# Mining Now!

WHITE PAPER AA!LAB

www.miningnow.online

# Contents

General information about the Mining Now! project!	3
Blockchain, mining, cryptocurrency	3
What is blockchain	3
Who are miners	4
Transaction Confirmation	4
Where the generating capacities are going to be located	5
What kind of equipment do we use for mining	7
Legal structure of Mining Now!	8
What the involved money resources are spent on	9
Own developments of AA!LAB	9
Miners	9
Mining Now tokens	10
Website. Personal account	10
Mining Now tokens (MNW)	11
What are <b>Mining Now</b> advantages ( <b>MNW</b> )	11
What is the fundamental difference from cloud mining and other mining projects	11
Income distribution	12
MNW cost forecast	12
Profit calculation for an investor	13

## General information about the Mining Now project!

It is the association, created by **AA! LAB** for a joint industrial cryptocurrency mining. The key difference between "**Mining Now!**" project and similar offers that already exist on the market, are:

- 1. Already existing mining capacities that work and bring profits before a cryptocurrency emission. It is possible to see them personally.
- 2. Presence of own cryptocurrency (tokens) named **MNW**, possession of which gives the right to use a part of the computing capacities that belong to **Mining Now!**
- 3. Farms construction in places with the cheapest electricity, cooperation with big companies that have a large surplus of electrical capacity and ready infrastructure. Thus, indirect costs are minimized. We do not build or buy expensive electrical equipment, such as step-down transformers. We focus on what we can do best-creating the most efficient capacities for generating cryptocurrencies.

#### 4. Provision cryptocurrency by the generating capacities serviced by Mining Now!

- 5. All funds received from the sale of cryptocurrency are spent on increasing generating capacities. Thus, new investments are profitable both for new owners of cryptocurrency and for old investors.
- 6. A part of mining incomes is also spent on increasing of generating capacities of the Mining Company.
- 7. Public system of mining income distribution according to a previously approved scheme.
- 8. All information on mining for owners of **NNW** tokens is in the public domain on the site <u>miningnow.online</u> in a member's personal account or on the mobile application available on main platforms (iOS, Android, Windows). There's an ability to see forecasted payments of a current month online.
- 9. Production of own computing stations, use of a unique software and hardware complex developed by **AA! LAB** specialists to control computer stations in a fully automatic mode.

# Blockchain, mining, cryptocurrency

#### What is blockchain

Blockchain is a distributed database and registry. It is a consecutive chain of blocks, each of them has transactions recorded: who has transferred cryptocurrency and how much. Blockchain has several features that made this technology so popular.

All full-fledged network members, called nodes, keep the entire block chains with all transactions for all times. And constantly add new blocks to an end. This makes the database distributed. Hence, one of the most important characteristics is that it is impossible to lose information. It is duplicated in the network a lot of times and each participant is interested in its safety.

Cryptography (hence the "crypto" in the word cryptocurrency). The correct operation of the system is guaranteed by mathematics and by the rules that are verified at each node, not by a reputation of a person or organization. Moreover, each operation is signed by a crypto-proof digital signature of a wallet's owner, which excludes the possibility of transactions faking. Thus, one more important trait of blockchain is provided - the invariability of information. In order to make changes backdate, you need to get control over more than 51% of nodes in the network, which makes such attacks economically meaningless.

#### Who are miners

There are a lot of cryptocurrencies. A bigger part of them take fully decentralized projects, such as bitcoin, dash, ethereum, zcash and many others. Such currencies are distinguished by the absence of a single emission center.

Mining was created to ensure security in such networks, as well as to protect against hacker attacks. This is a process of creating a new block for recording new transactions. It is related to a solution of a very complex mathematical problem. Moreover, the more miners participate in its solution, the more difficult it is. Thus, the same number of blocks is always generated in a unit of time. For their generation, a reward is accrued. This is cryptocurrency. If a miners community (pool) participate in a block generating process, the reward is divided proportionally to the investment of each participant.

Hence three basic conclusions follow:

- 1. Mining is needed because it makes the main type of hacker attacks on the network meaningless, i.e. provides stability of blockchain and cryptocurrency.
- 2. The system is self-regulating. The more people mine a cryptocurrency, the greater the complexity of mining is, a reward decreases, miners start switching to the generation of alternative cryptocurrencies.
- 3. Profitability of mining changes all the time depending on the complexity and the exchange rate. It is necessary to react to these changes as quickly as possible.

It should be noted that mining is not the only way to ensure blockchain stability. However, it can be considered to be the only one that has proved its worth. Alternative methods, Proof of Stake or its modifications are still being tested on really large public networks.

That is why it is safe to say that mining will keep its leading role in carrying out of cryptocurrency transactions in the foreseeable future. Then it will be modified into smart mining – not just a solution of complex mathematical problems, but serve useful purposes. For example, distributed computing, training of neural networks, recognition of images, voices and so on.

#### Transaction Confirmation

All kinds of transaction in blockchain must be confirmed by all (the majority of) members of the network. Confirmation is a recording of transaction information in a block node with all rules respect check.

This can take a long time. Therefore, for different currencies, a different number of received confirmations is sufficient to ensure that the transaction is considered to be completed.

Carrying out of confirmations also takes resources. Therefore, those who confirm transactions in some blockchains also get a reward.

It should be remembered that a transaction cannot be canceled, because blockchain guarantees the invariability of information. This is a huge difference from fiat money transactions through the banking system.

# Where the generating capacities are going to be located

Country	Located capacities, MW	Projected period			
Russia	6	01.07.2017 - 01.06.2018			
Bulgaria	6	01.11.2017 - 01.05.2018			
Hungary	3	01.04.2018 - 01.12.2018			
Kazakhstan	30	01.08.2018 - 01.09.2019			
Kyrgyzstan	30	01.08.2018 - 01.09.2019			

The company **AA! LAB** is engaged in cryptocurrency mining in cooperation with large consumers of electricity, having MW spare capacities located in regions with a low average annual temperature and a good transportation. For example, in the territory of Karelia in Russia, the partner of **AA! LAB** is **RUSAL**, the world's largest aluminum producer.

Karelia is almost a perfect place for mining cryptocurrency. There is a large number of hydroelectric stations, up to 50% of spare electricity generating capacities. Hydropower is considered to be one of the most efficient and economical sources of renewable energy. This type of electricity is environmentally friendly, natural and neutral in terms of carbon dioxide emissions. The use of hydropower provides rational management of resources and allows minimizing the level of industrial emissions. Thus, locating generating capacities for tens of MW, we do not damage nature and do not hamper the development of other types of industry.

After the ruble fall in 2014 in relation to major world currencies made the cost of electricity in Russia one of the lowest in the world. And the use of hydropower stations managed by RUSAL and high-voltage transmission lines can reduce the cost of electricity delivery. The total cost of electricity is about 3 cents per kW, taking into account all overheads. This gives maximum profitability for mining now and will ensure competitiveness in the future. In case of decrease in its profitability, companies with a low cost of electricity will have the advantages.

Table 1 shows the comparison of the cost of electricity at **AA! LAB** with the average cost of it for industrial consumers with high voltage connections. It can be seen that in comparison with European countries, the location of generating equipment on **AA! LAB** sites saves hundreds of thousands of euros per month.

At the same time with the construction of farms in the territory of Russia, farms` construction in the territory of Bulgaria is going to be held. At a much higher price for electricity, a location of generating capacities in the territory of this European country gives protection to the business, makes it possible to quickly move generating facilities from one country to another, to protect against possible adverse changes in legislation in one of the countries.

In the territory of Bulgaria, the price for electricity is 5 cents for AA! LAB.

The second stage is going to be the location of generating capacities in Kazakhstan, also in cooperation with **RUSAL**. The cost of electricity will be a record low - 2.4 cents per kW/h.

Also, the construction of generating capacities in Hungary is envisaged, using own generation based on thermal sources, which will give an average cost of 1 kW/h equal to 2.2 cents.

The final stage is the location of capacities in Kyrgyzstan, where the price for electricity is going to be 1 cent per kW/h.

Table 1. Comparison of electricity prices for industrial consumers connected by high voltage

Country	Price USD/kW/b	% relatively to AA!LAB	Monthly overpayments using 10 megawatt hours, USD
AA!LAB Karelia	0,030	0%	
AA!LAB Kazakhstan	0,024	-20%	- 43 200,00
Australia	0,042	39%	83 520,00
South Korea	0,044	45%	97 200,00
Malaysia	0,045	48%	104 400,00
Canada	0,045	49%	106 560,00
Russia	0,049	62%	134 640,00
Taiwan	0,052	72%	154 800,00
Norway	0,060	99%	213 840,00
Sweden	0,069	131%	282 240,00
USA	0,070	134%	290 160,00
Mexico	0,071	136%	293 040,00
Spain	0,072	140%	301 680,00
Finland	0,074	147%	318 240,00
Brazil	0,075	148%	320 400,00
France	0,079	164%	354 240,00
Romania	0,081	169%	365 760,00
China	0,090	200%	431 280,00
Poland	0,102	239%	516 960,00
Holland	0,107	256%	553 680,00
Denmark	0,108	261%	563 040,00
Great Britain	0,112	273%	589 680,00
Austria	0,115	282%	608 400,00
Ireland	0,115	285%	614 880,00
Belgium	0,118	293%	632 880,00
Germany	0,121	302%	653 040,00
Czech Republic	0,124	313%	676 800,00
Italy	0,126	320%	691 200,00
Hungary	0,129	329%	710 640,00

Despite the fact that we are renting existing production areas - large hangar-type premises, with an area of about 10,000 sq. meters, equipment for mining is installed in freight containers. The advantage of this method is that such containers can be easily built in the most convenient place, and then, after a complete check of the operability of all systems, including remote monitoring and automatic management of mining, deliver them to a production object. Another advantage of this approach is that all our containers with equipment for mining are equipped with extremely efficient cooling and ventilation systems. In addition, if it is necessary, such containers can easily be moved from place to

place. The average cost of one fully-equipped container is about 300 000 US dollars and varies from the equipment used.

### What kind of equipment do we use for mining

We use the most modern equipment, which brings the maximum profit. At the same time, we do not forget about diversification. There are two main types of miners. ASIC miners are highly specialized computers which are capable to solve a task extremely efficiently. And the miners based on video cards are ordinary computers with 4-8 installed video cards. Such computers are able to solve a wide range of tasks, but they are inferior to ASIC miners in their field.

Therefore, all cryptocurrencies for mining are divided into 2 groups - those that make sense to be mined with ASIC miners and those that are mined by video cards. Creating ASIC miners for the last group is simply unprofitable because their cost will be commensurable with the cost of miners on video cards.

Today the most stable investments are

ASIC miners Bitcoin ANTMINER S9



1. ASIC miners for altcoin mining L3+

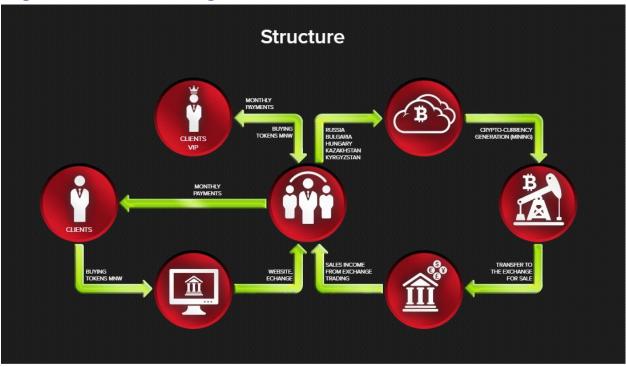


2. GPU miners for mining big range of cryptocurrencies, such as Ethereum, ZCash, ZenCash, MonaCoin μ others.



**Mining Now!** uses all these types of miners, we build some of them on our own, buying components, reducing their cost.

# Legal structure of Mining Now!



We pay great attention to legal issues. **AA! LAB** is a company registered in Bulgaria, the country with the lowest taxes in the European Union, favorable to cryptocurrencies.

All software and hardware development, as well as purchased equipment belongs to **AA! LAB**. Participants in the **Mining Now!** project can purchase tokens directly by transferring fiats (dollars or euros) on a public offer to **AA! LAB** account, or by transferring cryptocurrency to the smart contract posted on the website www.miningnow.online

Each participant can choose the type of payments that he will receive for using his rights to the computing capacities of **AA! LAB** in cryptocurrency to his personal wallet or personal bank account.

To ensure work in countries where generating capacities are created, local representative offices of the company are being opened, working under an agency agreement. Including, for the convenience of local participants of **Mining Now!**, they can sign a personal investment agreement and invest into the account of **AA! LAB** through a local representative. Also, the payment of income to a participant can be organized. In this case, it is possible to withhold local taxes (in Russia - income tax) from the participant's income.

Special terms are offered to VIP clients investing in the project from 100 000 euros or more. In addition to an additional discount for tokens, a personal investment agreement is concluded, assistance in setting up the software is provided, consultations in the field of cryptocurrency are given, and also help in selling tokens on the exchange. It is also possible to buy back tokens by agreement of the parties.

# What the involved money resources are spent on

In the **Mining Now!** project! indirect costs are minimized. At the initial stages, we are not engaged in the construction or purchase of buildings, power stations or even transformer substations. We use the ready infrastructure provided by our partners. This makes it possible to use the money of investors as efficiently as possible. After all, they invest exactly in the generation of cryptocurrencies, as in the most profitable business. Therefore, we use the majority of the invested money for purchase or components for building. The construction of own power generation facilities is expected only at the second stage of the project, in Hungary. There modern methods of obtaining electricity from thermal sources allow obtaining a low cost of electricity received.

Miner consists of equipment operating 24/7 at extremely high loads, and therefore technical failures are quite common in this area. Miners need to be repaired in service centers, which takes a lot of time, especially if such service centers are located abroad, and every day of idle time means a loss of profit. Therefore, we organize independent workshops for equipment constructing and repairing in the immediate proximity to the places of its use.

This makes it possible to minimize idle and improve the efficiency of the mining process. As a rule, representatives of this industry do not disclose information about their mining facilities in order to preserve trade secrets and prevent competitors from accessing inexpensive sources of electricity. We openly publish information about our current and future locations, financed by the sale of tokens.

# Own developments of AA!LAB

**AA! LAB** specialists have done a lot of preparatory work in order to make the process of mining as efficient as possible, and also to shorten the period from receipt of investments to their conversion into operating computing capacities up to 1 month.

#### Miners

In **Mining Now!** laboratory all main models of miners that are on the market were studied. All the miners were tested for reliability and efficiency. For each of them, control software was written for inclusion in the own information management system **AA! LAB**. This system allows automatic tracking of current rates of cryptocurrencies, the complexity of generating each cryptocurrency and taking into account the coefficients calculated by the analytical department **AA! LAB**, considering the perspectives for changing the rates of a particular cryptocurrency. A decision on each type of a miner to use is made taking into account the currency which is the best for mining at the moment. Also, this system collects

statistical information on the basis of which the efficiency of a miner is calculated, the stability of its operation, problems in its work are revealed in advance.

The system is able to control the power of a miner in the automatic mode, which allows you to remotely turn off and on the power to the whole block of miners, and also to reload the hung up miners without human intervention.

In addition, own models of miners on video cards have been developed, as well as the building of ASIC miners using components.

All this allows you to maximally diversify the business and purchase the most effective equipment at the moment in the shortest time and at the lowest price

#### Mining Now tokens

**AA! LAB** specialists have developed a smart contract for Mining Now tokens. It will be available in December 4, 2017. At the same time, tokens will be issued and distributed among the participants on pre-SALE and pre-ICO.

Also, software that monitors the possession of tokens in automatic mode has been created, allowing you to get income received from the use of the rights that belong to an investor to a portion of the computing capacity. The entire process is automated and occurs in an automatic mode.

**MNW** tokens are issued only for investment. This guarantees that there is no inflation. The generation capacity directly depends on the volume of investments, therefore, investors who own **MNW** tokens do not compete with each other for capacity, but vice versa create a cumulative effect for each other.

We are carrying out ICO to implement the first stage of the project - the creation of generating capacities in Karelia and Bulgaria. After solving this problem, secondary sale of tokens will be held for other stages of the project. Tokens will be sold not at par, but at the current exchange price. The maximum number of tokens sold at all stages up to the end of the ICO is 3,600,000 tokens.

The price of a token is set based on the principle that it must bring at least 3% of revenue monthly. Since the profitability from mining is higher, the cost of tokens will grow. Therefore, it is especially important for investors to take part precisely at the stage of primary placement of tokens.

On the implementation of all stages of the project **Mining Now!** there are going to be not more than 10,000,000 **MNW** tokens released. A lot of projects burn unused tokens. We do not do this, since tokens are issued only for new investments.

The founders of the project **Mining Now!** receive the same income from their tokens as the others. At the initial stage, the founders own 100 000 **MNW** tokens, which corresponds to their investment in generating capacities. Also, the founders will be allocated 10% of the tokens bought by new investors.

#### Website. Personal account.

The website <a href="www.miningnow.online">www.miningnow.online</a> and a personal account have been created by experts of AA! LAB and are integrated with the mining information system. This allows investors-users of a personal account receiving the most detailed information about the project, current incomes, and forecasts of payments. Also, in a personal account, an investor can choose the form which he wants to receive a reward in- cryptocurrency or fiats in.

# Mining Now tokens (MNW)

#### What are Mining Now advantages (MNW)

Purchasing an **MNW** investor buys the rights to use part of the computing capacities to generate cryptocurrencies owned by Mining Now! Proportional to the number of tokens that belong to him. All costs for the placement, maintenance, repair, upgrade of computing capacities is done by Mining Now! All participants receive 30% of the profit got as a result of generating cryptocurrencies.

#### What is the fundamental difference from cloud mining and other mining projects

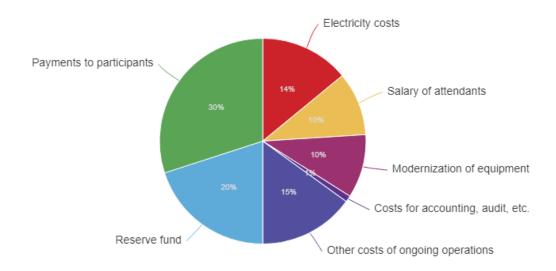
Buying an ordinary cloud mining, you get a generating capacity, most often measured in MH or GH. With the course of time, the complexity of generating cryptocurrency is growing and the participant who bought them is offered to buy more capacities, or the generation will quickly fall. Sometimes it happens that an investor does not even have enough time to get a significant income until the moment when it will be necessary to invest again.

In the case of the **Mining Now!** Project, we undertake the upgrade of the computing units, their maintenance and development. Part of the profit received as a result of the activities goes to further increase in computing power. Thus, the generation capacity of the purchased capacities not only does not decrease, but also increases with the operation. The main thing is that the investor receives income not only from the process of generating critical loans, but also due to the growth of the value of MNW, which he can sell on the exchange, fixing his income.

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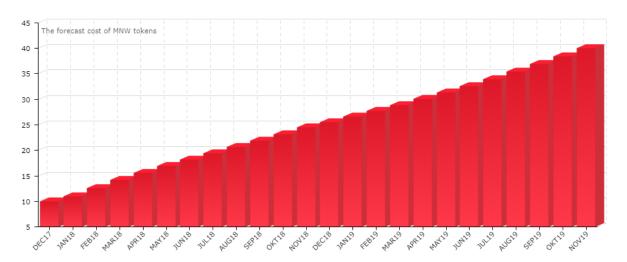
#### Income distribution

Incomes received from the activities of the project **Mining Now!** Divided according to a pre-approved scheme



# MNW cost forecast

Due to the fact that the mining profitability amounts to 20% of the equipment cost per month now, the income distributed between investors will be higher than the promised 3% of the cost of tokens. This will increase the cost of tokens. The forecast for the growth cost is shown in the graph



# Profit calculation for an investor

Let's analyze the income an investor who bought 10,000 MNW tokens will get

Period, month	Investments	MNW tokens ammount	Coins` price	Month dividends	Monthly dividend yield,%	Dividends cumulative	Total	%, annual
1	100 000,00	10 000,00	100 000,00				100 000,00	)
2			125 090,25	3 790,61	3,8%	3 790,61	128 880,86	173,29%
3			138 535,26	4 198,04	4,2%	7 988,65	146 523,91	186,10%
4			152 169,09	4 611,18	4,6%	12 599,84	164 768,93	194,31%
5			166 118,82	5 033,90	5,0%	17 633,74	183 752,56	201,01%
6			180 483,17	5 469,19	5,5%	23 102,93	203 586,10	207,17%
7			195 344,04	5 919,52	5,9%	29 022,44	224 366,49	213,20%
8			210 773,06	6 387,06	6,4%	35 409,51	246 182,57	219,27%
9			226 835,57	6 873,81	6,9%	42 283,31	269 118,88	225,49%
10			243 593,16	7 381,61	7,4%	49 664,92	293 258,09	231,91%
11			261 105,43	7 912,29	7,9%	57 577,21	318 682,63	238,56%
12			279 431,12	8 467,61	8,5%	66 044,82	345 475,94	245,48%

From the table it can be seen that an investor will receive the main income by increasing the value of his investments - **MNW** tokens, which at any time can be sold on the exchange or take advantage of a buyback offer that will periodically placed by the **Mining Now!** project.