



This white paper audits and analyses certain aspects of the MMINE Token and its underlying cryptocurrency mining operation. The white paper and the information stated herein is not legally binding and the paper focuses exclusively on the intentions and potential assets of Mariana Token. For a description of the Token, operation, mining market, risks and proposed benefits associated with the MMINE Token, please see the relevant white paper sections which you can find in the content list; the white paper contains certain forward-looking statements, such as potential revenue, set up of the company, funding, timelines etc. A forward-looking statement is a statement that does not relate to historical facts and events. The forward-looking statements are based on forecasts of future results and estimates of amounts not yet determinable or foreseeable. Such forward-looking statements are identified by the use of terms and phrases such as anticipate, believe, could, estimate, expect, intend, plan, predict, project, will and similar terms, including references and assumptions. This applies, in particular, to statements in this white paper containing information on future developments of the MMINE Token or its mining operation, plans, and expectations regarding MMINE or its growth in value. Forward-looking statements are based on current estimates and assumptions that the author makes based on verified present knowledge.



EXECUTIVE SUMMARY

Mariana Mining Limited is planning on penetrating the crypto mining market with a diversified portfolio consisting of several different ASIC miners and crypto currencies. We aim to keep our risk low, our yield high and exponential. We also intend to keep the MMINE Token pool finite, whilst simultaneously increasing hardware quantities on an ongoing basis which should result in a continuous revenue & profit increase. The production shall be scaled steadily from year to year, investing more into expansion during the initial years, in turn increasing the revenue output and capital value of the MMINE Token. We aim to launch the project in Q1 2022, with mining commencing as soon as possible post the minimum cap being reached; the location where the mining will take place is still to be determined, however, we are looking at various Latin America options such as Paraguay, Ecuador, Mexico etc. as they fulfil all the necessary criteria for crypto-mining, whilst the STO/Holding Company itself operates in the British Virgin Islands. This jurisdiction was chosen primarily due to its tax friendliness, speed, cost and its light-touch regulatory regime. This white paper will try to concisely and pedantically explain the market, crypto mining, possible returns, and all factors related to running an efficient mining operation. Lastly, our appendices will be detailed accounts of certain elements of the White Paper, such as financial statements, and ASIC mining specifications. The financial aspects have been estimated, produced and audited by 3rd party specialist companies listed further in the White Paper.

Mariana Mining Limited - COMPANY INTRODUCTION

Mariana Mining was founded in the British Virgin Islands in 2021 by a team of established businessmen and cryptocurrency investors.

Mariana Mining is a newly established business with the aim of delivering high-performance crypto-mining models and solutions to its Token holders, whilst completely taking care of the hardware maintenance and software infrastructure for mining cryptographic currencies.

Locations were scoured based on the availability and cost of energy, competent IT professionals, as well as reliable partners that undertake the tasks of regulation compliance, auditing and maintenance to the highest standards, to keep the operation transparent, up-to-date and legally compliant. We provide the ability for investors to passively enter into the crypto phenomenon, from their homes, across continents, with the knowledge that Mariana Mining will take care of the entire mining operation and that investment strategies will be implemented with the aim of increasing profitability.

The mining itself acts as a protector against forging transfers of crypto transactions and assets between wallets; meaning that by using our computing power to validate transactions we are rewarded with new (added) cryptocurrency coins (Ethereum, BTC etc.) for the validation process.

Mariana Mining will build and operate an immersive cryptocurrency mining site and will promote the MMINE Token to represent a certain percentage of the total yield generated by the acquired machines, as will be detailed further in this white paper. These yields will be distributed in a crypto format, directly to the token holder wallets. We shall acquire a wide array of hardware models and mine various algorithms to diversify our portfolio, hash-rate, and assets as much as possible. The aim is to create a relatively low-risk / high-yield mining structure based on an immersion cooling model rather than the standard airflow model. This cooling method reduces running costs, increases revenue, miner longevity, and is more environment friendly. In addition, we aim to launch in a free zone (tax exempt) and/or under a concession agreement in our chosen location, as well as negotiating some of the most competitive prices in the world, in regards to operational costs, such as electricity and water.

Terminology, Interchangeable words and Abbreviations

Audit/3rd Party Audit: The process of a 3rd party verifying the stated information in this document and/or could refer to smart contracts and/or monthly financial audits done during the mining operation.

BTC: Bitcoin.

Cost Breakdown: A detailed document containing our costs, general expenditure, revenues, and dividend distribution.

Currency/Coin/Crypto: When talking about cryptocurrencies.

Hard Cap: The largest amount we are willing to take for the project - the STO stops here.

Immersion/Immersive cooling: The process of submerging computing hardware into dielectric liquid for optimal cooling.

KYC: Know your customer regulation - all buyers will have to verify their identity to battle money laundering as per EU and US law for securities.

Mining Revenue: The coins/currency we receive by offering our computing power to solve mathematical algorithms in order to verify blockchain transactions.

Miners/ASIC miners/Machines: The hardware we use to mine crypto currencies.

Profit/Dividend: Distribution of company profits to token holders.

ROI: Return on Investment.

STO: Security Token Offering, similar to IPO's, and the security acts like a dividend paying stock.

Soft Cap: The minimum amount we need to raise to launch this project.

Token/MMINE: Our token can be viewed as a digital security that will pay digital dividends, same as buying a dividend paying stock.

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The Opportunity is now!

What is it?

The crypto world is a highly complex, new and to many, a confusing and hard to understand field; connecting finance, IT security, business, and a multitude of different aspects via blockchain technology, leaving many new participants confused or overwhelmed with the spectrum of the technical aspects involved in the crypto universe; digital assets, crypto wallets, smart contracts, crypto mining, and the list goes on. Of the aforementioned, the concept of crypto mining seems to baffle the most, especially in our chosen format: immersion cooled mining.

In a nutshell, mining is interconnected machines that provide computing power in order to solve complex mathematical algorithms which in turn verify blockchain transactions; providing new coins of the currency. In its basic essence, it is an ecosystem of hardware, software, power consumption, and the management of these aspects of the operation, all of which works in synergy.

Challenges:

The costs, and also the challenges we face when it comes to mining are:

- Electricity capabilities, installation, stability and ultimately the **cost** thereof
- 24/7 security is absolutely crucial
- Floor space, Facility costs, and the fit-out of the facility
- The taxes and regulations that are most often country specific
- Costs and the capacity of the local internet

Solution:

These factors are mitigated by criteria such as; location & operation model, cooling system, and costs which are necessary for the overall success of the mining project. Launching in Latin America either in a mining friendly Free Industrial Zone and/or under a concession agreement initially offering **no taxes on crypto related ventures**, lucrative prices on water supply, infrastructure, facility rent, kWh costs, skilled professionals availability and very affordable labour costs is essential to an effective mining operation.

This choice in itself lets us scale our operation in a safe and lucrative environment whilst producing an ROI that we believe is in the top echelons of its sector. We shall strive to identify strong up-and-coming currencies with high gain potential, and diversify our mining pool to cover several algorithms, covering even more currencies. Through Mariana, you can now invest in a short/long-term endeavor, regardless of what restrictions or hindrances your current location may present – such as regulatory uncertainty, or high-power costs; and just mine directly with us, in a completely hands-off manner, and enjoy your profits. In addition, we take care of all the tedious day to day operational responsibilities and issues.

- The revenue will be optimized through automated software that analyses the crypto market in real-time, and redirects the miners to mine the highest yielding currency at that moment – although, some machines may be mining selective currencies that we believe will have exponential capital gains growth in the future, and these currencies could be held for later liquidation, with immense ROI potentials.

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- Our facility will be located in Latin America, in a Free Trade Zone and/or under a concession agreement, which is beneficial in regards to electricity costs, operation, security and tech personnel.
 - Transparency: Any MMINE Holder is more than welcome to come visit the Mariana facilities when they are set up and running, and will receive full assessment reports in regards to our ASIC miners and other potential rigs to monitor the returns and their respective condition (health), this also applies to all works done and new acquisitions.
 - This concept, executed on a moderate scale, generates more profit than methods such as Virtual/Cloud mining or mining on a small scale where you are not able to produce enough profit from the economies of scale, as it is dependent on factors such as electricity retail price, labour costs etc. and ends up being far less lucrative than our model.
 - We aim to negotiate some of the best kwh rates in the World, and are currently in talks with several Latin America jurisdictions.
 - Our Token pool is **finite**, and the Token holders will only receive more dividends/coins with each new **expansion** (buying more miners), creating exponential growth and value for the Token itself.
 - **Immersion cooling** gives us a drastic change in both costs and revenue, as will be further explained later in the white paper. Its core attributes mitigate challenges such as HVAC systems, dust build-up, shortened lifespan due to dust/dirt, adds a higher hashrate through overclocking, provides much more efficient cooling of the units and doubles the units lifespan in some cases.
 - **Risk Mitigation:** we are trying to be as risk averse as possible. We aim to diversify the currencies we mine and keep a portfolio of 3 currencies at any time. Secondly, we will be using a variety of miners, and thirdly, we will acquire said miners from several different manufacturers across the globe.
 - **Our cost** negotiations have brought down both kwh costs and water costs for the operation as we are to be located at an industrial tax free zone and/or under a concession agreement rather than a commercial area.
 - **The opportunity** to increase your ROI with the crypto currencies dividends you receive is also there through **staking** and **capital gains** (holding), if you, as an investor, opt to do so.

In addition to this, crypto as much traction as it has garnered over the past 12 years, is just on the verge of making its biggest leap into our infrastructure. Once bitcoin and other currencies become increasingly adopted as a standard payment, we will see a boost, and transfer of wealth directly into the crypto sector – making it more profitable than ever. This is the perfect time to enter the mining market, and be a part of the revolution.

THE CRYPTO & MINING MARKET

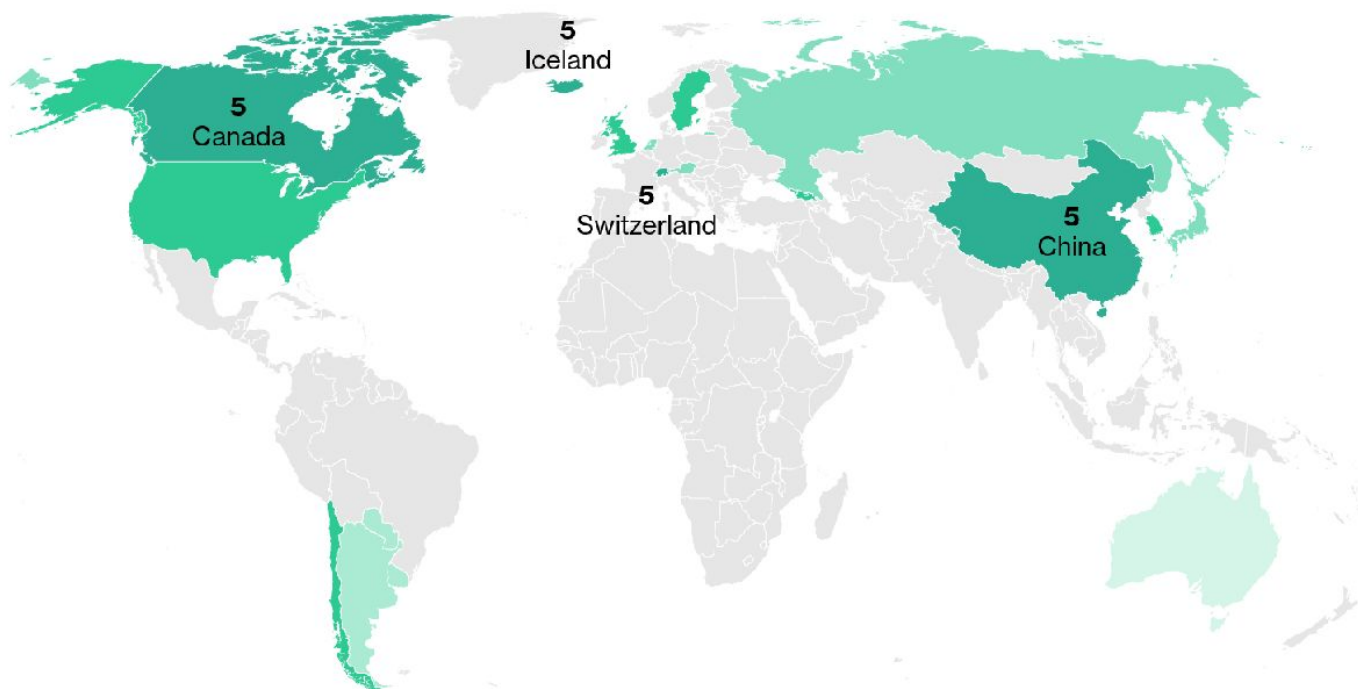
What is it?

As a basic comparison, blockchain is a technology that can be seen synonymously to a decentralized register (public ledger) that compiles all the transactions carried out within a specific crypto currency. The mining power compiles all of these transactions into what are called “blocks”, that are then stacked in a “chain”, hence the name blockchain; then a cryptographic verification ensues to ensure validity, legitimacy and processing of the blocks. Once this becomes verified by the network of miners which is decentralized (interconnected nodes), the next sequence (transaction) in the chain is connected to it. Once this process is complete and a block is added, it becomes immutable and cannot be deleted, modified or altered; even hacking becomes a very hard task when blockchain technology is involved. As a reward for this encryption-based verification process, mining machines are then rewarded with the accrued transactions fees and coins of the mined crypto currency.

A Greening of Cryptocurrencies

Number of favorable mining conditions vs world averages

Number of metrics that are more favourable than the global average



Source: Bloomberg New Energy Finance

Bloomberg

The Hardware in Mining

Mining equipment comes in many different forms, sizes, variations and some are made for certain crypto currencies, or to mine via a specific algorithm. In the first years of Bitcoin, mining could be done from any computer CPU. As time passed, the need for speed, power, and technology changed, resulting in an increased competition that made casual miners increasingly redundant. You can still mine using older methods as of today, but the profitability is almost non-existent.

As time went on, CPU mining became increasingly GPU mining due to higher hash-rates, and later even the strongest performing PC's become obsolete due to specifically designed mining hardware known as ASIC (Application Specific Integrated Circuits) chips being released onto the market. These are special purpose chips that are manufactured with one purpose; to mine crypto currencies. The ASICs are designed for minimal energy consumption, whilst simultaneously delivering the highest possible hashing per second output. Although these are widely available, certain currencies are resistant to this technology and are only mined with CPU/GPU rigs.

We plan to use a mixture of ASIC miners to cover a spectrum of currencies / algorithms. Our intention is to get ASIC miners that are algorithm-oriented, and aim to diversify the pool of miners to support the mining of a variety of currencies. The ASIC miners have only improved with time and provide stability, maturity and power optimizations where necessary. The diversifications primary focus is reducing risk by mining a varied portfolio rather than placing its whole trust in one currency.

The software that we will use is yet to be determined, but it will have a specific focus on optimizing the control of security, costs and quality; and there is a great spectrum of state of the art software currently on the market, and more to come.

Liquid immersion cooling is the main niche of the operation, and will be explained below.

Note: all ASIC miner models / specs will be outlined in the appendices attached.

Trading vs Mining

Crypto Mining has a different and more lucrative pay-off model compared to traditional investments into crypto. The following highlights the advantages of mining versus investing/holding:

- Mining provides a stable stream of crypto coming in to a portfolio. There is no day-trading necessary to make gains on market movements, the mining machines take care of this time-consuming and risk-related activity. This results in a relatively low-risk and steady high-yield income stream.
- Since 2010, Bitcoin mining has always been profitable and returned a profit; in recent years a variety of coins have been profitable, and in some cases, where the miners were pro-active and could foresee a great increase in market price for the currency they were mining, experienced immense capital gains – such as Ethereum going up from \$300 to \$3300 (at the time of writing). This cannot be said for every trader, or even for the majority of traders. And with the increasing growth in green and sustainable energy, cost for power has also been going down, making mining even more profitable.

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- Investing, such as buying Bitcoin, relies solely on the market price to increase in order to gain a profit. On the contrary, investing in mining through us provides you with new coins every day (distributed monthly) as a reward. If we experience a drop in market price of the coin we are mining, our miners will likely begin to make even more coins on the same hash rate as the difficulty usually drops or increases in relation to the price (it chases the price), resulting in more crypto gathered; once it moves back again, the Token holder will reap the profit of the price gains on the crypto that has been mined (and held).

IMMERSION COOLING

A key success factor in this operation will be the optimal cooling and storing of our mining hardware which will be done by immersion cooling. This is why the miners will be submerged in dielectric liquid, which does not conduct electricity. It offers a variety of benefits that air-based cooling cannot offer, including risk mitigation (fire, earthquake etc.), and reduction in maintenance costs and replacement costs due to prolonged lifespan, and removal of the dust gathering elements. Benefits include: (source <https://bixbit.io/en/products/rack>):

- **+40% HASHRATE INCREASE**
- **+100% SMART HEAT UTILIZATION**
- **200% EQUIPMENT LIFESPAN**
- **-100% NOISE AND DUST**
- **-30% POWER CONSUMPTION**
- **+90% FLOOR SPACE REQUIRED**

This approach will heavily impact our ongoing revenues, miner lifespans, ongoing costs and is overall a much better solution than air-based cooling. The cell lifespan is 10-15 years, and the liquid coolant lifespan is 3 years, however, we will replace the liquid on an annual basis. We only need to clean/rinse the miners on occasion. This cooling method has a 100% smart heat approach, covering every part of the miner whereas airflow cannot, allowing the machines to be utilized at 20-40% overclocking (we aim to operate at 30% overclock). The cells are then placed on Racks, which have their own cooling towers and internal heat exchangers. Just the fact that it can potentially prolong miner longevity by 200% is in itself an impressive feat. Each cell carries 6 miners, each rack includes 4 cells. This method also removes all noise and dust build-up on the machines, decreasing/removing risk of fire and is much safer in situations like earthquakes.

It comes with its own monitoring and control system, mitigating certain start-up costs such as BSM. They are also very space-friendly, and each rack is projected to about 1 sqm of space taken, meaning we will be very space friendly, reducing rent costs. Likewise, it gives us an ease of transport should a different opportunity arise in terms of power etc. we can easily relocate the farm from A to B.

The monitoring system AMS* (Automatic Monitoring and Control System) performs full control over the electrical part of the rack with instantaneous diagnostics. All information about rack, cells, circuit breakers, pumps and rigs is displayed on a 7-inch touchscreen display. Sensors are installed in each cell and in an external closed circuit. In case of emergency, either one cell or the entire rack is shutdown. AMS features full control of power consumption, cooling tower speed as well as remote control and connection to external PC.

All items are made of corrosion resistant materials, and equipped with video surveillance as well as an access control system. The Racks will be placed in a secure warehouse. The units will be set up by the respective company, and warranties will be issued. The stats are based on several other mining companies and immersion cooling providers.

MINING MARKET CAPACITY

COMPETITION & PENETRATION

As the market is still under steady growth, and new currencies are coming onto the markets which use the POW (Proof of Work) validation system, we see no problem being able to mine effectively. As the POW is a global system for each currency, meaning all computing power is used; we can join a mining pool, pay a certain fee, and obtain blocks more quickly than mining alone, essentially working together rather than against each other.

THE DISTRIBUTION OF MARIANA MINING POWER

Here we take a look at the currencies that we aim to mine, and are divided by the total network hashrate, block rewards, total blocks and block time. Certain currencies miners are added for pure risk mitigation, but are kept at a low percentage as they lack firmware to overclock the miners. Overclocking is when you manually instruct the miner to work over its programmed 100% capacity.

The generation of profits will be diversified through a variety of currencies, this is done to mitigate risk and increase long-term yield. Several currencies are chosen, and these are currencies that have established themselves on the market, and are considered relatively safe:

Please see the Appendix for ASIC miner specifications.

BTC	75.00%	Antminer S19
CKB	5.00%	Ibelink bm n1
Kadena	20.00%	Ibelink bm k1

*Please note that the above currencies have been used for the purposes of our estimations, and identified as being preferable to mine, however, the operation will most likely automatically mine whatever currency is the **most profitable** on the relevant algorithm, except for currencies we deem to be more favourable in a future capital gains aspect.*

MMINE TOKEN – SECURITY TOKEN OFFERING

Mariana Mining will hold a Security Token Offering (STO) in Q1 2022, to launch the MMINE-Token and commence the setup of our mining farm in Q1-Q2 2023; the mining will take place under the chosen regulation, executed and maintained with transparency and financial safety. The STO on the other hand will be launched in accordance to the applicable securities laws of the British Virgin Islands.

Description

The MMINE Token will be based on the widely recognized and accepted ERC20 standard and will provide rewards in crypto currencies (Most likely BTC) directly to your wallet, which you can then swap into any desired currencies. MMINE holders will also benefit from the added hash rates, overclocking and profit via our expansion model of which a percentage of the revenue is dedicated.

We aim to have the first Mariana Mining centre up and running sometime in Q1-Q2 2023 (depending on the funding round and machine availability); its main focus is to mine a variety of cryptocurrencies that we hope will be able to produce a stable yield both in terms of revenue and capital gains. The distribution of the initial and ongoing funds will be outlined further in the white paper.

What is a Security?

The instrument should also be comparable with the examples set out in MiFID II (or similar lists set out in other applicable laws, such as MAR), and have similarities to traditional equity and debt instruments. The element of “negotiability on the capital market” must also be present in order for an instrument to constitute a transferable security. Capital market trading is currently restricted to equity and debt instruments. For example, using shares and bonds as a reference, the instrument in question will usually provide holders with:

- a right to participate in some form of financial profit or return; and
- a financial claim against the issuer of such an instrument.

In this case, the investor is entitled to a share of the profit by purchasing the MMINE token - functioning as a standard dividend-paying security.

Please note that the tokens are subject to the following conditions and particular attention should be made when reviewing the STPA documentation:

- The MMINE Tokens will be burnt 10 years from the commencement of the mining operation;
- The MMINE Tokens will be subject to a one year lock up period which is in accordance with the strictest of regulations.
- The MMINE Token holders carries no rights, express or implied, other than those, set out herein. In particular, MMINE Token holders shall have no influence in the development or governance of the MMINE Token or Mariana Mining Limited. The Token holder may only assign MMINE Tokens (after the expiry of the lock up period described above) to parties whose accounts have have been duly verified by Mariana Mining Limited and/or their engaged KYC compliance manager.

MMINE Crowd-Sale

For all MMINETokens issued upon reaching the crowd sales soft cap, which starts Q1 2022 and lasts for approximately one year, the same rules apply to create its intrinsic and fair value pricing for all Token holders alike:

Distribution of STO funds raised:

- Soft Cap (€ 2,000,000):
 - Energy Infrastructure Set-up - € 150,000 (7.5%)
 - Data Center Set-up - € 100,000 (5%)
 - Set-up Immersion Cooling Racks - € 180,000 (9%)
 - STO Related Cost - € 120,000 (6%)
 - Mining Hardware - € 1,450,000 (72.5%)
- Hard Cap (€ 5,000,000):
 - Energy Infrastructure Set-up - € 200,000 (4%)
 - Data Center Set-up - € 150,000 (3%)
 - Set-up Immersion Cooling Racks - € 460,000 (9.2%)
 - STO Related Cost - € 120,000 (2.4%)
 - Mining Hardware - € 4,070,000 (81.4%)

STO Related Costs: € 120,00. The same amount applies to both soft and hard caps, and includes items and services such as company registration, lawyers, AML/KYC, dashboard, website etc.

NOTE: The Majority of this amount has already been paid by the Founders to cover relevant costs and the private placement will compensate this amount.

Distribution of Mining Revenue:

Our revenue will be distributed after deductions have been made; **ongoing costs** (water, electricity, etc.), maintenance, lease and insurance costs, as well as two additional funds; one for **replacement** of faulty equipment and one for **expansion** which will be used to purchase additional equipment to boost our mining capacity. Once the costs have been deduced, the remainder will be distributed to our token holders. In certain years we will focus on higher allowances for replacement and expansions, and in some years we will focus on maximizing the distribution of dividends to our holders.

NOTE: If you are curious to the exact figures and calculations, take a look at our documents for both soft and hard caps.

Marketing

We will be pushing key features to select channels (will depend on initial interest):

- Direct: Internet, Sales Team
- Social Media Marketing
- Airdrops
- Referral Bounty
- Listings
- Direct STO Marketing Firms

We will not focus on heavy marketing, as this is a community mining project and our Token will be finite meaning that our initial and only marketing cost will be in the duration of the STO itself, in case we need to add some fuel to the offering. We expect the funding to be completed by Q4 2022.

Location

After doing our due diligence, we have located several viable locations such as Paraguay, Ecuador, Mexico and Georgia. The key factors that can create an unfavourable mining environment are mostly all mitigated in Latin America; it is also a region that is frequently adopting digitization and progressive innovations such as blockchain and cryptocurrency;

- Is fast becoming one of the most crypto-friendly continents on the planet; where you can buy a plethora of items, services, and assets with crypto.
- **Tax regulations:** Crypto-related business would be virtually tax free through concession agreements.
- **Regulatory bodies:** Contenting locations aim to be Crypto Nations in the future.
- **Low power costs:** We aim to secure a price of around \$0.05 per kWh, and in certain areas such as the one we are looking at, they can be under \$0.05 per kWh. The same logic and aim applies for water costs, lease, workers etc.

STO JURISDICTION

Our aim is to select a jurisdiction that has a balance between the ease of setting up our company, and launching the STO, both in terms of time required, restrictions and/or local requirements, and investor protections. Our goals in this regard are:

1. Regulations to protect the investors whilst not substantially impairing the launch of the project
2. Reasonable setup costs for company and bank accounts
3. Reasonable costs in terms of 3rd party representatives, such as tax advisors and lawyers
4. No withholding, or any kind of capital gains tax in the respective country
5. Easy to launch STO within a reasonable timeframe
6. Neobank availability

We have three primary choices that vary in the aforementioned factors:

1. Cayman Islands

The Caymans offer a realistic balance between their security regulations, offering great investors protections as well as an easy process in terms of launching the company, gathering initial funds, and working towards launching the STO; as a potential downside here, local representatives may require high minimum investment limits in order to protect themselves from litigation. Cayman setup is cost and programme efficient, although 3rd party companies can ask for a substantial amounts for their custodial services. No withholding tax.

2. Switzerland

Switzerland, arguably, is the strictest jurisdiction in term of security regulations that could possibly be equated to higher investor security, although not necessarily, as all countries on this list offer a substantial amount of protections to investors. The main issue with this jurisdiction is the very long application, verification and set-up times that will potentially prolong our offering by 3-4 months. Secondly, the jurisdictions is very expensive in terms of 3rd party companies that we would have to hire. Lastly, Switzerland has a withholding tax of 35%, meaning that our investors would have to claim this in their respective countries, adding an unnecessary layer of action for our investors.

3. British Virgin Islands - *Chosen Regulation*

The British Virgin Islands offer low regulations in term of launching the security, which can be perceived as lower investor protections. Secondly, the launch process is both very quick and cheap in relation to other jurisdictions, it has no withholding tax, and potential 3rd parties are not as inclined to put defensive barriers between themselves and the investors by raising the minimum investment requirement.

Please note that the chosen jurisdiction is the **BRITISH VIRGIN ISLANDS**, due to the aforementioned factors aligning perfectly coupled with us engaging a reliable and trustworthy team to help us set up our business, comply with all legal aspects and help facilitate the neobank registration.

STO METRICS

Of all MMINE Tokens that will be issued up to the Soft Cap, seventy-one (71) percent will be distributed and made available to the public, (9) percent will go to the private funding investors. The remaining twenty (20) percent are allocated to the emitting company in the following way:

Founding (Management) Team and shareholders (20 percent); contributors, advisors, and management are all an integral part of the success of MMINE and Mariana Mining.

Important STO metrics include (Realistic STO):

- Soft-Cap of EUR 2,000,000
- Hard-Cap of EUR 5,000,000

MMINE Token metrics:

- Soft-Cap of EUR 2,000,000 - 5,174,644 MMINE
- Hard Cap of EUR 5,000,000 - 12,674,644 MMINE

The total supply of Tokens is unknown until the last second during the STO Phase, where the total sum of investments is calculated and converted in to the appropriate Token-supply, but working with the metrics above the total MMINE supply would be:

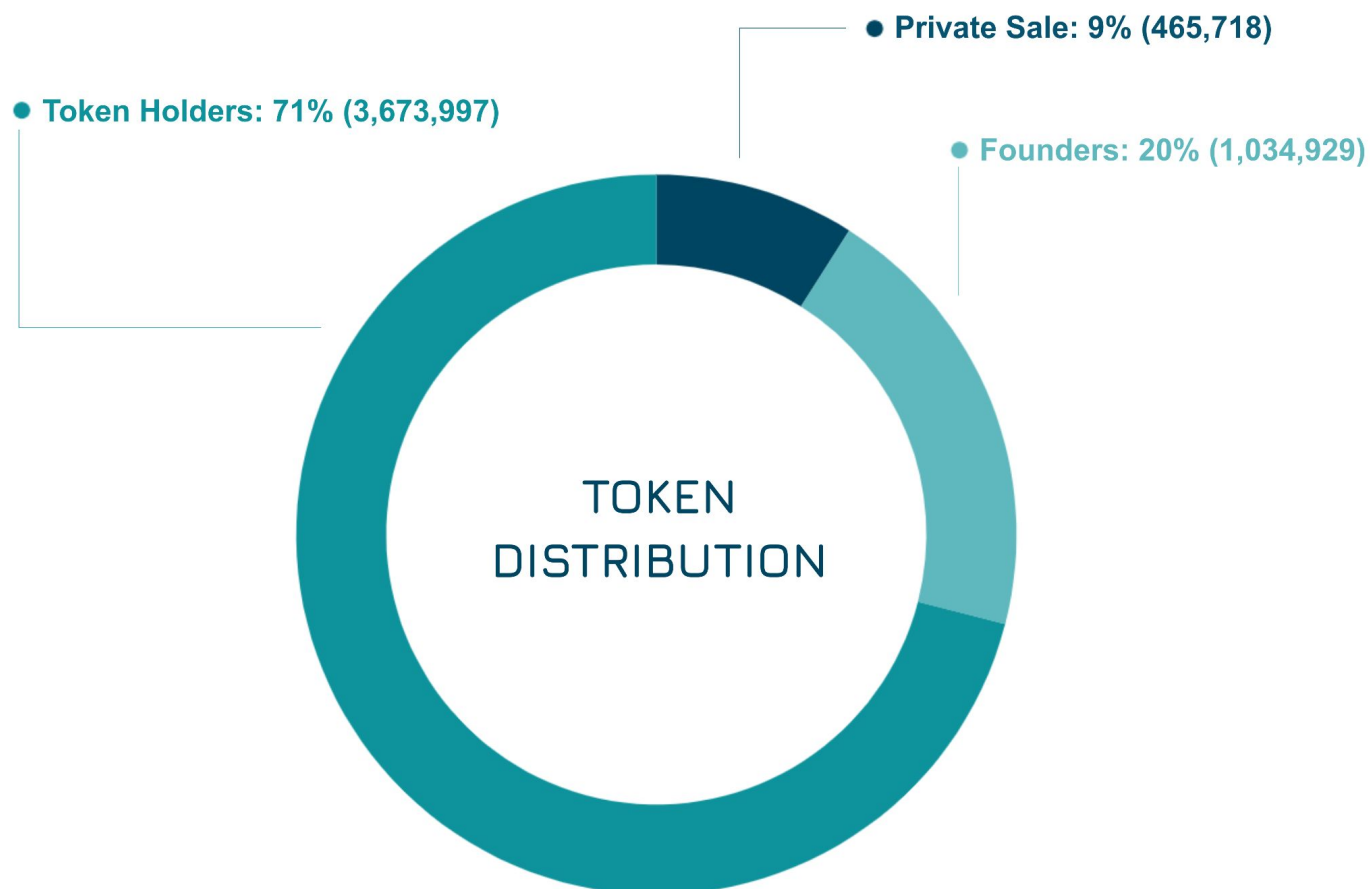
Soft Cap – 5,174,644 MMINE Token

START-UP COSTS:

- Soft Cap: €550,000 (Maximum)
- Hard Cap: €930,000 (Maximum)

Please look at our revenue breakdown further in the white paper for a more accurate description.

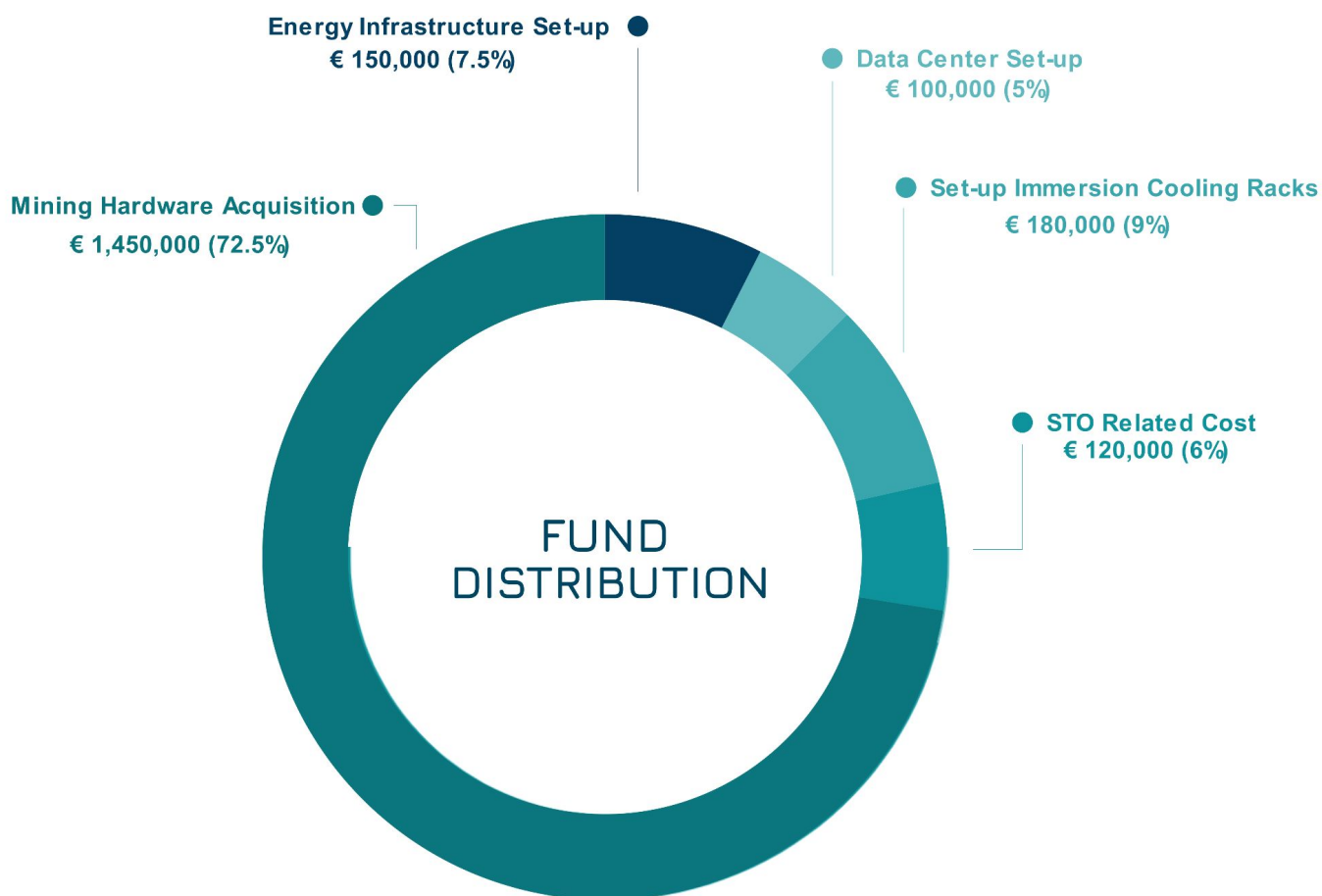
MMINE Token can be purchased and sold at any time (in accordance with KYC/AML procedures) after the initial lock-up period of the MMINE Token; the price is then driven by standard supply/demand market dynamics, as well as added revenue via mining capacity expansion.



Token Distribution - Detailed Breakdown

Total Token Pool - Soft Cap: 5,174,644

1. 9%, Private Placement will receive 465,718 token at a discounted rate (30% discount)
2. 20%, 1,034,929 of the Token pool goes to the Founders/Management
3. 71%, 3,673,997 of the Token pool is sold via the main funding round



Fund Distribution - Detailed Breakdown

Total Funding Soft Cap: €2,000,000

1. Energy Infrastructure Set-up - € 150,000 (7.5%)
2. Data Center Set-up - € 100,000 (5%)
3. Set-up Immersion Cooling Racks - € 180,000 (9%)
4. STO Related Cost - € 120,000 (6%)
5. Mining Hardware Acquisition - € 1,450,000 (72.5%)

BUYING/SELLING MMINE TOKENS

To buy MMINE Tokens, investors will need to sign-up on the Mariana Mining website platform (www.marianamining.com) and go through a standardized KYC/AML identification process. The process foresees the following steps:

- Go to website
- Click the Register button and make an account with an email and password (confirmation email will be sent)
- After clicking the confirmation link sent via email, sign in to the site
- Fill out the (Know Your Customer) form: Name, DOB, Passport #, Nationality, Address, Zip Code.
- After everything has been submitted, you'll receive an email that says you've been verified (after you pass the KYC); then you'll be able to participate in the sale.
- You may now transfer funds (Crypto and/or Fiat) and place your STO purchase
- Other functionality such as payment systems, etc. is available depending on the level of verification a user has gone through.

Selling MMINE Tokens can take place on our website as well as on decentralized exchanges that support the ERC20 standard. When selling MMINE Tokens all rights (especially to rewards) and other benefits, obligations, responsibilities and liabilities are transferred to the receiving party.

Should an investor decide to sell their holding of MMINE Tokens, the new Token-buyer will have to register and complete the onboarding process prior to any sale as they need to be whitelisted (go through our KYC/AML). Only by registering on the Mariana Mining Dashboard, will the new Token-owner, upon completion and approval of the KYC procedure, receive access to the trading and reward functionality of the MMINE Tokens.

EXPECTED REVENUE AND PROFITS

These averages will be done based on an aggregation of all of our ASIC miners, including all relevant costs. These figures are used to demonstrate the “**Base Case**”, i.e. the most realistic potential revenue produced by Mariana Mining. Look at our appendices for an in-depth demonstration of the projected numbers for Soft and Hard cap; the numbers will reflect three scenarios: “**Optimistic**”, “**Base Case**”, and “**Pessimistic**”.

Potential Revenue Streams & Benefits for the Token Holder

It is highly important that you understand the various revenue streams and how they work; ask for more information if uncertain about any principles mentioned here:

1. **Coins** received from the Mining Operation
2. You can **Stake** received currency mined (if you plan to hold them long term – see point 3)
3. **Holding** the currency you receive for a future capital gain (changes in market price)
4. **Expansion** adds more and more revenue to the Token you hold (Token supply is finite, expansion is ongoing)
5. **Token Value (MMINE Token)** increase due to demand/supply and increase due to expansion
6. **No Taxes** on Crypto subject to Token Holders Location

We will base the calculation upon our Soft-cap goal of €2,000,000. Start-up costs and facility set up is around €550,000, leaving €1,450,000 for machines. The Hard-cap of €5,000,000, start-up costs being €930,000, leaving €4,070,000 for machines (see appendix for detailed breakdown)

Repair/Replacement: we aim at covering the most simple repairs in the budget, with our **maintenance** fund, whilst complete replacements on broken miners will be taken from the **replacement fund**. It is hard to determine the amount of miners that will break down at any point of the operation; the expected longevity of the ASIC miners is 3 years, with immersion cooling this life span is potentially doubled (as stated by immersion cooling manufacturers and other large mining companies), making it up to 6 years; in our documents we have assumed a miners lifespan to be 4 years in order to be as conservative and low-risk as possible.

Please note that the financial documentation has been developed in collaboration with Crypto Oxygen who provided their qualified opinion (<https://crypto-oxygen.com/>) on Mariana Mining’s business case and model.

Financial Breakdown:

The ROI is based upon the revenue that the miners produce, and the capital gain aspect of the Token you, as an investor would hold; the Token value increases with each expansion and projected revenue in future years, i.e. it would be the same share in principle. The ROI's **do not include the investor holding received currency for future capital gains, nor the fact that you would be able to stake said currency for interest payments, so-called APY's (Annual Percentage Yield).**

Soft Cap breakdown:

Total Return:	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Quantity of shares/tokens	5,174,644	5,174,644	5,174,644	5,174,644	5,174,644
Private placement tokens (9%)	465,718	465,718	465,718	465,718	465,718
Management tokens (20%)	1,034,929	1,034,929	1,034,929	1,034,929	1,034,929
General issuance tokens (71%)	3,673,997	3,673,997	3,673,997	3,673,997	3,673,997
Earnings per share (EPS)	0.29	0.26	0.25	0.34	0.24
ROI (General issuance tokens)	73%	91%	98%	129%	95%
ROI (Private placement tokens)	104%	101%	109%	142%	104%
Dividend payout	0.25	0.25	0.27	0.35	0.26

	Investment Projection Summary
Internal Rate of Return (IRR)	78%
Net Present Value (NPV)	4,633,970
Payback Period	1.3 Years
Profitability Index (return on dollar)	3.32

Hard Cap breakdown:

Total Return:	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Quantity of shares/tokens	12,674,644	12,674,644	12,674,644	12,674,644	12,674,644
Private placement tokens (3.67%)	465,718	465,718	465,718	465,718	465,718
Management tokens (20%)	2,534,929	2,534,929	2,534,929	2,534,929	2,534,929
General issuance tokens (76.33%)	9,673,997	9,673,997	9,673,997	9,673,997	9,673,997
Earnings per share (EPS)	0.36	0.33	0.33	0.44	0.34
ROI (General issuance tokens)	88%	112%	122%	159%	124%
ROI (Private placement tokens)	126%	126%	137%	180%	140%
Dividend payout	0.31	0.31	0.34	0.44	0.34

	Investment Projection Summary
Internal Rate of Return (IRR)	97%
Net Present Value (NPV)	16,543,098
Payback Period	0.8 Years
Profitability Index (return on dollar)	4.31

Main Assumptions, Exclusions and Notes

- The above figures exclude revenue / profit appreciation pursuant to Capital Gains, Token Appreciation and/or Possible Staking Rewards etc. Meaning we exclude three different revenue streams from the forecasts.
- ASIC equipment prices are based on market prices - all hardware will be subject to fluctuation and availability.
- The above kWh rates are assumed to be 0.041 € and the water consumption rates are assumed to be 0.09 € / m3 - please note these figures are conservative.
- The following assumptions have been made - Mining Pool Fees (3%) / Mining Software Fees (1%) / Lease rate (€ 30k annually) / Maintenance Fees (€ 100k annually) / Insurance Costs (24k € annually) / Professional Fees (1%) / Exchange Fee (0.2%).
- The soft cap forecasts are based upon a mix of 192 ASIC hardware units - please note that this depends on the scenario.
- The hard cap forecasts are based upon a mix of 540 ASIC hardware units - please note that this depends on the scenario.
- Mined currencies include - BTC / KDA / CKB. Although the software will mine the most profitable currency on the algorithm.
- Conversion rates utilized for the purposes of this forecast - see financial projections document.
- Expansion funds shall be calculated as follows - Year 1-8 (30% equipment increase) and Year 9-10 (no expansion).
- The maintenance fee and equipment replacement fund will be used to maintain the ASIC unit numbers throughout the operation in years 1-8.
- We have assumed that € 550,000 (Soft Cap) & € 930,000 (Hard Cap) will be sufficient for the purposes of the fit-out, professional fees and equipment (Racks / Cells) etc.
- Any and all savings in relation to projected running costs will be utilized to then purchase additional equipment as applicable.
- The above figures are projections and estimates only and are subject to fluctuations.
- We have assumed that the electrical / water costs shall increase on a year by year basis of approx. 2%.
- We have assumed an average lifecycle of the hardware to be 4 years - please note that we have added one year to the normal product life cycle pursuant to the immersive environment.
- We have assumed that 2% downtime should be sufficient for equipment as we only need to replace the fluid on an annual basis and any malfunctions in terms of equipment shall be dealt with on an individual cell basis.
- Please note that the asset types are for calculation purposes only and shall be updated as the operation progresses to ensure that the most relevant hardware is procured.

ROADMAP

Q1 2021

- Finishing Content Creation
- Website & Animation Creation
- Financial Documents Creation
- Documentation and STO introduction
- Online Marketing / Local Marketing

1

Q2 2021 - Q4 2021

- Internal Compliance Audit
- Company Registration (Sto Launch Jurisdiction - BVI)
- Website Completion
- Financial Documentation Completion Q2
- Legal Advisory Partnership
- Financial Documentation Completion Q4
- Financial Audit Completion
- White Paper Finalisation Q4
- Discussions with relevant jurisdictions in Latin America

2

Q1 2022 - Q4 2022

- Launching the STO
- Private Placement Funding
- Public Placement Funding
- Ongoing STO marketing
- Pre-Concession Agreement / Concession Agreement Finalisation
- Immersion Cooling System Design
- Finalising Mining Infrastructure Design
- Source Remaining Consultants - Audit Consultant etc.

3

Q1 2023 - Q2 2023

- Fit-out of the Mining Site
- Acquisition of Immersion Cooling System
- Mining Equipment Acquisition
- Mining Commences

4

The above is indicative and subject to amendment.

TEAM PAGE



Igor Seferovic | Founder

[LINKEDIN](#)

Igor Seferovic has a BSc (Hons) in Psychology and in Human Resources, and his private investment venture includes eight years of investment projects such as Buy-to-Let real estate in the UK, as well as property development in Montenegro: he later accepted an offer to lead a project and produce the white paper for a green energy company in 2017, ending in a very successful private placement round. With increasing interest in crypto and several idea pitches later, the concept of Mariana Mining was formed.

Igor has extensive experience with project management and client relations, in regard to both developing a property and a company from scratch, and scaling it. Two facilities have been constructed in Montenegro, and one successful private placement round has been accomplished. Igor can quickly adapt to new environments and resolve issues in a strategic and efficient manner. He plans to incorporate these skills in the Mariana Mining venture.

William Scurr | Founder

[LINKEDIN](#)

William Scurr's experience includes over ten years in the Construction Industry: specialising in commercial, contract, project and risk management, with around four years of executive management. Will has a BSc (Hons) in Quantity Surveying, and is a member of the Royal Institution of Chartered Surveyors (MRICS).

Will started his adventure into crypto in 2019, when he became an early investor in Unstoppable Domains and has continued down the crypto rabbit hole.

Will has negotiated and worked with a plethora of clients, and has been relied upon to deliver the desired quality, programme and cost parameters. This reliability will be continued with this venture along with his relevant construction experience.



APPENDICES INFORMATION:

These documents can be found on our website, dashboard and groups, and will include a **very detailed** description of:

Financial Projections of Soft & Hard Caps:

1.1 Assumptions: This sheet contains all relevant key drivers of the business case and the underlying assumptions. It is the only sheet in the Financials Section where direct edits can be made.

1.2 Comparison: This sheet compares driver assumptions by Mariana Mining and Crypto Oxygen

1.3 KPIs: This sheet contains an overview of different revenue, profitability, and ROI KPIs including graphs.

1.4 P&L: This sheet contains a detailed profit and loss statement of the mining operations.

14.8 CF: This sheet contains calculations supporting the P&L.

1.5 SH Value: This sheet contains KPIs depicting the investment profitability.

2.1 Miner Sourcing: This sheet contains an overview of miner specs.

2.2 Scenario Assumptions: This sheet contains an overview of the different scenario options for profitability modelling.

The format of the documents is in Microsoft Excel, so please make sure you look through all the relevant tabs.

DISCLAIMER

Purpose:

The purpose of this White Paper is to present Mariana Mining and the MMINE token to potential token holders in connection with the proposed STO. The information set forth herein 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 token holders in order for them to determine whether to undertake a thorough analysis of the company with the intent of acquiring MMINE token. Nothing in this White Paper shall be deemed to constitute a prospectus of any sort or a solicitation for investment, nor does it in any way pertain to an offering or a solicitation of an offer to buy any securities in any jurisdiction.

This document is not composed in accordance with, and is not subject to, laws or regulations of any jurisdiction, which are designed to protect investors. Some of the statements outlined in this document are not statements in historical fact but constitute “forward-looking statements” those are predictive and may involve risk and uncertainty. Please familiarize yourself with all information mentioned in this document including risk and uncertainties prior to any purchase or expression of interest, ensuring you are fully aware of all potential outcomes and risks prior to conduct any business with us.

Risks and Uncertainties:

Mariana Mining structure is not yet developed and is subject to further changes, updates, and adjustments prior to its launch. Such changes may result in unexpected and unforeseen effects on its projected appeal to users, possibly due to the failure to meet users’ preconceived expectations based on this White Paper, and hence, influence its success. For the foregoing or any other reason, the development of the MMINE token and launch of Mariana Mining future business ventures may not be completed and there is no assurance that it will be launched at all.

In the case of unforeseen circumstances, the objectives stated in this document may be changed. Despite the fact that we intend to reach all goals described in this document, all parties involved in the purchase of MMINE token do so at their own risk.

The funds raised in the STO are exposed to risks of theft. The Company will make every effort to ensure that the funds will be securely held in blockchain wallets and escrow accounts. Notwithstanding such security measures, there is no assurance that there will be no theft of the cryptocurrencies as a result of hacks, sophisticated cyber-attacks, distributed denials of service or errors, or otherwise.

No Cancellation and No Refund:

All MMINE token orders are deemed firm and final. The Client acknowledges that they are fully aware that they will not be entitled to claim any full or partial reimbursement under any circumstances whatsoever, except in the case that we do not meet the Soft Cap amount; in this scenario the funds will be returned to respective general issuance investors.

Note on forward-looking statements :

All claims and statements made in this Mariana Mining white paper, Mariana Mining website, press releases made by Mariana Mining, also any oral statements made by the Mariana Mining team members or certain agents acting on behalf of Mariana Mining that are not an accomplished fact may represent so called forward-looking statements.

Some of these forward-looking statements may be considered such by containing the following terms: “will”, “anticipate”, “plan”, “aim”, “target”, “expect”, “estimate”, “envision”, “intend”, “project”, “may”, “believe”, “if”, or any other such terms. Further, the terms listed above are not necessary to identify a forward-looking statement. All statements that include, but are not limited to any financial projections, estimates, plans or possible trends, risks, as well as future prospects of cryptocurrencies should be considered as forward-looking statements as well.

These forward-looking statements are not yet accomplished facts and Mariana Mining does not take responsibility and cannot guarantee that the future results will correspond with above-mentioned forward-looking statements. These forward- looking statements are also provided as-is and Mariana Mining takes no responsibility for updating these forward-looking statements, should any information relevant to the pertaining forward-looking statements become available in the future. No information contained in this white paper should be considered as a promise, representation of commitment or undertaking as to the future performance of the Mariana Mining Company, or MMINE token.