



**ARC IRIS**  
HYDROGEN MINING



# Blockchain Technical White Paper

Arc Iris -Mining  
September 20, 2019



# Arc Iris

## Whitepaper

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## Executive Summary

Arc Iris aims to undertake a next-gen integrated project for state-of-the-art cryptocurrency mining done in an environmentally responsible manner. It will provide safe long-term investment with upside cryptocurrency exposure, yet secure against cryptocurrency volatility by ensuring lowest operating costs. The project envisages utilizing Hydrogen technology to power the cryptocurrency miners.

We are creating a cost-effective and efficient cryptocurrency mining facility with robust infrastructure backbone. Cryptocurrency and Bitcoin mining will be powered by Hydrogen energy with sustainable and best practices.

The cryptocurrency mining industry has been revolutionary and trail-blazing in its formative years since the launch of Bitcoin in 2009. Mining can be done using various processing equipment depending on the kind of currency and the mining algorithm and protocols that they follow. Bitcoin needs very powerful equipments such as ASIC devices which can generate enough processing power to mine it profitably. Still, every kind of cryptocurrency mining needs huge processing power, and concomitant utilization of vast quantity of energy.

As the cryptocurrency mining industry is moving towards its maturity phase, its future seems bright and full of amazing developments. However, cost of operations, particularly the energy consumption, is a major consideration for the entire cryptocurrency mining industry. As the costs of energy or electricity have risen and continue to rise, only the mining operators who have very low energy costs overall can earn adequate returns on the capital invested. The energy costs are bound to rise further as the complexity and time consumption of the Bitcoin mining increases.

As the energy consumption of the crypto-mining industry has reached mind-boggling proportions, it is causing a very adverse impact on the environment. This is more so due to the fact that the crypto-mining industry is energized by electricity. Moreover, electricity is produced mainly using fossil fuels. The mining concentration in the countries with low social and environmental standards is further aggravating the situation. This is detrimental to the environment.



Arc Iris has an innovative and disruptive model to successfully tackle the environmental and other problems related with the cryptocurrency mining. We have worked out a solution which is a byproduct of structured water (hexagonal water) and it's splitting into hydrogen and oxygen. With the help of fuel cell technology developed by us, we can now drastically reduce the share of external electricity demand and thus the external electricity costs. This led to our concept of equipping fuel cell cryptocurrency server farms and offering them to our customers in the form. To make this possible, we have created a cryptocurrency ourselves - Arc Iris - ACI Coin - The Rainbow Currency. ACI Coin is based on the Scrypt POW algorithm.

Arc Iris Development Inc. is creating an energy-efficient cryptocurrency and Bitcoin mining operation by utilizing Hydrogen technology. We use the sophisticated cloud mining techniques to create the mechanisms that would empower everyone to become a cryptocurrency miner. Cloud mining offers the users the benefits of cryptocurrency mining without maintaining any mining equipment.

Arc Iris has optimized vertical integration along the value chain to attain the best operational results and efficiency in the asset management and cryptocurrency operations.

Arc Iris intends to utilize the latest blockchain technologies and environment friendly practices for creating a sustainable organization. Arc Iris has a solid financial plan and competitive strategy. The Arc Iris team comprises of highly experienced and qualified professionals.

The Arc Iris ICO Presale will start in the first week of December 2019. The ICO public sale will start in the first week of January 2020 and will continue to 30th of April 2020 or until our goal is reached. We aim to raise 15 million USD. Awesome crowdsale bonus would be available during the ICO, especially Pre-ICO.

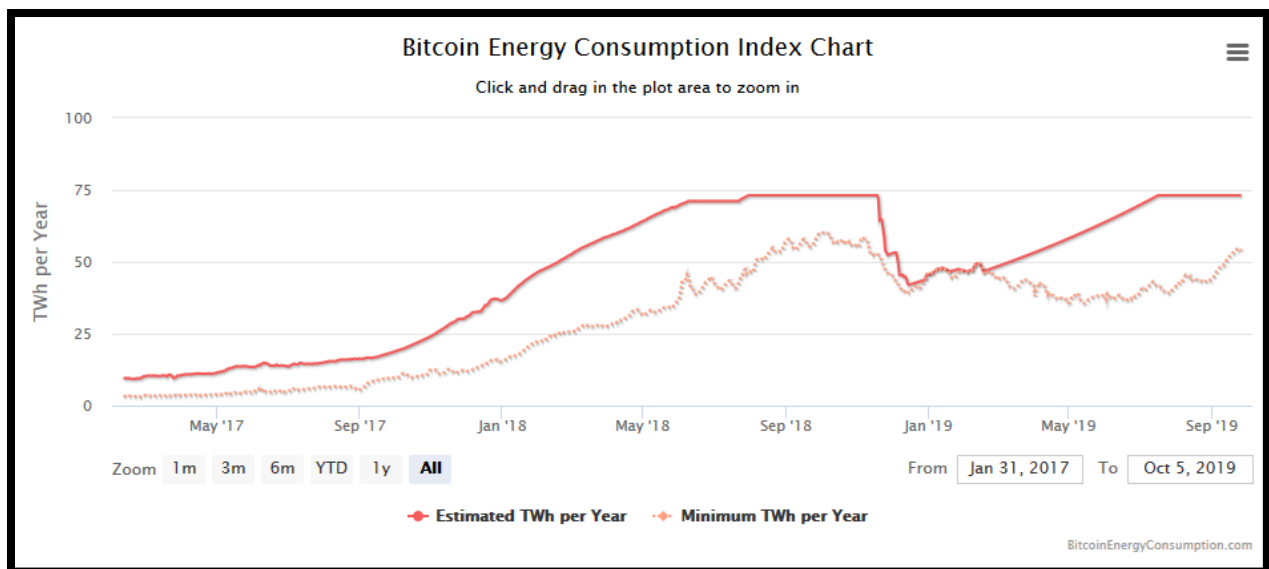


## Industry and Market Overview

The cryptocurrency mining industry has been revolutionary and trail-blazing in its formative years since the launch of Bitcoin in 2009. As the mining industry is moving towards its maturity phase, its future seems bright and full of amazing developments. However, cost of operations, particularly the energy consumption, is a major consideration for the entire cryptocurrency mining industry.

The Energy Consumption by Cryptocurrency mining is huge. Bitcoin alone consumes a lot of energy as shown in the graph:

### Bitcoin Energy Consumption



Source: digiconomist.net

Annualized total electrical energy consumption is estimated to be 73.12 TWh, which is comparable to the power consumption of Austria. It has shown an extremely high growth from an estimated annualized total electrical energy consumption of 9.5 TWh in January, 2017 to annualized total electrical energy consumption of 73.1 TWh in September, 2019.



According to the Bitcoin Energy Consumption Index, a project of Alex de Vries, blockchain specialist at PwC, annualized global mining costs \$3.66 billion, with a revenue of \$7 billion.

The Bitcoin Energy Consumption Index model predicts that miners will ultimately spend 60% of their revenues on electricity. Of late, the maximum proportion of miner revenues, that is, \$2.3 billion are being spent on electricity costs. Alex de Vries puts the price per kilowatt at 5 cents, and remarks that in a lot of places energy is cheaper, for example, the regular price for coal-based electricity in China is 4 cents per kilowatt hour.

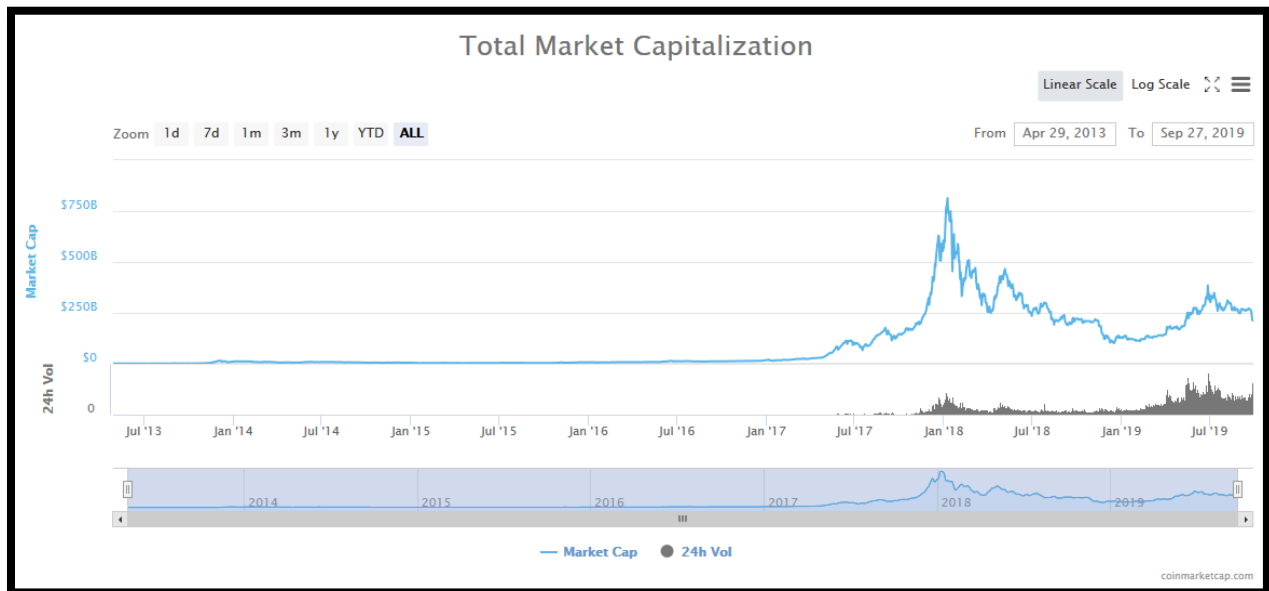
The following table reveals many important dimensions of cryptocurrency market and mining industry:

<b>Key Network Statistics</b>	
<b>Description</b>	<b>Value</b>
Bitcoin's current estimated annual electricity consumption* (TWh)	73.12
Bitcoin's current minimum annual electricity consumption** (TWh)	54.36
Annualized global mining revenues	\$6,155,675,048
Annualized estimated global mining costs	\$3,656,073,069
Current cost percentage	59.39%
Country closest to Bitcoin in terms of electricity consumption	Austria
Estimated electricity used over the previous day (KWh)	200,332,771
Implied Watts per GH/s	0.082
Total Network Hashrate in PH/s (1,000,000 GH/s)	101,253
Energy footprint per transaction (KWh)	612
Number of U.S. households that could be powered by Bitcoin	6,770,506
Number of U.S. households powered for 1 day by the electricity consumed for a single transaction	20.67
Bitcoin's electricity consumption as a percentage of the world's electricity consumption	0.33%
Annual carbon footprint (kt of CO <sub>2</sub> )	34,733
Carbon footprint per transaction (kg of CO <sub>2</sub> )	290.55

Source: digiconomist.net



The cryptocurrency market has become a force to reckon with. Even the world renowned companies are planning to introduce their own cryptocurrencies. For instance, Facebook is going to launch its own cryptocurrency called Libra, after getting the regulatory approvals. The cryptocurrency market has shown a meteoric rise in the value and volume, particularly since 2016, as shown in the graph:



Source: Coinmarketcap.com

The number of active cryptocurrencies has crossed the landmark of 3000. The total market capitalization of cryptocurrencies is above the \$200 billion mark. The total value of daily transactions in the cryptocurrencies has remained above the \$50 billion mark in the recent past.

The biggest challenge to cryptocurrency use is the unstable nature of its prices. The cryptocurrency market saw a great increase in its market cap between 2016 and 2017. But, there have been large fluctuations in their values since December 2017. The price of Bitcoin has risen astronomically over past years with a great deal of volatility. Bitcoin prices, for instance, in the past declined from \$19,500 to \$6,500 over a period of four months. However, the cryptocurrency markets have exhibited some sort of stability in the last couple of months.



In the coming future, the newer and advanced technologies could alter the digital currency space and cryptocurrency mining. The protocol changes in future could have a huge impact on the mechanics and economics of cryptocurrency mining.

As cryptocurrency mining data centers become massive, they would be too big to hide in the underground economy. Cryptocurrency mining would be regulated and taxed. That is not a problem as long as the rules are clear and the tax is not prohibitive.

Cryptocurrency mining would move to countries with cheap electricity and cryptocurrency friendly jurisdictions. Chinese firms may dominate cryptocurrency mining in future, as presently done due to the cheap electricity in China. It may not be from locations in China, but from the locations in the other countries, e.g., Chinese firms doing Bitcoin mining in Iceland. The evolution of blockchain may unfold at a rapid pace with the introduction of the quantum computers that would be million times more efficient at Bitcoin mining than the existing conventional computers with the most powerful ASIC cards.





## Problem

On our planet, there have always been the most varied cycles and events, which are partly triggered by nature itself, but also by its inhabitants and individuals, who themselves undergo developments.

In the history of the last two centuries, humans have triggered an industrial revolution that has put the planet's resources in a critical situation. Many of these resources are now coming to their natural end, have been used up. Species extinction has never been so great. In the field of plants, it concerns the primeval forests, in the area of animals the oceans, on land the insects and amphibians. Triggered and essential factor for the potential of destruction is the availability of harnessed energy, which in its very nature is directly involved in the destruction.

In this context, carbon footprint is the most critical issue associated with cryptocurrency mining industry. Across the globe, about 1% of the world's total energy is consumed for cryptocurrency mining. Mining industry's biggest problem is perhaps not even its massive energy consumption, but the fact that most cryptocurrency mining facilities are located in regions, primarily in China, that rely heavily on coal-based power.

In the beginning in 2009, the crypto-mining industry was a small and widely distributed network of a few thousand private miners. Their activities were limited and their power requirements were low. But, at present, this situation has changed dramatically and drastically. The unprecedented and exponential growth of the cryptocurrencies in the recent past has led to a very sharp increase in energy consumption.

The continuous block mining cycle incentivizes people all over the world to mine Bitcoin. As mining can provide a solid stream of revenue, people are very willing to run power-hungry machines to get a piece of it. Over the years this has caused the total energy consumption of the Bitcoin network to grow to epic proportions, as the price of the currency reached new highs. The entire Bitcoin network now consumes more energy than a number of countries.

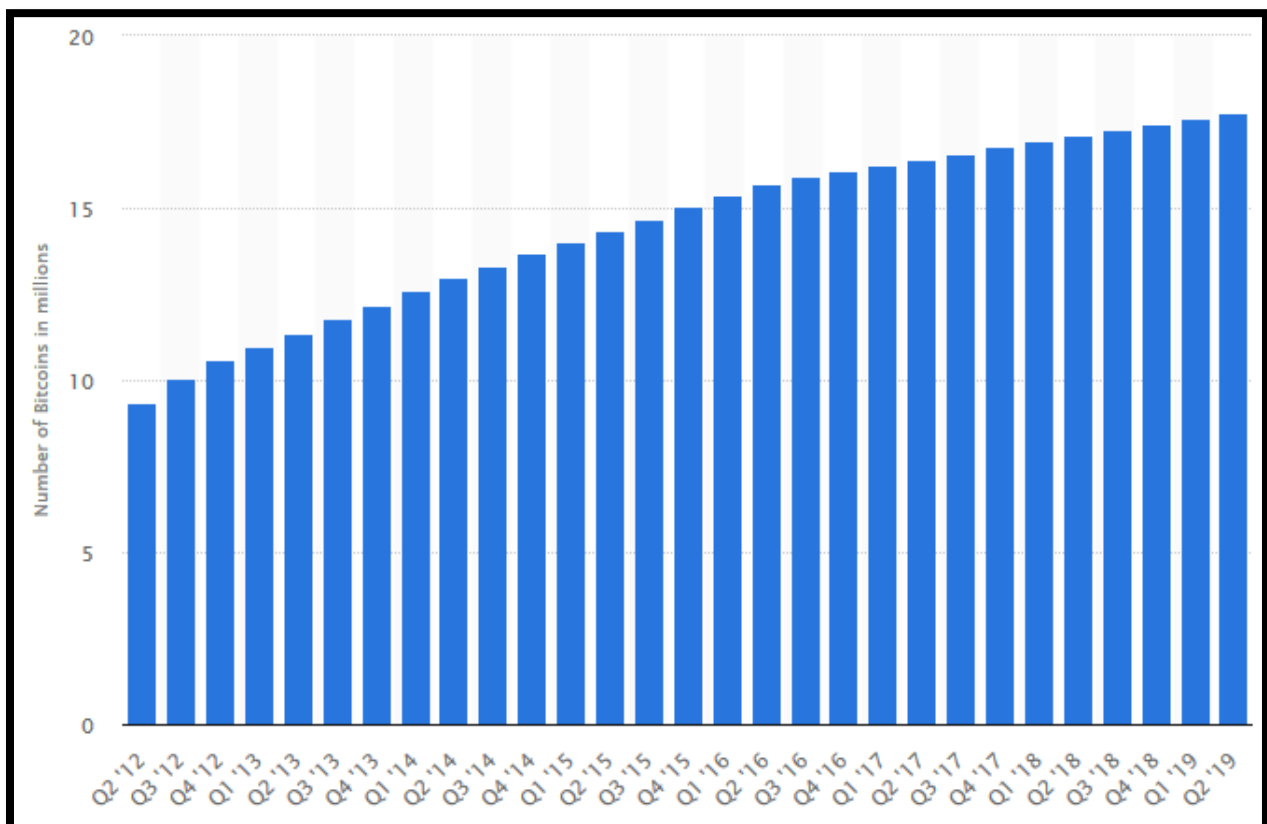
The average emission factor of the Chinese grid is around 700 grams of carbon dioxide equivalent per kilowatt-hour, this can be used for a very rough approximation of the carbon intensity of the power used for Bitcoin



mining. Assuming that 70% of Bitcoin mining is taking place in China, and that 30% of mining is completely clean, this yields a weighted average carbon intensity of 490 gCO<sub>2</sub>eq/kWh. Annualized total carbon footprint is estimated to be 34.73 Mt CO<sub>2</sub>, which is comparable to the carbon footprint of Denmark.

The Bitcoin protocol makes producing new blocks very difficult for miners by regularly adjusting the difficulty to ensure that all miners in the network will only produce one valid block every 10 minutes on average.

The number of Bitcoins has been growing since the creation of this virtual currency in 2009 and reached 17.8 million in the second quarter of 2019. In the past 10 years, 85 percent of the total Bitcoins that will ever be available have been mined. The number of Bitcoins in circulation worldwide from 2nd quarter 2012 to 2nd quarter 2019 (in millions) shown in the graph below:



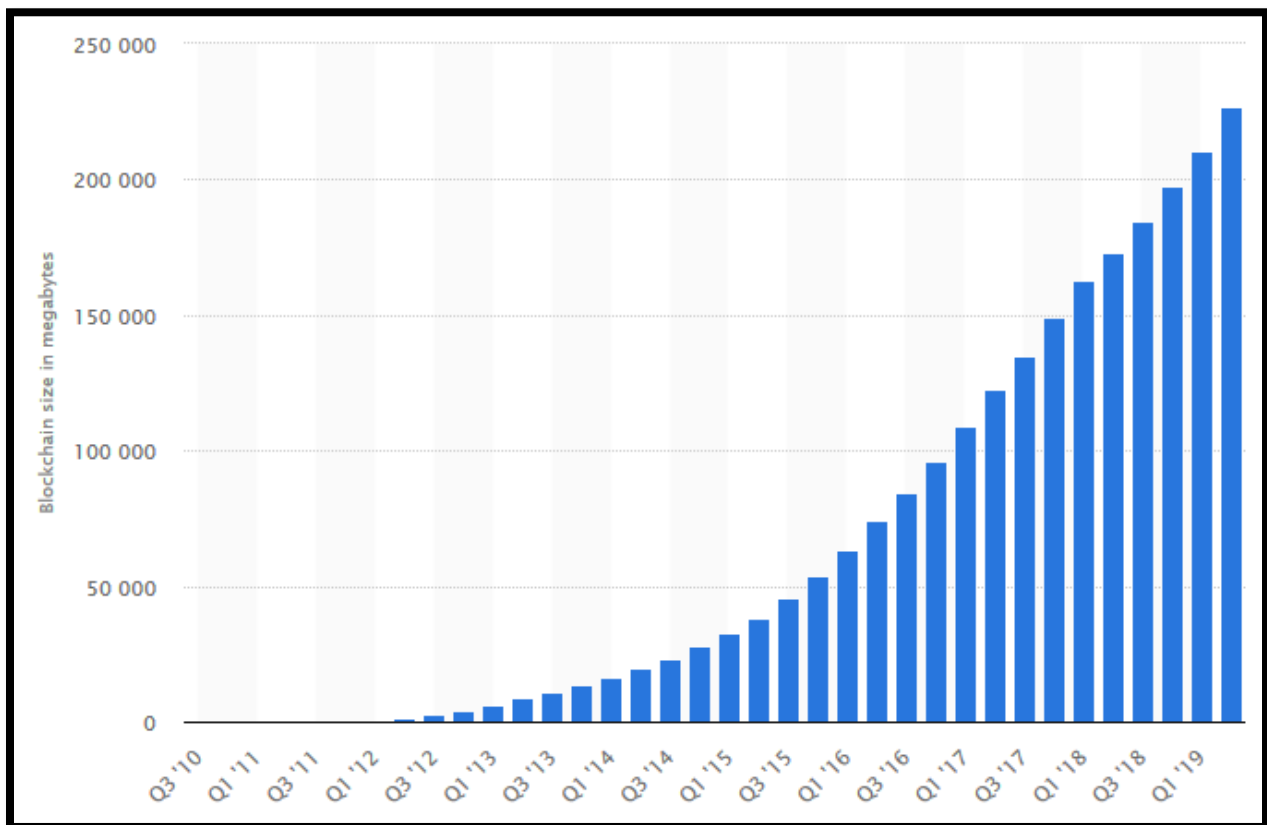
Source: Statista.com



There are only three million Bitcoins left to mine before the 21 million Bitcoin cap is reached. Assuming that there are no changes to the protocol, the Bitcoin cap will be reached by 2140, 122 years from now.

Mining is done by powerful and specialized computers that consume a lot of electricity as they search for the correct hash keys to make Bitcoin. Since the algorithm behind Bitcoin actually makes it harder to mine as time goes on, Bitcoin mining is bound to consume continuous electricity in increasingly gargantuan quantity.

The size of the Bitcoin blockchain has been growing rapidly since the creation of Bitcoin in 2009, reaching approximately 226.6 gigabytes in size as of the end of June 2019. The Size of the Bitcoin blockchain from 2010 to 2019, by quarter (in megabytes) is shown below:



Source: Statista.com

As the costs of energy or electricity have risen and continue to rise, only the mining operators who have very low energy costs overall can earn



adequate returns on the capital invested. The energy costs are bound to rise further as the complexity and time consumption of the Bitcoin mining increases.

As the energy consumption of the crypto-mining industry has reached mind-boggling proportions, it is causing a very adverse impact on the environment. This is more so due to the fact that the crypto-mining industry is energized by electricity. Moreover, electricity is produced mainly using fossil fuels. The mining concentration in the countries with low social and environmental standards is further aggravating the situation. This is detrimental to the environment.

Environmental activists are increasingly concerned that cryptocurrency mining has become highly detrimental to the environment due to high carbon footprint from heavy electricity consumption necessary for mining. Cryptocurrency mining operators are under growing pressure to account for their actions, and change their operating styles to become environmentally responsible.

## Systemic Risks and Cryptocurrency Price Volatility

Historically, the crypto-world has seen a lot of fluctuations, severe falls in the price of Bitcoin and particularly Altcoins, and bottoms that have erased all profits or even made complete losses to the cryptocurrency investors.

One of the biggest challenge to cryptocurrency mining is perhaps that of the unstable nature of cryptocurrency prices. This price instability can be a major factor in discouraging miners from proceeding with the mining activity as this price instability can lead to major losses for them as they cannot plan a proper income in advance.

There are other problems also. The high cost of equipment is another major problem that is faced by cryptocurrency miners is that the cost of the equipment is too high. ASIC devices run into thousands of dollars. Also, a mining rig often comprises of multiple ASICs– and the cost of all these equipments put together can be too high at times.

Obsolescence is also a problem. Technology evolves at a rapid pace in the case of cryptocurrency mining equipment. These devices tend to get



obsolete quickly as newer devices that can mine with a greater efficiency and greater power come out at frequent intervals. Every six-seven months, a new mining device comes out – which can outperform all older devices. It becomes necessary to upgrade with a hefty investment, because mining algorithm is such that it keeps increasing the difficulty at regular periods of time.

One of the problems is the government regulations. Sometimes, government regulations too, can act against the miners. China has been imposing strict laws on miners – even limiting their power supply – hence government regulations play a big role for miners.



## Solution: Our Model

Arc Iris has an innovative and disruptive model to successfully tackle the environmental and other problems related with the cryptocurrency mining.

Some of our researchers are now counteracting the environmental destruction and provide solutions in all areas. In the field of energy, this is the rediscovery of water as an energy source. It uses the elemental on the water itself, which ensures a clean and environmentally friendly provision of energy. Here, especially the limitation of the raw material itself is lifted. We now have the opportunity, to access this energy almost indefinitely technologically and methodically!

In recent years, currency availability has also changed as a result of the restrictive availability and stock market orientation triggered by the banks. Seeing the new form of money and currency in a new context has brought cryptocurrency to the fore as one of the solutions, creating new paths. However, as it turns out, the systems that generate the currency are themselves limited by high energy costs.

Here we have worked out a solution that cancels this limit. It is a byproduct of structured water (hexagonal water) and it's splitting into hydrogen (now a popular medical device as molecularly dissolved hydrogen in water) and oxygen (in combination with hydrogen coveted Browns gas for detoxification and welding technology, in emergency medicine as a measure of respiratory distress ).

With the help of fuel cell technology developed by us, we can now drastically reduce the share of external electricity demand and thus the external electricity costs. This led to our concept of equipping fuel cell cryptocurrency server farms and offering them to our customers in the form. To make this possible, we have created a cryptocurrency ourselves - Arc Iris - ACI Coin - The Rainbow Currency.

We can make available this energy technology in the short term. It should be noted that this form of energy will also be applicable in many other areas. There are also projects that allow people in Africa to drink clean water again, and also to provide energy for kindergartens, schools, and hospitals, thus significantly increasing their quality of life.



In addition to the environmental concerns, there exists a symbiotic economic relationship between the cheap renewable energy and crypto-mining. As the Hydrogen power is now becoming comparatively cheaper, there will be an economic driver for big crypto miners to move to Hydrogen mining,

As cryptocurrency mining is largely driven by the electricity prices, Hydrogen power has a strong potential to make crypto-mining more accessible and profitable.

Investment in the infrastructure is a must for the crypto-miners who are here for a long term. Renewable energy is at the centre of the transition to a less carbon-intensive and more sustainable energy system. Renewable energy sources have grown rapidly in recent years, accompanied by cost reductions. The International Energy Agency(IEA) expects renewable electricity generation to increase by a more than one-third by 2022.

Arc Iris Development Inc. will utilize energy exclusively sourced from its own state-of-the-art Hydrogen facilities to power new cryptocurrency mining farms stocked with latest high-powered miners. They will solve the energy cost problem by utilizing Hydrogen power at a little cost.

Cloud mining is the process of mining cryptocurrencies through cloud. Mining companies provide the mining hardware, electricity and maintenance. This facility gives the user an advantage of mining cryptocurrency without the need of purchasing their own expensive mining hardware, therefore, users may save space at home, time, and money as well as avoid various risks.

Arc Iris mining is powered with advance multi-mining algorithm and a dedicated mining hardware that developed by the company to sustain and elevate the efficiency of cryptocurrency cloud mining. Arc Iris cloud mining is designed by experienced and highly skilled experts to understand the needs of the user to improve and deliver great user experience.

We have an efficient solution to decentralized cloud mining. With Arc Iris system, miners have full control and access on their hash power. With our cloud mining facility, all miners will get solid returns with less effort. All data are encrypted and each user controls their own encryption keys. Without



the need of any private or central regulation, our network is a fully decentralized cloud mining network.

Our cloud mining facilities help a user to avoid hassles involved in setting up own mining operation and mining rigs, tricky operational problems, and numerous other complications like obsolescence of hardware, heating, loud noise in the home. Cloud mining offers you the benefits of cryptocurrency mining without maintaining any mining equipment.

Arc Iris currently has no dominant competitors that monopolize the cryptocurrency mining market which is our proposed domain of business. The cryptocurrency mining market has a large number of players, most of whom are small players and some are medium players. But none of the cryptocurrency miners has a market share in double digits and is in a position to dominate the market or dictate the terms for other market participants.

We are going to be a player in the top bracket of the cryptocurrency mining market, based on our advanced technology, low costs, and sustainable practices.

Arc Iris's goal is to tap the vast potential of the cryptocurrency market with the deployment of the state-of-the-art technology to satisfy the rapidly growing demand for cryptocurrency mining at a reasonable cost. This will help us in maintaining our lead in the market in the long term. We will also emphasize R&D and continuous improvement in the various technologies in order to keep our customers delighted and loyal as well as maintain our competitive edge. We will ensure that our data centers run at the lowest cost and maximum capability.

Cryptocurrency mining profitability is tied to several factors, including overall volume growth; cost inputs that include power and incorporate the technological efficiency of the mining equipment; and the price of cryptocurrency. Market growth is expected to be strong in the next 5 years due to the fixed supply and demand constraints of the Bitcoin protocol.

Arc Iris offers a secure stream of cash flows and profits to the investors from its low-cost and sustainable cryptocurrency mining operations. With efficient energy and mining units, Arc Iris is poised to provide a strong





return on capital under most of the pricing scenarios, with returns leveraged to the upside if the cryptocurrency price spikes.

We aim to become one of the largest hashpower provider in the cryptocurrency mining market for mining various kinds of cryptocurrencies.

Arc Iris will adopt a flexible approach in the business model. We would offer different types of contract for cryptocurrency mining to the customers. Our packages would provide the best value for money and would be attractive to the professional miners. We will offer contracts for 18 month and give the users Hashrate according to the package they purchase. The higher level packages would provide more benefits to the customers like freebies, low operational cost, etc. If users hold ACI coins, they get a discount on maintenance fees up to 80%, depending on the held amount of ACI.



## Why Choose Arc Iris

- ✓ Latest and high-end mining hardware
- ✓ Fastest mining hardware
- ✓ Low cost of operations
- ✓ Low maintenance costs
- ✓ Cheaper hardware due to large-scale purchases
- ✓ Great user interface
- ✓ Mining of alternative currencies (Altcoins)
- ✓ Reliable and trustworthy mining partner
- ✓ Facility to switch the mining power to mine any of the cryptocurrencies available with us, providing you the much needed flexibility to avail emerging market opportunities.
- ✓ Negligible downtime as various technicians to take care of the ongoing mining operations and solve any issues instantly.
- ✓ Honest and transparent cloudmining service
- ✓ No heavy upfront costs to the cloud mining users who don't need huge investments in setting up own mining operations.
- ✓ Immediate mining output for even a new user availing cloud mining contract, thanks to the already running hardware
- ✓ No loss to the cloud mining users due to obsolescence of hardware owned.
- ✓ No need to hire technicians to look after the hardware
- ✓ No hassles or problems related to own mining operations like heating, loud noise, etc.
- ✓ Responsive and fast customer service

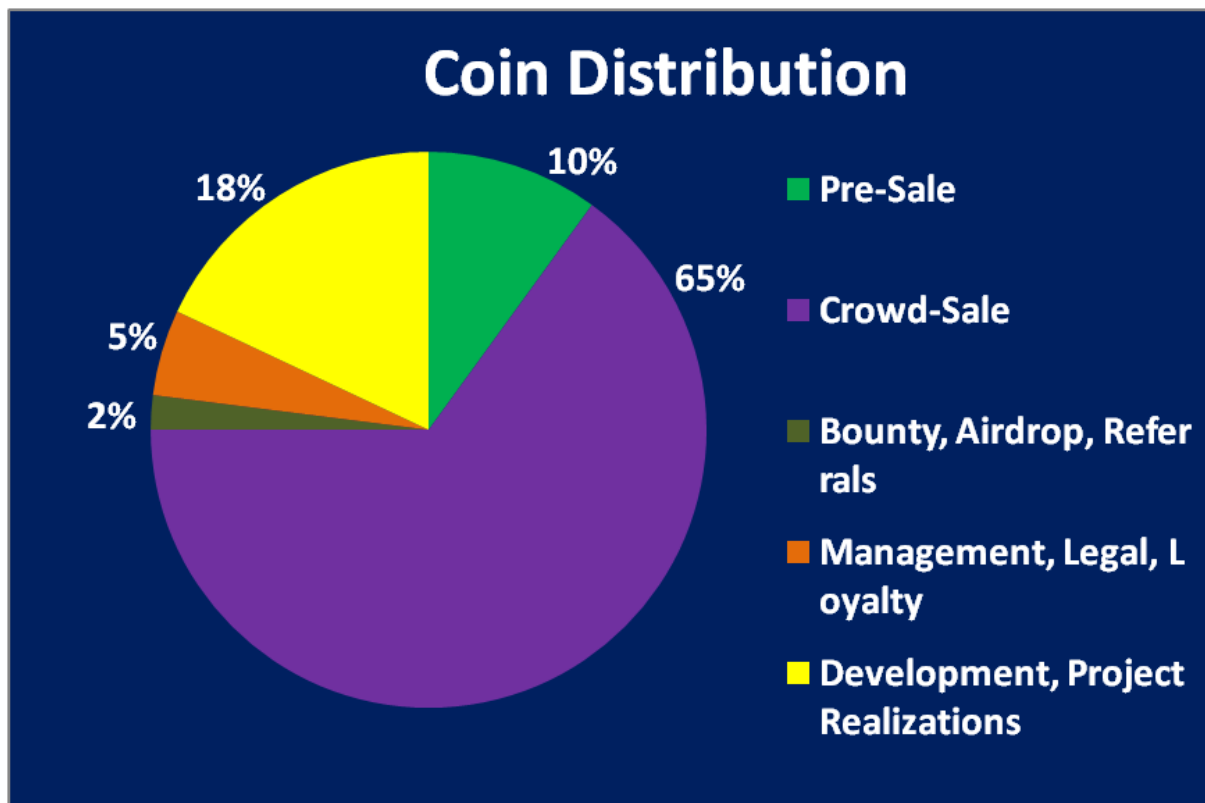


## Initial Coin Offering (ICO)

We aim to raise 30 million USD. The objective for raising the funds is to start an integrated cryptocurrency mining facility. Arc Iris has a strong business model backed by efficient cryptocurrency mining operations with steady and visible future cash flows and profits.

It is determined that up to 1 billion coins will be issued with a nominal price of \$0.1 USD. The coin distribution is pre-dominantly in favor of the common investors who are allocated 60% of the ACI Coins through the crowd-sale. The coin distribution details are as under:

The ACI coin distribution is as under:



The total supply of the ACI Coins would be 1 billion coins. The coin distribution in absolute numbers is as under:



<b>Coin Distribution (Number)</b>	
<b>Total Coins</b>	<b>1,000,000,000</b>
<b>Pre-Sale</b>	<b>100,000,000</b>
<b>Crowd-Sale</b>	<b>650,000,000</b>
<b>Bounty, Airdrop, Referrals</b>	<b>20,000,000</b>
<b>Management, Legal, Loyalty</b>	<b>50,000,000</b>
<b>Development, Project Realizations</b>	<b>180,000,000</b>

Each coin holder would be expected to receive a share in the future profit of the company proportionately. The individual share of net profit depends on the number of ACI Coins held by the individual investors. So, in addition to the appreciation in the value of the ACI Coin due to the rising price of the coin, the coin holder can also expect to receive net profit from the operations of the company.

## ICO Timetable

### Pre-Sale:

01st of December 2019 - 31st of December 2019: 1 ACI = \$ 0.025

### Crowd-Sale/ICO:

01st of January 2020 – 31st of January 2020: 1 ACI = \$ 0.05

01st of February 2020 – 29th of February 2020: 1 ACI = \$0.06

01st of March 2020 – 31st of March 2020: 1 ACI = \$0.07

01st of April 2020 – 30th of April 2020: 1 ACI = \$0.08

**Soft cap: 1, 000,000 USD**

**Hard cap: 15,000,000 USD**



We would provide a generous crowdsale bonus to the common investors and users. It would encourage the investors to buy the maximum amount of the ACI Coins they can afford. The details of the bonus are:





## Arc Iris (ACI) Coin

Arc Iris (ACI) Coin is a cryptocurrency coin based on the blockchain technology. The ACI Coin is built on the Arc Iris Development Inc.'s own blockchain platform. ACI Coin is based on the Script POW algorithm. This makes ACI Coin more secured. ACI Con will be used as a loyalty coin. All contracts and referral rewards will be paid in ACI Coins.

Arc Iris allows people to invest profitably and earn returns securely. With the value of the ACI Coin being based on the steady income of the cryptocurrency mining operations of Arc Iris Development Inc., the investors who purchase ACI Coins will be protected with a more stable price. ACI would be listed on the leading cryptocurrency exchanges giving ACI Coins high liquidity, and thus, benefiting coin holders with a wide range of uses.

Decentralized coin exchange facilitates trading and exchange of the financial instruments and currencies on the blockchain. ACI coin will be able to function as a currency for use on common cryptocurrency standard. ACI Coin conforms to the latest cryptocurrency standard and works with all the relevant apps and platforms. Any digital currency wallet can hold ACI Coin. ACI Coin is easily exchangeable with other cryptocurrencies and the ACI coin holders can exchange ACI coin with other currencies on various cryptocurrency exchanges.

<b>ACI Coin Features</b>	
<b>Coin Name</b>	<b>Arc Iris</b>
<b>Symbol</b>	<b>ACI</b>
<b>Type</b>	<b>Utility</b>
<b>Total Supply</b>	<b>1,000,000,000</b>
<b>Price of 1 ACI Coin</b>	<b>0.1 USD</b>
<b>Minimum Investment</b>	<b>100 USD</b>
<b>Available for purchase with</b>	<b>BTC, ETH</b>
<b>Whitelist/KYC</b>	<b>KYC</b>



## Arc Iris Multi-Currency Wallet

Arc Iris has developed a dedicated multi-currency wallet to store and manage digital currencies with ease and safety. It is a high security and decentralized multi-currency wallet to offer hassle-free services for the community. Arc Iris is constantly implementing enhanced security features to eliminate unauthorized access to your wallet. It keeps your funds secure, and saves you from threats or hacks.

### **Arc Iris Wallet Features:**



**SAFE** - Private keys are stored only with the users to ensure maximum security.



**HD Wallet** - Arc Iris supports Hierarchical Deterministic (HD) wallet which comes with 2 FA. HD wallet, based on 12-word master seed key and random 128 bit value system, brings extra security against attacks.



**CCSS** - The Cryptocurrency Security Standards (CCSS) involves 10 security aspects to ensure that customer transactions and cryptocurrencies are held to high levels of transparency and security.



**Cold Storage** - It keeps the private keys offline and goes online with a watching-only wallet.



**Multiple Digital Asset** - Arc Iris supports ACI, BTC, ETH, LTC, ZEC, and all ECR20 tokens. More digital assets are continuously added.



**Paper Wallet** - Arc Iris supports paper wallet.

Arc Iris wallet will be launched in January 2020. Arc Iris wallet comes with 500 ACI Coins for the first 10,000 downloads.



## Road Map and Milestones

Arc Iris has the following roadmap for the future:



The management team of Arc Iris would strive to achieve these milestones in a time bound manner. The implementation of some of these milestones depends on the total funds available.





## Technology

Our entire system is being designed for cryptocurrency mining through the innovative use of the cutting-edge technologies. We aim to develop innovative and highly sophisticated technology architecture to enable fast and secure transactions without experiencing the drawbacks of the currently prevalent systems.

There exists a symbiotic economic relationship between the cheap renewable energy and crypto-mining. As the hydro power is a great energy source with high level of efficiency and cost-effectiveness. This will be a strong economic driver for the cryptocurrency miners to move to our ecosystem, in addition to the environmental concerns.

As mining is done by powerful and specialized computers that consume a lot of electricity, investment in the environment-friendly and efficient energy infrastructure is a must for the cryptocurrency miners who are here for a long term. Renewable energy is at the centre of the transition to a less carbon-intensive and more sustainable energy system. Renewable energy sources have grown rapidly in recent years, accompanied by dramatic change in human attitude towards saving environment and climate.

Arc Iris will utilize energy exclusively sourced from its own state-of-the-art hydrogen energy facilities to power cryptocurrency mining farms stocked with latest highly efficient miners. They will solve the energy cost and carbon-footprint problems by utilizing hydrogen power at a little cost.

We have developed state-of-the-art technology for hydrogen power and cryptocurrency mining. Our energy and cost efficient hydrogen power facility is optimized for cryptocurrency mining. We are providing some glimpses of our high-end and advanced technology and systems to the investors. But, as you are well aware, specific and full details can't be revealed due to pragmatic reasons of trade secrecy, patents, and our competitive edge taking into account the cut-throat competition and copy-cats.

Our Hydrogen Reactor is an integrated reactor combining multiple components for special water and hydrogen treatment in order to achieve high level of efficiency and effectiveness. It includes fuel cell PEMFC (Proton Exchange Membrane Fuel Cell), metal hydride tanks, advanced



equipments for power generation using hydrogen, etc. Our Hydrogen Reactor can be combined with autarkic energysystems such as photovoltaic, solar energy and wind power.

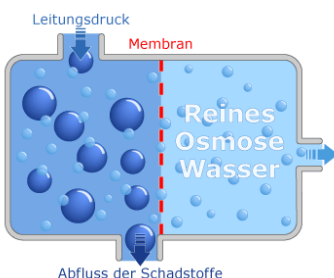
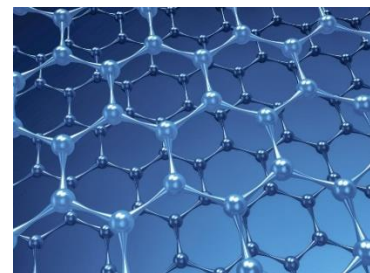
## EZ water (hexagonal water)



Our water treatment systems make it possible to chemically, physically and technically transform any water into structured, hexagonal water. This special water is achieved through a combination of advanced reverse osmosis technology and special vorticity.

Hexagonal water is mentioned as EZ water (EZ - Exclusion Zone) and describes a state of water as a liquid crystal. The EZ water contains a very purified form of water that shifts all dissolved substances from the EZ zone. Near the surface, a layer of completely pure water is formed, whereby all dissolved substances are shifted into the adjacent, not EZ-water layer.

The water in the EZ has special properties, such as a changed electrical resistance, a higher, jellylike viscosity, a strong absorption of infrared light, an altered ph-value and a higher negative charge. EZ water is a kind of liquid ice crystal. The molecules of this water release protons and arrange themselves in a 3-dimensional, stable, hexagonal grid - a structure that also occurs in ice and some other crystals. In contrast to ice, this crystal matrix is not completely solid in the EZ water, but it is still stable enough to hold its shape, displacing all dissolved substances.



Reverse Osmosis has been developed as a NASA technology for space travel - it is now available for every household. This technology was developed in the 1960's on behalf of NASA, which needed a drinking water recycling system for manned space flights. To date, all membranes of well-known manufacturers originate from the USA. The most



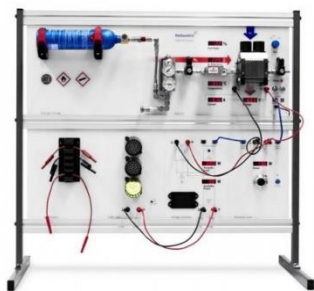
important field of application today is the industrial desalination of seawater. Further areas of application are in the food industry (concentration of fruit juices), medicine (dialysis), wastewater recycling (for example in electroplating plants). In the US, reverse osmosis systems have long since made their way into households.

### **Conversion of EZ water into hydrogen and oxygen with low-temperature fuel cell PEMFC (Proton Exchange Membrane Fuel Cell)**

The Aqua Vortexia solution for electrolysis is a proprietary PEMFC cell. Unlike other water ionizers, Aqua Vortexia does not increase the pH of the water, but bubbles pure hydrogen into the water under pressure. The PEMFC uses platinum-coated titanium electrodes to produce molecular dissolved hydrogen in water of medical grade with up to 1.6 ppm hydrogen (fully dissolved).

With the help of water electrolysis, we convert electrical energy into chemical energy, which is then available to us as hydrogen, the gas of life and the source structure of our universe. Hydrogen water is more energetic than normal water.

### **Hydrogen Storage in a metal hydride tank**



Based on the Aqua Vortexia EZ water, the autarkic energy system is built. The hydrogen obtained via PEMFC is "stored" in metal hydride storage tanks under pressure.

Hydrogen storage is one of the most important and sensitive parts in the hydrogen supply. With the Aqua Vortexia metal hydride storage, storing this special gas is easy and safe. Hydrogen is stored at low pressure between 5 and 10 bar in refillable cartridges that meet the highest safety standards in terms of material and technology. By including hydrogen with calibrated metal hydride mixtures, the gas is safely stored.





The Aqua Vortexia metal hydride reservoirs use defined temperature ranges. The cooling effect of the water or the air allows a faster and complete assimilation of hydrogen in the loading phase. Heat forces the complete delivery of the hydrogen gas for the PEMFC fuel cell power. The supply uses the same heat that allows the maximum efficiency cycle during the powering phase.

### **Power generation using hydrogen from the metal hydride tank**

With the PEMFC, electricity is generated in the same way as before using external energy sources. The largest of the currently available metal hydride tank reservoir holds 7,000 liters of hydrogen in about 120 cm long and 15 cm diameter tank. For driving hydrogen-powered vehicles currently need 1 liter of hydrogen per 1 km. 1 liter of EZ water supplies hydrogen for 800 km.



### **Generation of hydrogen using electricity from the metal hydride tank**

During the generation of electricity, the other PEMFC's produce hydrogen, which is recharged into the other metal hydride tanks.

Arc Iris ecosystem runs on the latest techniques and equipments, ensuring full anonymity, minimal processing time, minimal fee, fraud prevention, etc. Security and ease of use are some of the core features of our ecosystem. This will enable us to build sustainable stream of technological innovations to serve the thousands of cryptocurrency miners with better facilities and products based on the environment-friendly processes/practices. We will also emphasize R&D, hi-tech research on next-generation products, and continuous improvement in the various technologies in order to enhance our competitive edge. This would also enable us to offer these services at a lower cost to our customers and partners.



## Marketing Plan

Arc Iris will implement a comprehensive plan for marketing. We have well thought out marketing plan for Arc Iris cryptocurrency mining operations and participation in cloud mining. There would be full-fledged marketing campaigns to ensure an exceptional response to Arc Iris.

We will list the Arc Iris coins on the major cryptocurrency exchanges. We will also place ads on the various popular and relevant digital platforms. We also plan to offer a generous incentive for the referrals and bounty. This will help us in attracting the desirable number of investors for our ICO. Arc Iris will constantly review the exchanges and partner with them to increase the marketability of Arc Iris coins worldwide.

For Arc Iris, the marketing Campaigns will be mainly focused on the online advertising like Google Ads, YouTube, etc. Our publicity plan is focused on the social media influencers and cryptocurrency miners and enthusiasts. Arc Iris executives have solid reputation and excellent relationships with a number of influential people. They would act as a source of word of mouth publicity. Arc Iris has a number of competitive advantages for attracting customers. We will implement all the necessary marketing strategies to attract customers by highlighting the various advantages like fairness, transparency, etc. to attract users to Arc Iris.

Once the Public Sale is over, the ACI Coins will be listed and traded in a number of cryptocurrency exchanges allowing anyone who hasn't bought ACI Coins, the possibility of acquiring them. Our compelling proposition and technology will attract the people from various countries across the world. As more and more people earn ACI Coins and use them in various ways, the value of the ACI Coins will sustainably rise. This will lead to the enhanced marketability of ACI.

With the miners getting profits from Arc Iris cryptocurrency mining operations and participation in cloud mining, more miners would start using our mining facilities through the various suitable packages. We will also have a referral program where the user get for the first level 5% from the paid amount for the contract fees, maintenance fees and 5% from the amount which the direct partner gets paid daily from the mining. The referral rewards will be paid in ACI Coins.

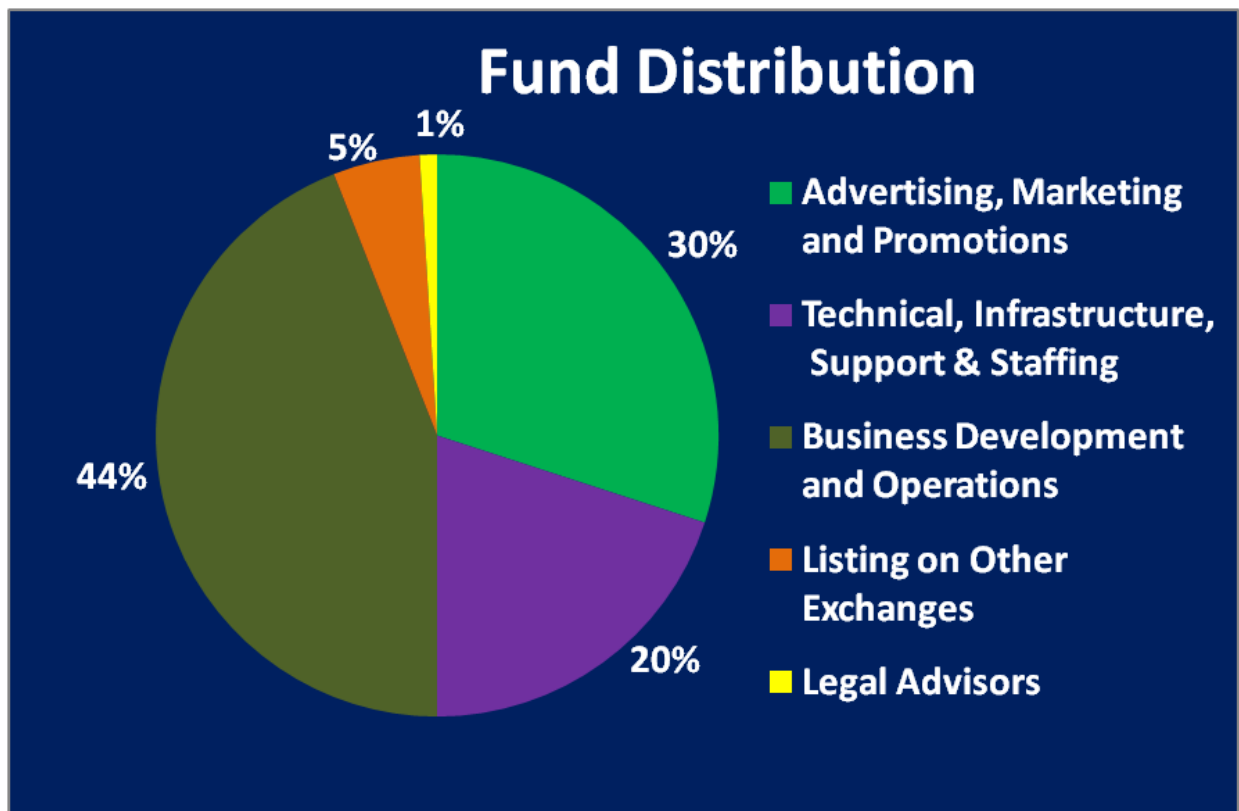


## Financial Plan

Arc Iris has a sound financial plan as a part of the overall strategy. In its operations, Arc Iris will focus on the bottom-line from the very beginning to achieve the profitable growth and sustainability. The pricing strategy of Arc Iris is fine-tuned to capitalize on the marketplace reality and competitiveness.

We have prepared a detailed strategic plan with regard to the future operations of our company. We are raising the resources through the Arc Iris ICO and would implement our strategy depending on the amount of the funds raised through the ICO. Our strategy has a built-in flexibility. This would help us in case of the less funds being raised through the ICO. We will deploy each dollar of the funds raised in the productive and profitable use.

The deployment of the financial resources raised through ICO is:





The funds will be utilized pre-dominantly for the cryptocurrency mining operation. We will purchase the latest cryptocurrency Mining Equipments to start cryptocurrency mining. We will also invest in the infrastructure to power miners from Hydrogen. The entire infrastructure would be state-of-the-art to gain the global competitiveness in the cryptocurrency mining, along with the best levels of efficiency and cost-effectiveness.

Transparency: All project expenditures will be listed on the website for anyone to see.



## Risk Assessment and Mitigation

For every company aiming at long-term play, risk management is one of the essential areas of strategizing. The appropriate risk assessment and mitigation requires identification of future possibilities that may unfold and their impact on cryptocurrency market in general, and cryptocurrency mining in particular.

We have classified various future possibilities into three main scenarios:

### Optimistic Scenario

The characterizing features of the optimistic scenario mainly include:

- Very high growth in the cryptocurrency market in the next 5-10 years
- Fully favorable policies by the governments and regulators across the world
- Deep integration of cryptocurrencies into everyday life
- Adoption of cryptocurrency by the majority of public
- Cryptocurrency will actively replace paper currency
- Majority of payments made in cryptocurrency with increase in cryptocurrency payments by 100 times or more from the current levels.

In this optimistic scenario, Arc Iris will experience a lot of amazing growth and progress. The value and volume of ACI Coin will enhance phenomenally by 100 to 200 times or more. There would be huge income and profits for Arc Iris and its investors.

The principal challenge would be to scale up adequately to tap the unprecedented economic opportunities. For this, Arc Iris Development Inc. is well prepared with its highly scalable business model and operations.





## Realistic Scenario

The realistic scenario is the most likely to happen in the coming future. The characterizing features of the realistic scenario mainly include:

- High growth in the cryptocurrency market in the next 5-10 years
- Moderately favorable policies by the governments and regulators in a number of countries
- Fair level of adoption of cryptocurrency by the public
- Cryptocurrency will coexist with paper currency and plastic money
- Increase in cryptocurrency payments by 20 - 30 times from the current levels.

In the realistic scenario, Arc Iris will see a high growth and development. The value and volume of ACI Coin will increase. There would be high level of income and profits for Arc Iris and its investors.

The main challenges would be to maintain a competitive edge and conduct operations in an efficient and effective way to avail the unfolding business opportunities. Arc Iris has a robust business model with emphasis on continuous research and development to ensure a competitive edge over business rivals. Thus, we would be able to progress well with high growth rate of income and profits of 50 -80% per annum.

## Pessimistic Scenario

The characterizing features of the pessimistic scenario mainly include:

- Low growth in the cryptocurrency market in the next 5-10 years
- Unfavorable policies by the governments and regulators
- Moderate adoption of cryptocurrency by the public
- Cryptocurrency continue to exist with domination of paper currency
- Increase in cryptocurrency payments by 10 - 15 times from the current levels.



In the pessimistic scenario, Arc Iris will see a fair growth of operations. The value and volume of ACI Coin will increase moderately. There would be a reasonable level of income and profits for Arc Iris and its investors.

The main challenges would be to protect capital and achieve a sustainable growth. Arc Iris has a solid business model and low cost of operations. We have access to low cost energy in the form of hydrogen power. As the energy cost is the major cost in the cryptocurrency operations, it would provide us a big buffer in the hard times. Thus, we would be able to progress comfortably with a growth rate of income and profits of 20 - 30% per annum.



## TEAM

The Arc Iris Development Inc. and Arc Iris team comprises of highly experienced and qualified professionals. The management has a great depth and breadth of exposure and experience across various domains in network technology, cryptocurrency/digital currency space, latest blockchain technologies, energy, Hydrogen technology, etc. Some of the brilliant members of the Arc Iris team are as follows:



**Nikolay Davidenko**  
CEO



**Myroslav Vakulyuk**  
CFO - Chief  
Financial Officer



**Oleg Olefirenko**  
COO- Chief  
Operating Officer



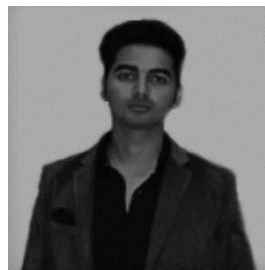
**Vansh Tah**  
Blockchain Developer



**Aniket Tiwari**  
Frontend Engineer &  
Service Now Consultant



**Akshat Verma**  
MEAN Stack Developer



**Chandan Mishra**  
Full Stack Developer



**Kazi Sajib**  
Bounty Manager



**Mukesh Dewangan**  
Full Stack Developer

## ADVISORS



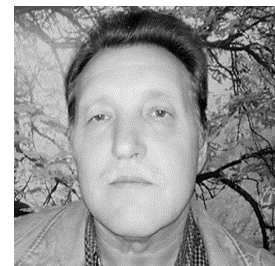
**Hamza Kahn**  
Advisor



**Rubab Arshad**  
Advisor



**Frederik Lund**  
Advisor



**Sergey Klimov**  
Advisor

Arc Iris and Arc Iris team is capable of handling the crypto mining effectively and efficiently with the financial resources obtained from the ICO.

The manpower would be increased further taking into account the evolving needs with the expansion of the operations and mining. This will help us in keeping the overall costs under control and achieve profitability at an early date.



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## Legal Disclaimer

This white paper has been issued by Arc Iris. It should be read in conjunction with the terms and conditions of company.

Main Purpose of this Whitepaper is to offer potential purchasers with the information on the company's project to let the purchaser to make their own decision regarding he/she wishes to proceed to purchase of Arc Iris or not. Above whitepaper does not establish an offer or call or any other type of sale or purchase of shares, securities or assets of the company.

The purpose of this Whitepaper is to present Arc Iris, its technology, business model and the ACI Coin to the potential coin holders in connection with the proposed ICO.

The information given may not be exhaustive and does not imply any elements of a contractual relationship. Its sole purpose is to provide relevant and reasonable information to potential coin holders in order for them to determine whether to undertake a thorough analysis of the company with the intent of acquiring ACI Coins.

Certain statements, estimates and financial information contained herein constitute forward-looking statements or information. Such forward-looking statements or information concern known and unknown risks and uncertainties, which may cause actual events or results to differ materially from the estimates or the results implied or expressed in such forward-looking statements.

This English-language Whitepaper is the primary official source of information about the Arc Iris ICO and ACI Coin. The information contained herein may be translated into other languages from time to time or may be used in the course of written or verbal communications with existing and prospective community members, partners, etc.

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