

WIND ENERGY MINING



WHITEPAPER

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Before you buy the token of the project, please, read carefully and take into account this disclaimer.

The document aims to present general information on the project. Nothing in this document shall be deemed to constitute a prospectus of any sort or a solicitation for investment or guarantees of future profits, nor does it in any way pertain to an offering or a solicitation of an offer to buy tokens etc.

The information in this document constitute "forward-looking statements" and is not a statement of any historical fact. The statements, which are contained in this document, are forward-looking and contain statements concerning intentions and current beliefs and expectations of the project team. The forward-looking statements are not promises or guarantees of any sort.

References to any studies, projections, and information in the public domain are used in this document in the purpose to point out the credibility of the source of information and do not guarantee the accuracy and comprehensiveness of this information.

WEMcoin is a domestic means of payment and does not provide voting rights in the company, shares of the company, participation in the activities of the company, rights to receive dividends and any other entitlements, possession of tangible assets and any other rights connected with investment and investment activities.

The company, project team, and any third parties invited to participate in the development, implementation and carrying out the project, do not incur responsibility for any losses from actions with tokens not provided for in the document.

The company, the project team, and any third parties invited to participate in the development, implementation and carrying out the project, do not bear responsibility for any consequences connected with action of force majeure not dependent on the will of the company, the team and the third parties participating in the development, implementation and carrying out the project (equipment breakdown or destruction because of natural disasters, fire; steal or deliberate damage of the equipment by third parties not relating to the company and the project, changes in legislation, and other force majeure events)



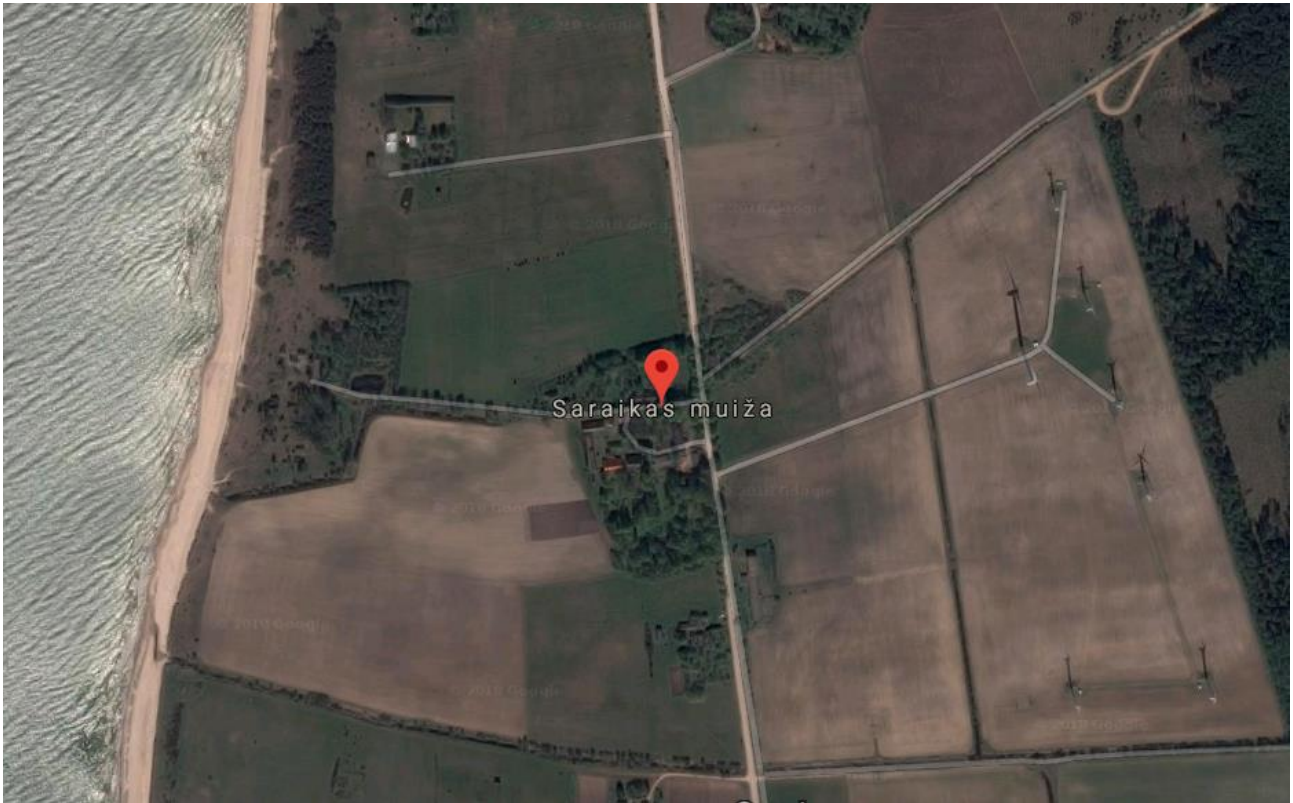
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1. About the company



The Latvian company ETB Ltd. has been dealing with wind energy production for more than 10 years. The company owns seven wind-driven electric power stations with total capacity of 4.5 MW. The power stations are located in the rural area in 800 meters from the seashore and occupy a total area of about 30 hectares, which is also our property. The geographical location of the wind park - 56.696212° north latitude and 21.066440° east longitude - are ideally suited for wind energy production, since wind in these parts is an inexhaustible natural resource, which makes it possible to produce about 8 thousand megawatt hours of green electricity per year. Against this background, taking into account the experience of successful work in the industry, we see considerable potential for the development of the company - advanced technologies on the market of electricity production equipment allow to modernize production and sufficiently increase electricity production thus contributing to the development of alternative energy in general.



2. The problem

Environment and power generation

To date, the problem of global warming and emissions of greenhouse gases has become a particularly urgent issue world community of nations attempts to resolve both at the level of regulation and at the level of real use of green-energy technologies. The catastrophic consequences of natural disasters manifest themselves practically in all spheres of life. Anthropogenic impact on the environment, among other things, is acknowledged as the reason for changes. Global energy production shows unpleasant statistics on greenhouse gases emissions since it is based mainly on the use of fossil energy sources. The United Nations Framework Convention on Climate Change included measures to mitigate and adapt to climate change, but greenhouse gas emissions continued to rise. In 2015, the Paris Agreement on Climate Change was adopted. The purpose of the agreement is to retain the global temperature rise below 2 degrees above pre-industrial levels and to enhance the ability to adapt to the adverse effects of climate change. The parties of the agreement reached common ground on the need for national contribution to the achievement of climate objectives. One way to achieve these objectives is to increase renewable energy production and consumption. On 28 November 2017, the Energy Committee of the European Parliament approved the changes in the EU directive on renewables, according to which the share of renewable energy consumption should be increased up to 35% by 2030. At the same time, the European Parliament noted the need for financial support for measures, which increase the share of electricity produced from renewables, highlighting that the measures should be stable and predictable, and the national authorities should avoid frequent and retroactive changes.

Political risks and bureaucratic obstacles for green energy development

Since we have been producing green electricity for many years now, we have had the first-hand experience of the problems renewable energy producers face. In spite of the high level of development, the building of "green" power stations still requires a huge outlay. The industry has a strong need of subsidies, without which the renewable energy production becomes uneconomical.

However, the green electricity producers and those who are going to produce it, often face reluctance of bureaucratic entities and political elites, closely related to oil and gas monopolies, or acting in support of their perceived interests, to support such production. Moreover, producers face deliberate intention to impede their development. Despite European Council plans were amplified long before their official publication, it is not uncommon when possibilities of the producers are limited by the bodies responsible for the development of green energy production, and new unreasonable requirements making the production impossible in principle, are introduced. As a result of adopting retroactive decisions, the payback problem is thrown into sharp relief. The possibility to build new green power stations is doubtful, as does the achievement of general European targets, because the political and bureaucratic obstacles connected with oil and gas sector lobbying, limit the freedom of actions of the industry willing to develop green energy production. Therefore, green energy producers are challenged to develop and apply new schemes for production finance without state aid.

Electricity and cryptocurrencies mining

One more serious problem that appeared against the background of the increased popularity of cryptocurrency mining is its influence on climate. The advent of blockchain technology has encouraged the creation of numerous blockchain projects and startups. The most common sphere of application of the technology to date is cryptocurrencies – digital assets used as a means of payment in certain markets of goods and services. The only way of cryptocurrency emission, or generation, is mining – transaction-confirmation mechanism. Mining is carried out by the network of independent computers, which are distributed around the world, and miners, in their turn, receive a reward in cryptocurrency for providing their processing power. Today, mining is carried out both by private persons and in industrial scale. Undoubtedly, it is a substantial process that ensures functioning and integrity of the entire system, but it, however, has a significant shortcoming – it consumes a lot of energy. As already mentioned, a great deal of energy consumed originates from fossil sources, raising concerns and making some countries consider the possibility of introducing restrictive measures against mining.

3. The proposed solution

As a part of a solution of these issues, we consider creating a model in which renewable electricity is used for cryptocurrency mining, and the proceeds from the cryptocurrency sale are subsequently used for further development of renewable energy.

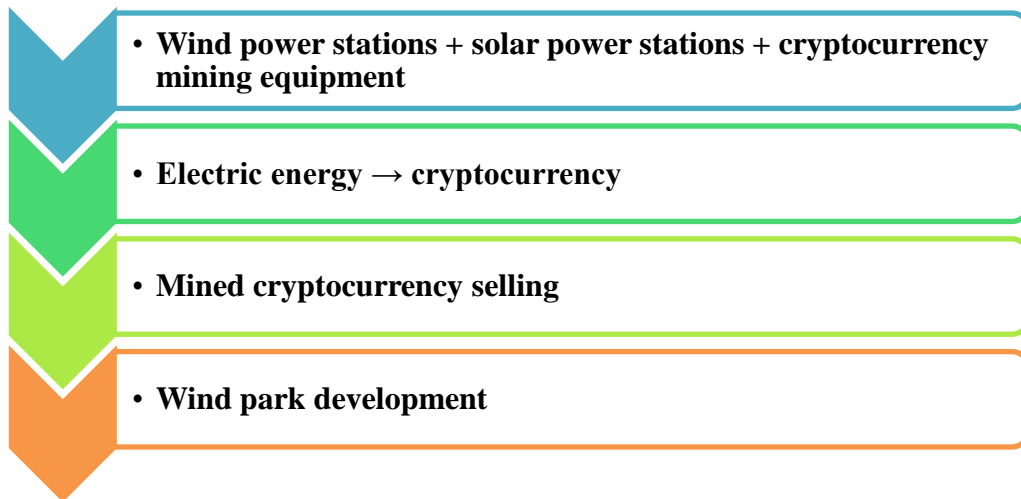
The transition to such a model of renewable electricity production financing will considerably improve the possibilities of the company. At present situation on the market, it is more profitable to spend electricity on mining than just sell it. Broadening the scope of activities and selling green electricity in the form of mined cryptocurrency will help to obtain additional funding for the modernization of current electricity production and the introduction of new productive capacities. This should help to raise output in the production of renewable electric energy, and, as a whole, will lead to an increase of its share and contribute to improving the environmental situation. In addition, it allows to examine development perspective without state support.

The value of such a model would be that production, in this case, has no negative environmental impacts - green energy helps to obtain "green" cryptocurrency. The combination of mining and electricity production has an additional advantage. In the modern electric power industry, the issue of accumulation of electric power is becoming increasingly important. During the periods of weak demand for electricity, there is a need to balance its production and consumption - it is necessary to either reduce production, or to create artificial consumption, or to accumulate the energy and use at a time of enhanced demand. Unfortunately, to date, there are no sufficiently large, inexpensive, high-performance batteries, which could accumulate excess electricity, transfer it directly to the network during periods of high demand, and would not affect electricity price. Hydro-accumulating power stations solve this problem, converting electrical energy into mechanical one by pumping water from the lower reservoir to the upper one, and, at the time of increasing demand, the water is discharged into the lower reservoir, and a hydroelectric generator converts the mechanical energy into electrical one. Along with that, another approach to resolving the issue of accumulation of electricity is used - its consumption is increased. To that end, it is necessary to artificially create a new consuming facility. Cryptocurrency mining rigs can effectively perform the function of such a facility and consume electricity when it is not used. Thus, participating in the process of electricity balancing, mining has a beneficial effect on electrical grids.

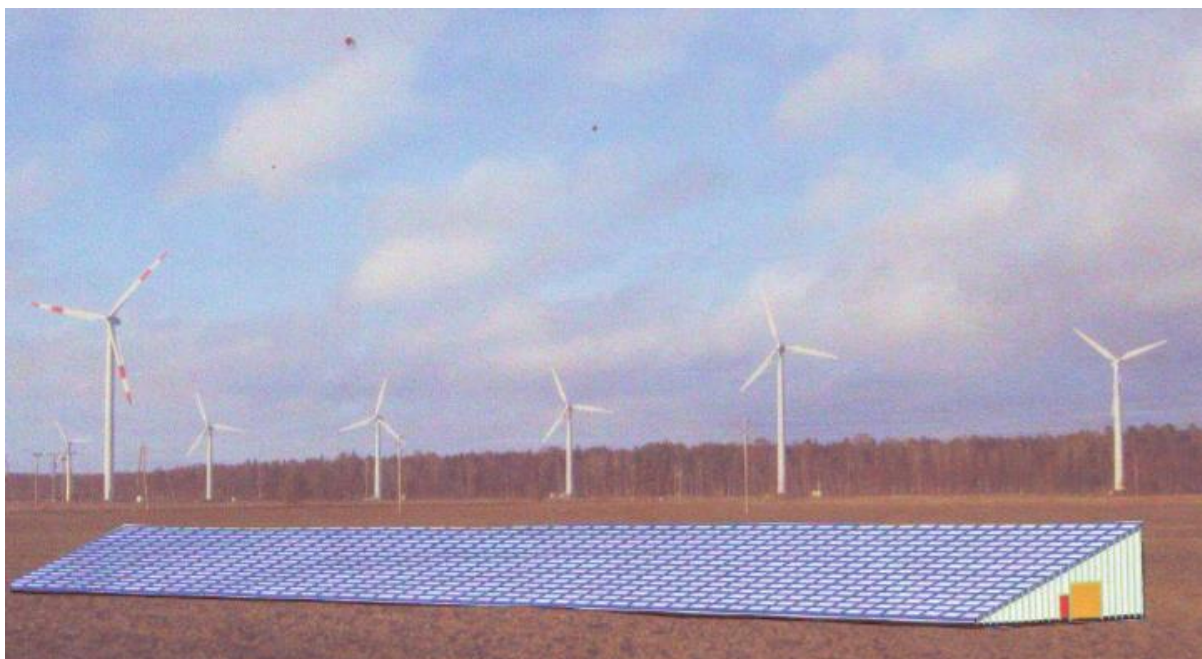
In parallel, we are exploring funding opportunities and possibilities to make energy production cheaper using blockchain technology on a broader scale. According to the most recent data, renewable energy sector shows positive growth rates. However, there has been an insufficient use of the most effective resources potential — wind and solar — in promising for production regions. The reason is the weakness of subsidy systems. Latvian state support model has considerable shortcomings, and the key one is providing support to both green and natural-gas power stations. The result of the model is high electricity bills that ultimate consumers receive since they bear the costs associated with subsidies for energy producers. Introduction of blockchain technology and smart contracts will primarily reduce bureaucratic costs, such as information collection and processing costs, costs of negotiations and decision-making, control costs, etc. In the case, both producers and the state benefit since this would free additional funds from the national budget. The funds could be used for other purposes, including establishing a prototype of a blockchain-based electricity production and trade system without compromising the interests of ultimate consumers. Recently, an active interest in blockchain technology has been demonstrated on the State level, and, therefore, we consider recommending the model and involving to our study industry-specific organizations and national entities responsible for energy development in the state.

4. Project description

Within the project, we plan to install containers with ASIC units next to each wind power station. The obtained cryptocurrency (BTC, LTC, ETH, Zcash, Dash etc.) will subsequently be sold at an exchange and provide further development of the project.



In the first phase of the project, we plan to purchase mining hardware. We also plan to supplement the wind park with the installed capacity of 4.5 MW with solar power stations with total capacity of 2 MW, which will serve as power supply for a cryptocurrency mining farm together with wind power stations and increase wind power stations capacity to 10 MW. In this way, we will increase the nominal output of our renewable resource park to 12 MW and more.



The favorable geographical location of the enterprise contributes to effective equipment cooling.

The implementation of mining capacities is going to be undertaken in phases. The company will provide funding for the project out of profits from the sale of electricity and mined cryptocurrency.

As part of broadening the scope of our activities, we offer those wishing to an opportunity to install their own mining equipment on the territory of the renewable resource park, and to use green electricity that is produced by our power stations.

WEMcoin, which is released specially for this purpose, will serve as a means of payment for the services provided by our company.

5. WEMcoin

WEMcoin is an ERC20 token on the Ethereum blockchain

WEMcoin is a functional token of the project and is intended to serve as:

- a means of payment for renting a place for mining equipment;
- a means of payment for electricity;
- a means of payment when buying a Wind Energy Mining product – a specialized mining container powered by wind power plants

WEMcoin price will depend on the exchange rates.

WEMcoin can be bought on TradeSatoshi, Forkdelta exchanges.

Using WEMcoin, you support the development of renewable energy and green mining.

All the actual information on the project will be published on the website of the project, www.etb.lv, under the "News" section. You can periodically review information on the operation of the equipment, and take a virtual tour around the park territory there, too.

6. Roadmap

1Q 2018 — project preparation,

2Q 2018 — mining equipment installation — the first stage

2Q 2018 — the beginning of mining, WEMcoin release

3 - 4Q 2018 — mining capacity extension

1Q 2019 — mining, product development — specialized container for cryptocurrency mining on wind energy

1Q 2019 — product testing

2Q 2019 — the launch of the container, preparation for serial production.

2019 and beyond:

Installation of containers next to each turbine,

Container manufacturing on order,

Installation of solar panels,

Mining, gradual expansion of the renewable resource park.

References to sources of information

European Parliament, press releases, 28-11-2017: Cleaner energy: new binding targets for energy efficiency and use of renewables

<http://www.europarl.europa.eu/news/lv/press-room/20171128IPR89009/cleaner-energy-new-binding-targets-for-energy-efficiency-and-use-of-renewables>

The text of the 2015 Paris Agreement:

https://unfccc.int/files/meetings/paris_nov_2015/application/pdf/paris_agreement_russian_.pdf

COMMUNICATION FROM THE COMMISSION Guidelines on State aid for environmental protection and energy 2014-2020:

[http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014XC0628\(01\)&from=EN](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014XC0628(01)&from=EN)