoin is not backed by any physical asset, making it susceptible to strong speculation and potentially fluctuating by over 50% in a matter of months.

On the other hand, an NFT backed by artificial diamonds also requires substantial investments in high-tech equipment, specialized experts, and significant energy consumption. However, it involves the production of a stable element based on its physical nature, with a value-backed by growing demand.

In essence, we have a tangible element that adds value and security to NFTs.

If the energy source for the equipment in laboratories and plants producing synthetic diamonds comes from low-carbon footprint sources, such as small hydroelectric power plants that can provide surplus energy to small communities, we would have an almost ideal solution to mitigate the impacts generated by the energy requirements for the production of artificial or synthetic diamonds.

## 11- THE PHASES OF THE PROJECT

In the first phase, as previously mentioned, NFTs backed by certified natural gemstones, artificial diamonds of jewelry quality, and artificial diamonds for industrial purposes will be created and made available. These NFTs will not only be backed by assets but also have guaranteed liquidity provided by the faithful custodian company of the underlying assets, after a specified period from their initial acquisition.

In the second phase of the project, a cryptocurrency initially called DiamondFXCoin (DFXC) will be launched, linked to the production of artificial diamonds, where each DFXC will correspond to a certain quantity of "X" carats of artificial diamonds. This cryptocurrency will be issued only after the production, ensuring it is always backed by assets. Furthermore, this cryptocurrency is not tied to the US dollar or Stable Coins but rather to the market price of artificial diamonds per carat.

With this currency, it will be possible to acquire one's own asset backing or use it as a stable and non-inflationary form of exchange. The currency is backed, meaning it is supported by something real, making it more stable and less susceptible to volatility caused by speculators in current cryptocurrencies.

Its price will not be controlled by any government but rather by the artificial diamond market. The company responsible for the production and custody of the diamonds can be audited at any time to demonstrate the ability to deliver the same quantity of carats as the issuance of the cryptocurrency, whether in artificial diamond inventory or liquidity in Stable Coins..

## 12- SUMMARY OF THE SECOND PHASE

The ICO of DiamondFXCoin (DFXC) will take place after the market has tested and approved the NFTs based on artificial diamonds, following the following White Paper:

### 12.1- Introduction:

DFXC is a blockchain-based cryptocurrency that utilizes artificial diamonds as its backing. DFXC is a unique solution that combines the durability and stability of diamonds with the decentralization and security of blockchain technology. DFXC provides an opportunity for investors and cryptocurrency enthusiasts who seek a secure and stable alternative to traditional fiat-based cryptocurrencies.

### 12.2- The Problem:

Fiat-based cryptocurrencies are highly volatile, making it difficult for investors to predict their profits and minimize risks. Additionally, traditional fiat-based cryptocurrencies are subject to inflation and currency fluctuations. This can lead to significant value loss for investors who rely on a stable and secure cryptocurrency.

### 12.3- The Solution:

DiamondFXCoin (DFXC) solves these issues by providing a backing in artificial diamonds. Artificial diamonds are a durable and stable form of backing that is not subject to inflation or currency fluctuations. Furthermore, DFXC utilizes DFXC technology to provide security and decentralization for investors.

### 12.4- How It Works:

The artificial diamonds that serve as backing for DFXC are laboratory-grown and are identical to natural diamonds in terms of durability and stability. These diamonds are stored in a secure vault in a safe location to ensure their integrity and protection. For each DFXC issued, a certain quantity of carats of artificial diamonds is reserved as backing.

DFXC is built on a decentralized blockchain platform that provides security and transparency for its users. Users can purchase DFXCs on cryptocurrency exchanges and store them in their digital wallets. With each transaction, the blockchain records the transfer of value between users' wallets.

DFXCs can be exchanged for their backing, i.e., artificial diamonds.

### 12.5- Benefits:

DiamondFXCoin (DFXC) offers several benefits compared to traditional and fiat-based cryptocurrencies. Some of these benefits include:

Stability: DFXC is backed by artificial diamonds, a backing that is not subject to inflation or currency fluctuations.

Security: DFXC is built on a decentralized blockchain platform, which provides security and transparency for users.

Durability: Artificial diamonds are durable, stable, and resistant, with indefinite durability.

Appreciation potential: As the demand for artificial diamonds increases, the value of DFXC can also increase.

#### 12.6- Conclusion:

DiamondFXCoin (DFXC) is a unique and innovative cryptocurrency that provides stability and security for investors. With backing in artificial diamonds, DFXC offers a secure and stable alternative to traditional fiat-based cryptocurrencies. DFXC can be an excellent choice for investors looking to diversify their investment portfolios.

#### DISCLAIMER

Nothing in this Whitepaper shall be deemed to constitute a prospectus of any sort of a solicitation for investment. The document is not composed in accordance with, and is not subject to, laws or regulations of any jurisdiction which are designed to protect investors.

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