VenusEnergy
WHITEPAPER

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Abstract

Every year, humanity consumes more and more energy. Most countries often use fossil fuels (oil, gas and coal) to meet their energy needs. Fossil fuels are still the most important of all types of fuels, accounting for almost 77% of the total fuel consumed for their needs by Central European consumers. Atomic energy is 14% of the total. energy, only the remaining 9% – from renewable energy sources.

The average European consumes 27 megawatt-hours (MWh) per year, including all household, industrial, and transportation needs.

Basically it is the energy extracted from fossil fuels that is used for the extraction of cryptocurrency. Since the exchange rate of currencies has now fallen, and the amount of the extracted currency does not cover the cost of electricity – you need to buy more powerful ASIC servers that will consume even more energy.

VenusEnergy project offers a way out – to extract cryptocurrency with the help of electricity generated from renewable energy sources. This is especially true for large mining farms (with a large number of servers) that consume large amounts of energy. For example, a medium-sized farm can consume up to 20 MWh of electricity.

It is worth investing in the VenusEnergy project not only for its beautiful idea – "A Cleaner World", but also because the project is financially beneficial. This is evidenced by the following financial calculations.

Introduction

Electricity is often produced with the use of heat engines received as a result of burning coal, household wastes and other sources of fuel. Such a method of energy extraction is extremely environmentally unfriendly as more and more greenhouse gas is emitted into the environment, thereby increasing the greenhouse effect and exhausting the Earth.

Although the temperature on Earth has been increasing for millions of years, nevertheless, the temperature rise in the recent times is deemed to be too fast. This is conditioned by ever increasing consumption, specifically, by the consumption of electric energy.

The global temperature increase will cause further changes: rising sea level, respectively increasing or decreasing yield of various crops, melting of glaciers, weakened river flows, extinction of species and increase of diseases carriers. In order to avoid and decrease the greenhouse effect and the emission of greenhouse gases into the environment, various steps have been taken.

One of these steps is described in the Kyoto protocol, whose participants are countries willing to preserve the Earth and leave it for the upcoming generations as beautiful as it is now.

The use of renewable energy sources can be one of the main methods for reducing the greenhouse effect. Such sources of electrical energy as the sun, wind, geothermal heat, are natural energy resources, the appearance and renewal of which depend on the processes of nature itself.

Renewable energy sources must be of great current interest for bitcoin miners.

Using of renewable energy sources for the production of electric energy, which is to be used for the performance of bitcoin mining works, significantly decrease expenses on electricity, meaning that profit received for the works performed is bigger. Also, this leads to saving nature and decreasing the greenhouse effect.

The **VenusEnergy** team supports the idea of a clean world and seeks to spread the use of renewable energy in daily activities. An increase in the demand for bitcoin will also lead to an increase in the volume of "mining", while the use of renewable energy sources in the performance of work will lead to the preservation of nature, bearing in mind that the work is performed equally effectively.

Background

What if electric energy was produced by solar panels, wind power plants? Renewable energy sources account for only 19% of the production of electricity, of which 16% is produced by hydroelectric power plants and 3% from other sources. Why is it not so popular today?

Why do we still get most of the electrical energy from thermal power plants? Renewable energy recovery is expensive because devices that effectively recover energy from renewable energy sources are expensive and their efficiency is low. **But what if we can reverse this trend?**

Thermal power plants are the most common type of power plants in the world. They often feed on mineral fuels (petroleum products, bituminous coal, natural gas, etc.), bio-fuels, and public and industrial waste. Thermal power plants prevail in countries that have a sufficient amount of fossil fuels or import it in large quantities. Countries rich in fossil fuels produce energy only at thermal power plants (UAE, Kuwait, Qatar, etc.).

Advantages of a thermal power plant: simple and inexpensive construction, ease of installation near cities with a large number of users, consumption of various fuels, and relative safety.

Disadvantages: consumption of depleting resources, dependence on transport, relatively expensive energy production, significant pollution.

Thermal and nuclear power plants, other companies that supply and use electrical energy and heat, emit a significant amount of heat into the environment. A common practice is to use water from natural reservoirs, which is then returned by them to cool power station equipment. Warm water discharged into these reservoirs (which are called coolers), especially when it contains biogenic, toxic and other substances, violates the biological balance of ecosystems: generates pathogenic and dangerous infectious microbes, adverse organisms that impede the normal operation of power plants.

The temperature of the water in the cooler rises; water vapor increases; water level falls in summer; its hydrochemical qualities as well as changes in the microclimate of the environment change; the metabolic processes of biogenic materials (eutrophication) are accelerated; deteriorating sanitary condition of the water.
Thermal power plants often have an excess of heat that is discharged into the air through chimneys, thereby polluting the air.

All thermal power plants produce waste heat as a by-product of useful electrical energy. The amount of waste heat energy is equal to or exceeds the amount of energy converted to useful electricity. Gas-fired power plants can reach 65% conversion efficiency, while coal and oil plants reach from 30 to 49 percent.

Waste heat causes an increase in temperature in the atmosphere, which is small compared to greenhouse gas emissions from the same power plant. Natural liquid cooling towers at many nuclear power plants and powerful fossil fuel power plants use large hyperboloid chimney structures that release waste heat to the surrounding atmosphere by evaporating water.

Such a significant emission of harmful greenhouse gases into the atmosphere stimulates the greenhouse effect, which causes irreversible consequences for the Earth and the constantly increasing global warming.

Greenhouse gases are gases that are present in the atmosphere and absorb some of the infrared radiation that enters the atmosphere. Some of them are a natural part of the atmosphere, while others are in the atmosphere due to human activity. Among them are water vapor (most), ozone (O3), carbon dioxide (CO2), methane (CH4), nitrogen oxide (N2O), halogen-carbons (chlorine-fluorine carbons CFC). The sources of these gases vary from natural processes to the activities of people themselves.

After the industrial revolution, humanity is becoming increasingly responsible for the ever-increasing levels of carbon dioxide in the atmosphere. Humanity needs more and more energy resources. Although alternative resources are becoming increasingly popular, at the moment they hardly make up a few percent of the world's energy resources. Many environmental organizations accuse the United States of not signing the Kyoto Protocol. China, which continues to develop its wind energy energy infrastructure, currently does not agree to take measures to reduce the greenhouse effect, asking for economic support from other countries.

The increasing use of slowly recoverable and limited, as well as non-ecological energy resources such as coal and oil, is becoming increasingly problematic from the point of view of the impact not only on climate but also on the health of people and other animals, as well as ecosystems. The constantly increasing amount of carbon dioxide in the atmosphere causes unfavorable processes: the acidity of the ocean increases (from 1751 to 1994, the pH of the ocean decreased from 8,199 to 8,104), the carbon cycle becomes unfavorable.

Greenhouse gases absorb some of the infrared rays that enter the atmosphere and reflect them back into the environment, thereby retaining heat near the surface of the earth. Some greenhouse gases appear naturally in the atmosphere, while others grow as a result of human activity. The latter gases are called anthropogenic greenhouse gases. Increasing the concentration of anthropogenic greenhouse gases is considered the main cause of global warming and the greenhouse effect.

The greenhouse effect is a process leading to global warming as a result of the absorption of infrared radiation from the atmosphere.

The Earth receives energy from the Sun in the form of rays. Energy that is not absorbed by the earth's atmosphere and surface returns to space. This happens in two ways: by reflecting the sun's rays and by emitting infrared rays (heat) from the surface of the Earth. In the first case, the Earth reflects about 30% of the received stream of sunlight, the remaining 70% is absorbed by heating the Earth with its atmosphere, oceans, etc., Being mainly a source of energy for processes on Earth (including life processes). Heat absorbed and not used by the earth's surface is returned to the atmosphere. Because of the greenhouse gases that retain infrared radiation, the atmosphere releases only a fraction of this energy into space. The rest is returned to the surface of the Earth.

If there were no atmosphere on Earth, its surface would warm to 18 ° C on average, and the real average temperature was about 15 ° C. Therefore, the natural greenhouse effect is important for Earth processes and climate. However, as a result of accelerated industrialization over the past century, emissions of carbon dioxide, methane, nitrous oxide and other gases into the atmosphere affect the balance, thereby causing the threat of global warming.

Global warming is an increase in the total temperature of the earth's atmosphere near the surface and the oceans recorded during the last decades.

During the 20th century, the average global temperature increased by 0.74 ± 0.18 ° C. Although the temperature on the planet has steadily increased over the course of a million years, the last heating is considered too unexpected and is due to the greenhouse effect caused by human activity. Greenhouse gases that heat the earth's surface and lower atmosphere are released by burning minerals.

Global heating effects. Some changes, at least in part due to global warming, are already noticeable in people's lives and in the environment. This is the melting of glaciers, the destruction of ice barriers, rising sea levels, changing the amount and distribution of precipitation, increasing the frequency of hurricanes and other extreme weather conditions. Since, under heating conditions, general trends, intensity and frequency, it is difficult or even impossible to attribute heating as the cause of specific phenomena. The following global heating effects are expected: a rise in sea level of 11–77 cm by 2100, a large adverse impact on agriculture in the world, a possible slowdown in the thermohaline circulation, depletion of the ozone layer, an increase in the frequency of hurricanes and other extreme weather conditions, an increase in ocean acidity , an increase in the incidence of various diseases (such as malaria) and epidemics, significant extinction of biological species. One study predicts that it is possible that the climate will change to such an extent that 18–35% of the 1103 species of animals and plants on Earth will disappear by 2050.

« think that the risk that current climate control actions will not be sufficient will be up to 50 percent," said Thomas Schelling, a professor at the University of Maryland. The World Meteorological Organization and the US Environmental Protection Agency predict more frequent disasters associated with meteorological phenomena caused by abrupt weather changes, as well as population density. The likelihood and magnitude of these effects is difficult to predict due to a variety of factors and the inability to determine the influence of factors such as economics, technology and social development, therefore, this effect should be interpreted as a probability, but not as a statement.»

The VenusEnergy team does not want to wait for such radical global changes. In addition, one of the goals of the project is to encourage mutual communication between people without the intervention of any intermediaries, which is beautifully illustrated by the blockchain network and the idea of bitcoin. VenusEnergy proposes to use renewable energy sources to perform computational work in the blockchain network. This will be one of the small steps towards a better and cleaner life for humanity and a big step for the new blockchain technology with increased computing power, helping it to become massively used and to maintain competition with modern systems, such as payment systems. If you decide to use the solution we offer, mining will be cheaper if more people can execute them; Earth's resources

Project specific section

To solve the problem described above, the VenusEnergy team offers a solution related to the use of renewable energy sources.

Using renewable energy to perform calculations is a revolutionary solution.

The price of bitcoin, which is currently formed on the basis of the relationship between the price of electricity and computing power, will be simplified to the cost of computing power. The price of electricity will not affect the calculations in blockchain networks in such a way that it would be necessary to expand the number of people and equipment to perform the calculations. This would encourage networking, transactions, increased security; the network will develop and reach a faster version; and revolutionary technology can become competitive with the technologies currently available.

Renewable energy sources and their use reduce global warming and greenhouse gas emissions to the atmosphere, which improves the state of the Earth from different points of view. Calculating all bitcoins in a blockchain network consumes as much energy as a medium-sized country, such as Denmark or Ireland. **However, the implementation of the VenusEnergy proposal will lead to the fact that more and more people will start mining using renewable energy sources, which, in essence, will contribute to the idea of clean land.**

Therefore, the use of renewable energy sources during blockchain mining operations can be a good start and an example of switching to renewable energy sources in other areas. The massive use of renewable energy sources will also contribute to the promotion of industry; more and more solar collectors and wind power plants will be produced; these technologies will be developed, and their quality and efficiency will also improve.

Renewable energy sources

Renewable energy sources (RES) are natural energy resources, the occurrence and renewability of which are caused by natural phenomena: sunlight, wind, river current, sea waves, tides, biomass growth, geothermal energy, etc. The main source of almost all renewable energy is solar energy.

On a global scale, RES accounts for approximately 16% of the total energy consumed. The main part is biomass used as fuel (for example, wood); however, the use of solar, wind, wave and other types of RES is also increasing rapidly. RES is 19%, of which 16% is from hydroelectric power plants and 3% from other sources. RES use is growing rapidly in North and South America, Europe and Asia. Among RES, wind and solar power industries are particularly popular. In accordance with the installed capacity, the largest consumers of renewable energy are China, the USA and Germany. Rapid growth is observed in South Korea, Australia, France and other countries.

The main types of RES:

Wind energy — using airflow both on land and in the open sea or in the ocean to power wind turbines to generate electricity;

Solar energy – the use of sunlight to boil water, the production of electricity using solar panels;

Biofuel – the use of plant biomass for heat and power generation;

Biofuel – ethanol, diesel or methane, derived from biomass;

Geothermal energy – the use of heat from the inner part of the Earth.

VenusEnergy plans to concentrate its activities in the sector of **wind** and **solar** energy.

Wind power is the power of the air flow. According to calculations, 1–3% of the solar energy that reaches the Earth is converted into wind energy. This is 50–100 times more than the energy converted to biomass energy as a result of the photosynthesis process.

Most of this energy materializes in the higher layers of air, where the average wind force is ~ 160 km / h. As a result, wind energy becomes hot due to air friction. In wind energy, wind energy is the use of air flow through wind turbines of mechanical generators of electricity. This is one of the least dangerous branches of energy. However, even this is harmful to the environment. Birds (especially rare birds of prey), including bats, can be knocked down by the rotating rotors of wind power plants. This problem is particularly relevant on bird migration roads. Seeing the dead birds beaten by the rotors of wind power stations, i.e. food, birds of prey begin to decline until the rotors kill them. In 2005, wind power was 1% (or 58,982 MW) of all electricity produced in the world. Electricity produced using wind turbines accounts for 23% of electricity in Denmark, 8% in Spain and 4.3% in Germany. In 1999–2005, the amount of wind energy produced in the world increased four times.

Compared to conventional methods of generating electric energy using solid, liquid gas fuel, which requires reimbursement of the cost of purchasing fuel, delivering it to power plants, burning and removing ash, cleaning smoke and water in collagens, and to reduce air pollution, wind power plants do not needed such expenses. However, you can often hear the wrong opinion that the wind is an energy resource that costs nothing and that the electrical energy generated by a wind power plant is also worth nothing. Unfortunately, wind power road.

The cost is their installation and connection to the electrical network of the system, including the purchase of land for construction, asphalted roads passing by land, transportation of heavy elements to the construction site, complex installation works, construction of transformer buildings, cable laying, connection to the electrical network, input in operation, launch, etc. Maintenance of wind power plants during operation is not cheap, and should also be performed in accordance with the strict instructions of the manufacturers.

The operation of the wind power plant should be carried out by specially trained specialists who are able to find the causes of any possible defects and quickly eliminate them.

Solar energy is light and heat from the Sun, which is used using a number of constantly evolving technologies such as solar heating, photovoltaics, solar thermal energy, solar architecture, electrolytes with molten salt, and artificial photosynthesis. It is an important source of renewable energy, and its technologies are widely characterized as passive solar or active solar energy, depending on how they capture and distribute solar energy or convert it into solar power.

Active solar technologies include the use of photovoltaic systems, concentrated solar energy and solar water heating for energy production. Passive solar technologies include orientation of the building to the Sun, the choice of materials with a favorable thermal mass or light-dispersion properties, and the design of spaces that are with natural air circulation.

The large amount of available solar energy makes it a very attractive source of electricity. The United Nations Development Program, as part of the World Energy Assessment 2000, found that the annual potential of solar energy is 1,575–49,837 ecgege (EJ). This is several times more than the total global energy consumption, which in 2012 was 559.8 EJ. In 2011, the International Energy Agency announced that "the development of affordable, inexhaustible and clean solar energy technologies will have great long-term benefits. improve the energy security of countries through the use of a resource that is inexhaustible and largely independent of imports, increasing resilience, reducing pollution, reducing the costs of mitigating global warming and lowering fossil fuel prices. These benefits are global.

Additional costs for early deployment should be seen as an investment in training, they should be reasonably spent and should be widely distributed. " Solar energy is the conversion of sunlight into electricity, either directly using photo-electroplating (PV) or indirectly using concentrated solar energy (CSP). CSP systems use lenses or mirrors and tracking systems to focus a large area of sunlight into a small beam. PV converts light into electric current using the photoelectric effect.

It is expected that solar energy will become the world's largest source of electricity by 2050 using solar photovoltaics and concentrated solar energy, representing 16 and 11 percent of global total consumption, respectively. In 2016, after another year of rapid growth, solar energy produced 1.3% of world power.

Commercial concentrated solar power plants were first developed in the 1980s. The Ivanpah solar power plant with a capacity of 392 MW, in the Mojave Desert in California, is the world's largest solar power plant. Other large concentrated solar power plants include solar power plants – the Solnova solar power plant with a capacity of 150 MW and the Andasol solar power plant with a capacity of 100 MW in Spain. The 250 MW Agua Caliente Solar Project in the United States and the 221 MW Charanka Solar Park in India are the largest photovoltaic plants in the world.

Currently, Solar projects are being developed that exceed 1 GW, but most of the deployed photovoltaic cells are located on the roofs of small buildings with a capacity of less than 5 kW, which are connected to the network using final metering and / or feed rates.

In the past two decades, photo electroplating (PV), also known as solar photovoltaic, has evolved from a market of small applications to the main source of power generation.

A solar cell is a device that transforms light directly into electricity using a photoelectric effect. The first solar cell was built by Charles Fritt in the 1880s. By 2012, the effective efficiency exceeded 20%, and the maximum efficiency of photo-electroplating surveys exceeded 40%.

Potential

Solar power

Basically, the economic potential of solar energy covers the production of hot water (0.5 TWh), drying of agricultural products using solar energy (0.8 TWh) and passive solar heating of premises (1.25 TWh). In the long run, solar heating can be used for central heating in summer seasons; Photovoltaic systems can be important in the production of electrical energy. Solar energy is expected to reach 0.0012 TWh by 2020: these numbers are quite far from the established economic potential.

Wind energy

It has been established that the wind energy potential reaches a capacity of 0.85 TWh per year and is confirmed by the assumption that the wind farms in the continental part can be additionally designed to achieve a power of up to 500 MW. This is a limit that can not be overcome without additional costs for the reconstruction of the electrical network. It was found that the potential will be used until 2020. After 2020, part of the construction of wind power plants can be transferred to the sea, where wind conditions are the best.

Conclusion

The goal of IEO VenusEnergy is to create a commercial platform based on the use of renewable energy sources for the production of electrical energy.

That will allow investors, as well as ordinary users and coin holders (after launching the platform) to earn on:

- **Mining cryptocurrency**
- **Sale of electricity**

At the same time using renewable energy sources – which in turn solves the environmental problem. As a result, we get a compromise

- giving investors the opportunity to earn money, while distributing the funds received to create platforms that use renewable energy sources that do not harm the environment.

What are the benefits of VenusEnergy investors?

The ability to remotely obtain about 45 cryptocurrencies in real time. Production contracts are distributed in such a way that the user receives a threefold increase from the investment.

Additionally, contracts are integrated – which will open up the possibility of selling directly generated electricity

*(When Hard Cap will be reached).

Also, after the IEO – coin VENUS, will be placed on the stock exchanges and will have liquidity. That will allow investors and users to trade currency on the exchange.

"This is how we intend to contribute to solving the problem of global warming – starting with ourselves. We hope that this good practice will be picked up by other platforms in other areas of life."

Our goal is a synthesis, between striving for a cleaner world, and a commercial core, which will be a good aggregator for attracting more and more users, building more platforms for generating electricity – scaling the

GO GREEN FOR FUTURE GENERATIONS!

SWOT Analysis

Strengths

- Focus on sustainability and renewable energy sources
- Large discounts to buy mining power
- Active community
- An easy and secure transaction process
- Multiple partnerships and high scores on ICO review sites
- Little or no competition
- Decreasing greenhouse gas emissions

Weaknesses

- Lack of big marketing resources
- Market's reluctance to invest
- High initial investment
- Administrative bureaucracy
- Public's lack of knowledge in cryptomining technology

Threats

- Unstable blockchain trends
- Dependency on BlockChain adaptation
- Technology failures
- Mining platform safety
- Legal barriers

Opportunities

- Growing BlockChain technology market
- Rising importance of renewable resources and interest in sustainability
- Digitalization in the world, BlockChain will become accepted by people in their daily lives
- Subsidies

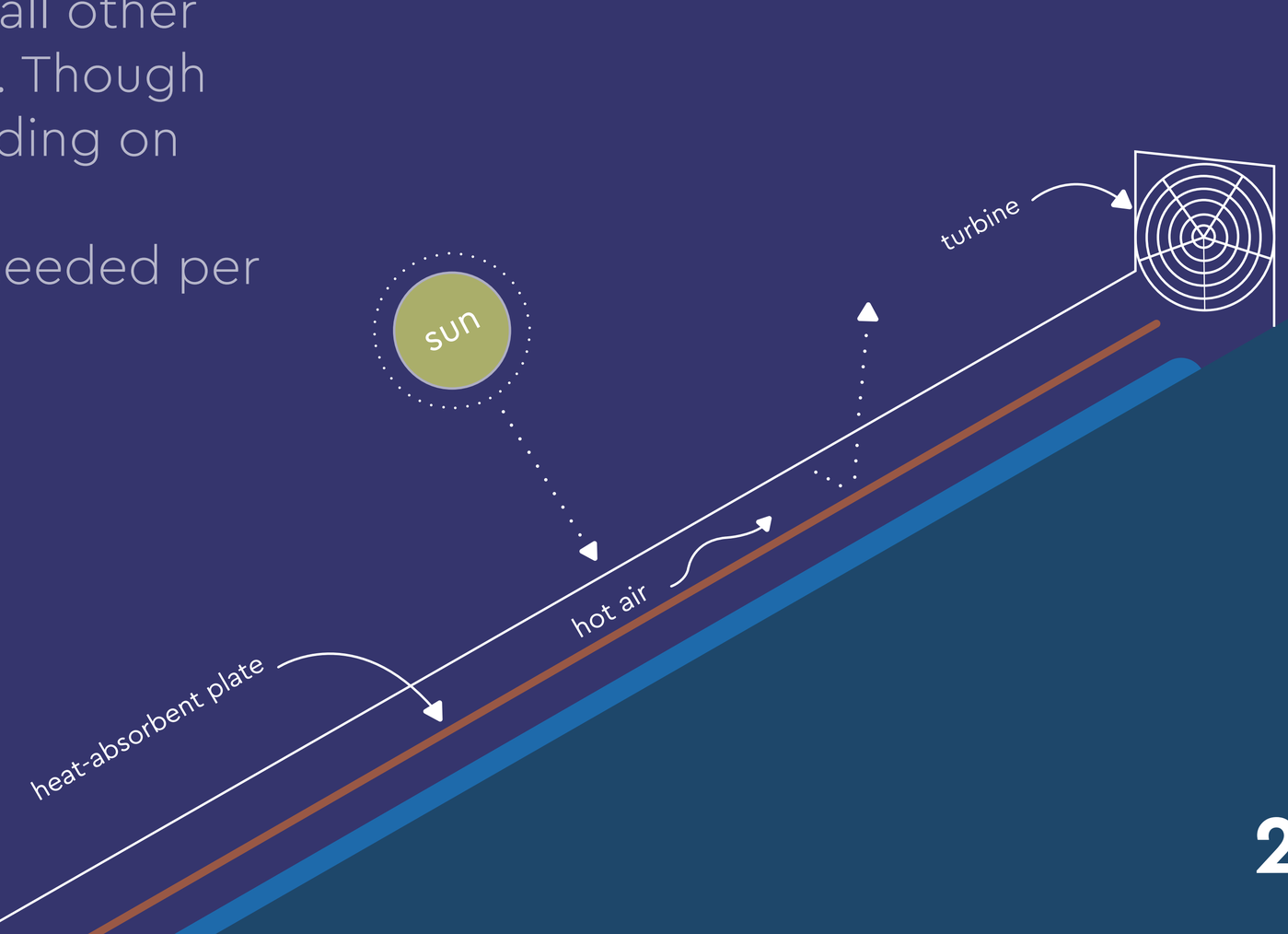
Business model

The strategic goal of the VenusEnergy project is to build cryptocurrency mining farms and to supply these farms with electricity produced from renewable electricity sources made by USAT.inc Solar-Wind power plants in Australia.

Australia is the most ideal location for implementing Solar-Wind technology because of its very high solar activity. According to the meteorological center's indicators, daily average duration of full sun exposure is 11 hours and average duration of partial sun exposure is 2 hours.

The simple and flexible design makes it robust and means it has many applications, whilst its ultra-low cost makes it highly accessible.
The design is simple: The Solar-wind farm is easy to scale to meet any energy requirements because it consists of a series of clear tubes connected together, built along a slight slope. Inside each tube is a flat, horizontal plate that helps to absorb the sun's heat and beneath this are tubes of water which help to trap heat and store it for use after the sun has set. At the top end of the tube, there is a turbine. As hot air rises, the warmed air in the tube has to pass the turbine to leave the tube, which turns it and generates power.

Solar-wind farms can produce power for less than USD $0.03 per kWh. This makes them significantly cheaper than all other sources of power on the market. Though power-production varies depending on the conditions of the location, approximately 45m of farm are needed per kilowatt of power required.



The Solar-Wind farm life cycle is assumed to be: 50 years

Appendix for calculations

(1)

Fixed Costs:

Type of expenditure	Value (%)
Land lease	1%
Maintenance	1%
Insurance	3%
Other expenses (bookkeeping, auditing,...)	5%
Total:	**10%**

According to **NREL** (National Renewable Energy Laboratories), the formula for calculating profitability or the cost to generate power ($P_{cost\ to\ gen}$):

$$P_{cost\ to\ gen} = [(FCR * IC) / AEP] + [(LRC + O\&M + LLC) / AEP]$$

Prototype Investment Efficiency Evaluation:

Power of the cryptocurrency mining facility kW	15
Heat generation by the cryptocurrency mining facility: (364.25 days * 24 hours * 15 KW = 8,742 MWh)	131 130 KWh
Energy losses (air conditioning, heat and aerodynamic)	67%
Energy recuperation at 33% rate	43 272 KWh
Surplus energy price: (EUR/kWh) (USD/kWh) (AUD/kWh)	 0,042 0,047 0,070
Total energy output: 79,014 KWh (solar-wind farm) + 43 272 KWh (recuperator) = 122,286 KWh per annum	122,286 KWh
Revenue: (EUR/year) (USD/year) (AUD/year)	 5 136 5 747 8 560
Total Cost (10% of Income):[1] (EUR) (USD) (AUD)	 514 575 856
Preliminary profit: (EUR) (USD) (AUD)	 4 622 5 172 7 704
kWh cost:[2] (EUR/kWh) (USD/kWh) (AUD/kWh)	 0.022 0.025 0.047
Without ASIC's	
Return on investment (ROI)[3]	8,2%
Break Even Point (BEP)[4]	12.19 years
With ASIC servers farm	
Return on investment (ROI)[5]	54.35%
Break Even Point (BEP)[6]	1.84 years

(2)

Pcost to gen = [(0.047∗32 800) / 122 286] + [(656 + 575 + 328) / 122 286] =
0.0126 + 0.0127 = 0.025 USD/KWh = 0.022 EUR/KWh = 0.047 AUD/KWh

Total annual expense (Tae):
Tae = Pcost to gen ∗ AEP = 0.025∗122 286 = 3 057 USD = 2 690 EUR = 5 747 AUD

Annual profit from the turbines (Pa):
We calculate the performance share of ASIC servers based
on your investment amount
AEP = (0.047 – 0.025)∗122 286 = 2 690 USD = 2 445 EUR = 2 812 AUD

(3)

Return of Investments coefficient **(ROI):**

ROI = Pa / Total investment = *2 690 / 32 800 = 0.0820 or 8.2%*

(4)

Break Even Point coefficient **(BEP):**

BEP = *C turbine / Pa = 32 800 / 2 690 = 12.19 years.*

SHA-256 ASIC server specifications:

Model	Hash Rate	Price (USD)	Fees (3%)	VAT (21%)	Shipping (10%)	Connection / Operation (20%)	Total Price (USD)
Ebang EBIT E12+	50 TH/s	1900.00	57.00	399.00	190.00	380.00	2926.00

Using Prototype servers with energy consumption – 15 KW

Ebang EBIT E12+ (maximum hashrate of 50Th/s for a power consumption of 2250 W):
6 pcs (total energy consumption – 13.5 KWh).

Model	Price (USD)	Amount	Total Price (USD)
Ebang EBIT E12+	2926.00	6	17 556.00

Total server price: 17 556 USD

The sum of all Prototype expenses:

Solar-Wind farm acquisition estimate (USD)	Miner acquisition estimate (USD)	Total Sum (USD)
32 800.00	17 556.00	50 356.00

Appendix for calculations

Annual profit from the Prototype mining farm (PMa):
PMa = 27 370 USD

(5) *Return of Investments coefficient* ***(ROI)****:*

ROI = PMa / Total investment = *27 370 / 50 356 = 0.5435 or 54.35%*

(6) *Break Even Point coefficient* ***(BEP)****:*

BEP = C mining / PMa = *50 356 / 27 370 = 1.84 years.*

An example of the profitability of a Prototype investment

Let's say that you invested $ 1,000. Calculate the performance share of ASIC servers based on your investment amount:
$P_{partial} = (P_{total} \times C_{partial}) / C_{total} = 300\,000 / 50\,356 = 5.958$ TH/s
Where:

P total – Total performance, TH/s
C total – Total investments amount, USD
C partial – Your investment amount, USD.

Investment profitability		
per Day	0.00013908 BTC	1.49 USD
per Month	0.00423322 BTC	45.30 USD
per Year	0.05079864 BTC	543.60 USD

Annual profit from your investment (PMi):
PMi = 543.60 USD

Return of Investments coefficient ***(ROI):***
ROI = PMi */ Individual investment = 543.60 / 1000 = 0.5436 or 54.36%*

Break Even Point coefficient ***(BEP):***
BEP = *Cpartial / PMi = 1000 / 543.60 = 1.84 years.*

**These calculations are approximate. Please see Disclaimer section for details.*

Prototype Investment Efficiency Evaluation with installed ASIC servers:

Total number of ASIC servers		6
Total servers Hash Rate (TH/s)		300
Profitability per Day	0.00700297 BTC	74.93 USD
Profitability per Week	0.04902080 BTC	524.54 USD
Profitability per Month	0.21315292 BTC	2280.82 USD
Profitability per Year	2,55783504 BTC	27,369.84 USD
Return on investment (ROI) [5]		*54.35%*
Break Even Point (BEP) [6]		*1.84 years*

Soft Cap Investment Efficiency Evaluation:

Power of the cryptocurrency mining facility kW	1000
Heat generation by the cryptocurrency mining facility: (364.25 days * 24 hours * 1MW = 8,742 MWh)	8 742 000 KWh
Energy losses (air conditioning, heat and aerodynamic)	67%
Energy recuperation at 33% rate	2 884 860 KWh
Surplus energy price: (EUR/kWh) (USD/kWh) (AUD/kWh)	 0,042 0,047 0,070
Total energy output: 5,250 MWh (solar-wind farm) + 2,885 MWh (recuperator) = 8,135 MWh per annum	8 135 000 KWh
Revenue: (EUR/year) (USD/year) (AUD/year)	 341 670 382 345 569 450
Total Cost (10% of Income):[1] (EUR) (USD) (AUD)	 34 167 38 234 56 945
Preliminary profit: (EUR) (USD) (AUD)	 307 503 344 111 512 505
kWh cost:[2] (EUR/kWh) (USD/kWh) (AUD/kWh)	 0.010 0.011 0.016
Without ASIC's	
Return on investment (ROI)[3]	48,47%
Break Even Point (BEP)[4]	2.05 years
With ASIC servers farm	
Return on investment (ROI)[5]	101.28%
Break Even Point (BEP)[6]	0.99 years

(2)

$P_{cost\ to\ gen}$ = [(0.047∗ 600 000) / 8 135 000] + [(12 000 + 38 235 + 6000) / 8 135 000] = 0.0035 + 0.007 = 0.011 USD/KWh = 0.010 EUR/KWh = 0.016 AUD/KWh

Total annual expense (T_{ae}):

T_{ae} = $P_{cost\ to\ gen}$ ∗ AEP = *0.011 ∗ 8 135 000 = 89 485 USD = 81 350 EUR = 130 130 AUD*

Annual profit from the turbines (P_a):
We calculate the performance share of ASIC servers based on your investment amount

AEP = *(0.047 – 0.011)∗8 135 000 = 292 680 USD = 260 320 EUR = 439 290 AUD*

(3)

Return of Investments coefficient ***(ROI)*****:**

ROI = P_a / Total investment = *92 680 / 600 000 = 0.4847 or 48.47%*

(4)

Break Even Point coefficient **(BEP):**

BEP = *C turbine / Pa = 600 000 / 292 680 = 2.05 years.*

1MW Solar-wind farm cost: 600 000 USD – 893 123 AUD – 543 675 EUR

SHA-256 ASIC server specifications:

Model	Hash Rate	Price (USD)	Fees (3%)	VAT (21%)	Shipping (10%)	Connection / Operation (20%)	Total Price (USD)
Ebang EBIT E12+	50 TH/s	1900.00	57.00	399.00	190.00	380.00	2926.00

Using Soft Cap servers with energy consumption – 1 MW

Ebang EBIT E12+ (maximum hashrate of 50Th/s for a power consumption of 2250 W):
440 pcs (total energy consumption – 990 KWh).

Model	Price (USD)	Amount	Total Price (USD)
Ebang EBIT E12+	2926.00	440	1 287 440.00

Total server price: 1 287 440.00 USD

The sum of all Soft Cap expenses:

Solar-Wind farm acquisition estimate (USD)	Miner acquisition estimate (USD)	Total Sum (USD)
600 000.00	1 287 440.00	1 887 440.00

Soft Cap Investment Efficiency Evaluation with installed ASIC servers:

Total number of ASIC servers			440
Total servers Hash Rate (TH/s)			22 000
	Energy costs (0.011 USD 1KWh)		Income
Mining estimate per Day	261.36 USD	0.51355119 BTC	5 495.20 USD
Mining estimate per Week	1 829,52 USD	3.59485831 BTC	38 466.42 USD
Mining estimate per Month	7 949,70 USD	15.63121428 BTC	167 260.25 USD
Mining estimate per Year	95 396,40 USD	187.57457136 BTC	2 007 123.00 USD

	Energy costs USD	Income	Profit
Profitability per Day	261.36 USD	5 495.20 USD	5 233.84 USD
Profitability per Week	1 829,52 USD	38 466.42 USD	36 636.90 USD
Profitability per Month	7 949,70 USD	167 260.25 USD	159 310.55 USD
Profitability per Year	95 396,40 USD	12 007 123.00 USD	1 911 726.60 USD
Return on investment (ROI) (5)			*101.28%*
Break Even Point (BEP) (6)			*0.99 years*

Annual profit from the Soft Cap mining farm (PMa):
PMa = 1 911 726.60 USD

(5)
Return of Investments coefficient ***(ROI)****:*

ROI = PMa / Total investment = *2 007 123 / 1 887 440 = 1.0128 or 101.28%*

(6)
Break Even Point coefficient ***(BEP)****:*

BEP = C mining / PMa = *1 887 440 / 2 007 123 = 0.99 years.*

An example of the profitability of a Soft Cap investment

Let's say that you invested $ 1,000. Calculate the performance share of ASIC servers based on your investment amount:
$P_{partial} = (P_{total} \times C_{partial}) \ / \ C_{total} = 22\,000\,000 / 1\,887\,440 = 11.656$ TH/s

P $_{total}$ – Total performance, TH/s

C $_{total}$ – Total investments amount, USD

C $_{partial}$ – Your investment amount, USD.

Investment profitability				
	Income		Energy costs	Profit
per Day	0.00027195 BTC	2.91 USD	0.14 USD	2.77 USD
per Month	0.00827744 BTC	88.57 USD	4.26 USD	84.31 USD
per Year	0.09932928 BTC	1062.84 USD	51.10 USD	1011.74 USD

Annual profit from your investment (PM_i):
PM_i = 1 011.74 USD

Return of Investments coefficient ***(ROI):***
ROI = PM_i */ Individual investment = 1 011.74 / 1000 = 1.0117 or 101.17%*

Break Even Point coefficient ***(BEP):***
BEP = $C_{partial}$ */ PMi = 1000 / 1 011.74 = 0.99 years.*

*****

These calculations are approximate. Please see Disclaimer *section for details.*

Hard Cap Investment Efficiency Evaluation:

Power of the cryptocurrency mining facility kW	5000
Heat generation by the cryptocurrency mining facility: (364.25 days * 24 hours * 5 MW = 43,71 MWh)	43 710 000 KWh
Energy losses (air conditioning, heat and aerodynamic)	67%
Energy recuperation at 33% rate	14 424 300 KWh
Surplus energy price: (EUR/kWh) (USD/kWh) (AUD/kWh)	 0,042 0,047 0,070
Total energy output: 26,250 MWh (solar-wind farm) + 14,424 MWh (recuperator) = 40,674 MWh per annum	40 674 000 KWh
Revenue: (EUR/year) (USD/year) (AUD/year)	 1 708 308 1 911 678 2 847 180
Total Cost (10% of Income):[1] (EUR) (USD) (AUD)	 170 830 191 168 284 718
Preliminary profit: (EUR) (USD) (AUD)	 1 537 478 1 720 000 2 562 462
kWh cost:[2] (EUR/kWh) (USD/kWh) (AUD/kWh)	 0,010 0,011 0,016
Without ASIC's	
Return on investment (ROI)[3]	48,80%
Break Even Point (BEP)[4]	2.05 years
With ASIC servers farm	
Return on investment (ROI)[5]	101.45%
Break Even Point (BEP)[6]	0.99 years

(2)

$P_{cost\ to\ gen}$ = [(0.047 * 3 000 000) / 40 674 000] + [(60 000 + 191 167 + 30 000) / 40 647 000] = 0.0035 + 0.007 = 0.011 USD/KWh = 0.010 EUR/KWh = 0.016 AUD/KWh

Total annual expense (*Tae*):

Tae = Pcost to gen * AEP = *0.011 * 8 135 000 = 447 414 USD = 406 740 EUR = 650 784 AUD*

Annual profit from the turbines (*Pa*):

Pa = (*Pselling price* − *Pcost to gen*)* AEP = (0.047 − 0.011) * 40 674 000 = *1 464 264 USD = 1 301 568 EUR = 2 196 396 AUD*

(3)

Return of Investments coefficient **(*ROI*)**:

ROI = Pa / Total investment = *1 464 264 / 3 000 000 = 0.4880 or 48.80%*

(4)

Break Even Point coefficient **(BEP)**:

BEP = *C turbine / Pa = 3 000 000 / 1 464 264 = 2.05 years.*

5MW Solar-wind farm cost: 3 000 000 USD – 4 439 702 AUD – 2 747 550 EUR

SHA-256 ASIC server specifications:

Model	Hash Rate	Price (USD)	Fees (3%)	VAT (21%)	Shipping (10%)	Connection / Operation (20%)	Total Price (USD)
Ebang EBIT E12+	50 TH/s	1900.00	57.00	399.00	190.00	380.00	2926.00

Using Hard Cap servers with energy consumption – 5 MW

Ebang EBIT E12+ (maximum hashrate of 50Th/s for a power consumption of 2250 W):
2 210 pcs (total energy consumption – 4 973 KWh).

Model	Price (USD)	Amount	Total Price (USD)
Ebang EBIT E12+	2926.00	2210	6 466 460

Total server price: 6 466 460 USD

The sum of all Hard Cap expenses:

Solar-Wind farm acquisition estimate (USD)	Miner acquisition estimate (USD)	Total Sum (USD)
3 000 000	6 466 460	9 466 460

Hard Cap Investment Efficiency Evaluation with installed ASIC servers:

Total number of ASIC servers		2 210
Total servers Hash Rate (TH/s)		110 500

	Energy costs (0.011 USD 1KWh)		Income
Mining estimate per Day	1 306.80 USD	2.57942756 BTC	27 600.91 USD
Mining estimate per Week	9 147.60 USD	18.05599290 BTC	193 206.35 USD
Mining estimate per Month	39 748.50 USD	78.51132625 BTC	840 102.60 USD
Mining estimate per Year	476 982.00 USD	942.13591500 BTC	10 081 231.00 USD

	Energy costs USD	Income	Profit
Profitability per Day	1 306.80 USD	27 600.91 USD	26 294.11 USD
Profitability per Week	9 147.60 USD	193 206.35 USD	184 058.75 USD
Profitability per Month	39 748.50 USD	840 102.60 USD	800 354.10 USD
Profitability per Year	476 982.00 USD	10 081 231.00 USD	9 604 249.00 USD
Return on investment (ROI) (5)			*101.45%*
Break Even Point (BEP) (6)			*0.99 years*

Annual profit from the Hard Cup mining farm (PMa):
PMa = 1 911 726.60 USD

(5)
Return of Investments coefficient ***(ROI)****:*

ROI = PMa / Total investment = *2 007 123 / 1 887 440 = 1.0128 or 101.28%*

(6)
Break Even Point coefficient ***(BEP)****:*

BEP = C mining / PMa = *1 887 440 / 2 007 123 = 0.99 years.*

An example of the profitability of a Hard Cup investment

Let's say that you invested $ 1,000. Calculate the performance share of ASIC servers based on your investment amount:
Ppartial = (Ptotal x Cpartial) / Ctotal = 1110 000 000 / 9 466 460 = 11.620 TH/s

P total – Total performance, TH/s

C total – Total investments amount, USD

C partial – Your investment amount, USD.

Investment profitability				
	Income		Energy costs	Profit
per Day	0.00027125 BTC	2.90 USD	0.14 USD	2.76 USD
per Month	0.00825612 BTC	88.34 USD	4.26 USD	84.31 USD
per Year	0,09907344 BTC	1062.84 USD	51.10 USD	1011.74 USD

Annual profit from your investment (PMi):
PMi = 1 011.74 USD

Return of Investments coefficient ***(ROI):***
ROI = PMi */ Individual investment = 1 011.74 / 1000 = 1.0117 or 101.17%*

Break Even Point coefficient ***(BEP):***
BEP = *Cpartial / PMi = 1000 / 1 011.74 = 0.99 years.*

*****These calculations are approximate. Please see* Disclaimer *section for details.*

Disclaimer

Bitcoin (BTC) calculations parameters based on September 2019 crypto market statistics and set as follows:

- Difficulty Factor = 1.07719966637e+13
- Exchange Rate = 10700.4
- 1 BTC = $10,700.40

Estimated calculations and profitability may change over time due to fluctuations in the cryptocurrency exchange rate and other parameters.

Venus Tokenomics

TOKENOMICS: UTILITY TOKEN VENUS

VenusEnergy (VENUS) is a digital asset classified as a Utility Token according to the parameters established in the Howey test that international regulatory agencies use to determine if a digital asset can be considered as a security and be subject to regulation standards due to its financial nature (representing a fraction of a company, rights to collect dividends, etc.) or if, on the contrary, it is a digital asset that represents an instrument or a right to future services and products of a company such as the VENUS token, which will also have a payment function and will be limited to the tokenized ecosystem of VenusEnergy. This token gives access to the mining platform.

VenusEnergy is aimed at all qualified and unskilled investors who wish to invest in the crypto-mining sector in a very profitable and sustainable way through the services that VenusEnergy, where tokens will be sold. VENUS tokens will give access to the rental of mining machines.

VENUS TOKEN SALE

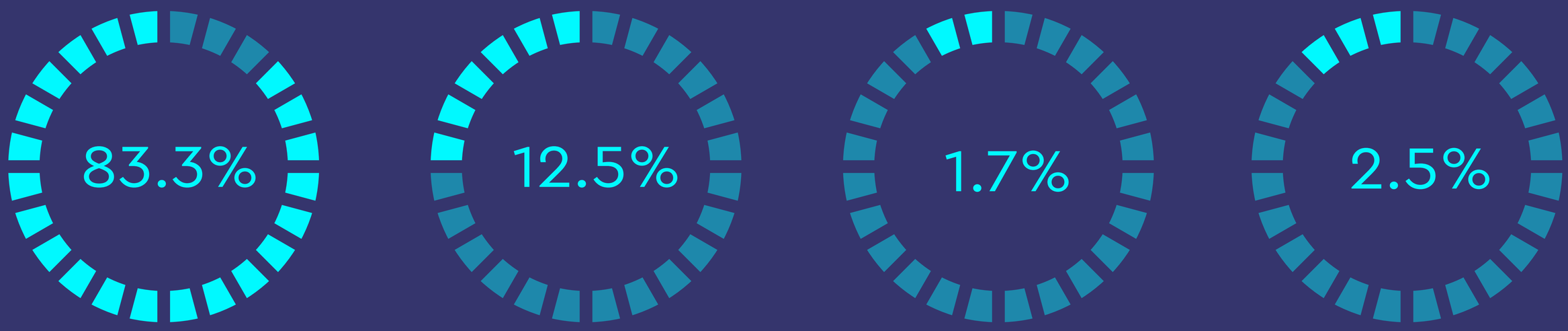
	Token Price EUR	Discount
SoftCup	0.001125 EUR	50%
HardCup	0.001800 EUR	20%
After IEO	0.002250 EUR	0%

- Initial price will start at € 0.001125 and will extend to € 0.002250. Payments will be available in ETH, BTC, EUR, USD and other crypto currencies.

VENUS (Features & Caps)

Token Name	VENUS
Blockchain	Ethereum
Code Language	Pragma Solidity
Token Nature	Utility Token (ERC20)
Total Supply	80,000,000,000
ICO Tokens	21,656,086,667 VENUS
Token for Sale (%)	27%
Funding Goal	30,101,460 €
EUR / VENUS	0.00225 €
SoftCap	13,154,808,889 VENUS
HardCup	21,656,086,667 VENUS

TOKEN DISTRIBUTION



	Total USD	Total EUR	Total Amount (VENUS)	%
Project development	28,450,306.99	25,074,516.18	17,196,611,111	83.3%
Team / Bounties	4,269,253.75	3,762,682.50	3,344,606,667	12.5%
Legal team & Advisors	580,618.51	511,724.82	445,947,556	1.7%
Marketing	853,850.75	752,536.50	668,921,333	2.5%
Market CAP	34,154,030	30,101,460	21,656,086,667	

- **Team, Bounties and Airdrop**
  Bounties and Airdrop Tokens will be distributed post ICO.

- **Legal Team and Advisors**
  These funds will be paid to the team and advisors after 36 months.

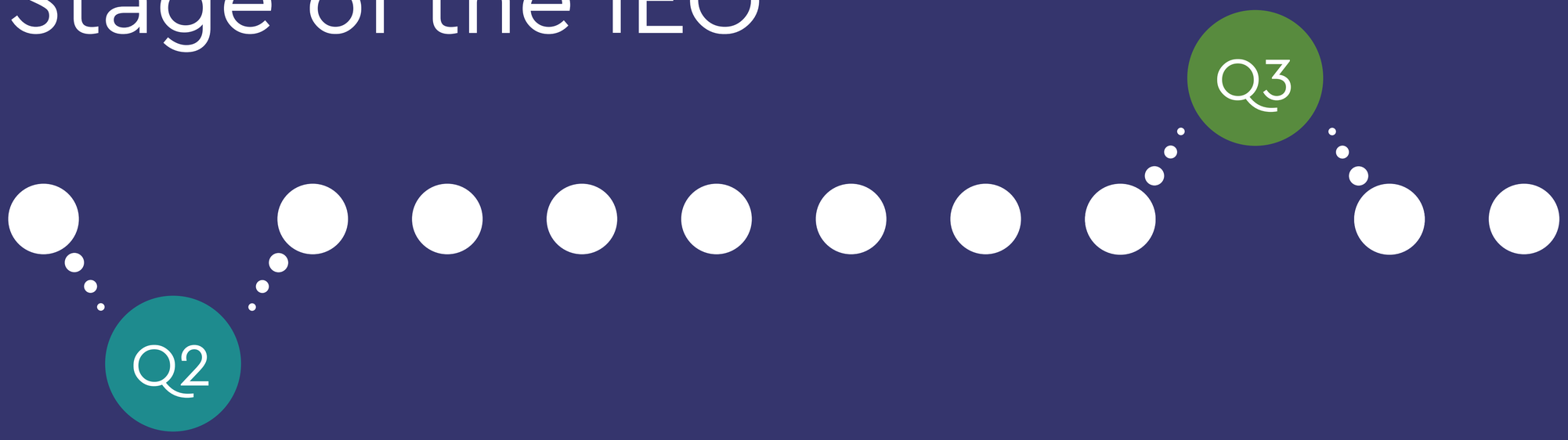
- **Marketing**
  These funds are for a marketing campaign (ICO and after ICO period).

Inaccessible Reserve

The Token Reserve 58,343,913,333 is frozen. In case of success, the amount will be used for the development of VenusEnergy project.

	Total USD	Total EUR	Sum (VENUS)	%
Project development	34,154,030	30,101,460	21,656,086,667	27.07
Team / Bounties			58,343,913,333	72.93
Legal team & Advisors			21,656,086,667	

Stage of the IEO



Tokens will be sold during the period Q2-Q3 2019

Start selling: **02.01.19**

Token price: 0.00225 EUR

VenusEnergy Platform

The VenusEnergy mining platform will be the one that allows to use the tokens purchased during the ICO.

The operation of the platform is described here below: In the VenusEnergy platform, the interfaces will monitor the mining activities individually, choosing between the different cryptocurrencies from SHA256 algorithm (total of 45 cryptocurrencies).

SHA-256
Amoveo (VEO)
Auroracoin (SHA 256) (AUR)
BADcoin (SHA 256)
BetaCoin (BET)
BetChip (BTCHP)
Bitcoin (BTC)
Bitcoin Air (XBA)
Bitcoin Atom (BCA)
BitcoinCach (BTH)

Bitcoin Rebooted (BOOT)
Deutsche eMark (DEM)
DigiByte (SHA 256) (DGB)
Litecoin CASH (LCC)
Joulecoin (XJO)
Peercoin (PPC)
etc...

INDIVIDUAL MINING

The user can choose this type of mining, where you can mine up to 45 coins as a base, and over time coins will be added or removed according to the demand of the users. In this type of mining, the generated yields will go to the wallet that the user chooses and 20% will be deducted when a block is found. This commission will be directed to maintenance expenses, equipment renewal and taxes.

VENUS Token holders will be able to buy mining speed 45% cheaper on the VENUSENERGY platform than other users paying in another currency. VenusEnergy gives investors the opportunity to get the cheapest electricity, which is even 45% cheaper than the price for the ordinary EU consumer. The following is a good example of this:

	Sales Price (1 KWh)	Ratio
Iceland	0,040 EUR	Cheapest EU price
VenusEnergy (Australia)	0,022 EU	45 % cheaper

Investor buys the server speed, corresponding to the amount of his investment in the project for the cheapest electricity price in the European Union countries.

Customers who will join the project after the end of ICO will have standard mining speed purchase plans that will be announced when the project starts.

OTHER MINING ALTERNATIVES

Depending on the inconsistent and always changing cryptocurrency market we can offer both parties to agree on halting the mining mining of the cryptocurrencies.

Electricity is consumed by mining the cryptocurrency, selling to the power networks or other users, and after deduction of tax revenue, returning the money to the token holder.

**This feature will only be available when the Hard Cap is reached.*

- Example:

  Ebang EBIT E12+ ($50_{TX/S}$) consumes about 2250 W of energy per hour. If we stop one miner, it will be 2.25KW. This means that we can sell that energy to power networks for 0.042 EU x 2.25, which will be 0.095 EU per hour without taxes.

ROAD MAP

2017

Q4

IDEA

Birth of the VENUS Token

2018

Q1

PRE – ICO

Q2

ICO 1st Stage

Q3

ICO 2nd Stage

Q4

ICO 3rd Stage

Q1

ICO 4th Stage

Q2

Q3

IEO

2019

Q3

Start of the Project. Start of the work at the Exchange Offices.

Q3

Acquisition of Land. Document Management.

Q4

Acquisition of the Industrial warehouse for the development of mining. Acquisition of ASICs.

Start of building renewable energy sources. Conditioning of facilities for the development of mining.

2020

Q2

Start of the Mining Platform development.
Launch of the platform.

Q1

End of the renewable energy source building. **Installation of mining ASICs.**

LEGAL DISCLAIMER

The purpose of this Whitepaper is to present to VenusEnergy ("the Company") it's technology, its underlying token (subsequently named as "VENUS" or token) to potential token owners. The information presented below may not be exhaustive and does not imply any element of contractual relationship. Its only purpose is to provide relevant and reasonable information to the potential owners of tokens in order to determine whether to perform a thorough analysis of the company with the intention of acquiring VENUS tokens. All relevant legal information can be found in the Token Purchase Terms and the Token Purchase Agreement.

In the content of this Whitepaper nothing will be considered as a proposal or an investment request of any kind, nor in any way is related to an offer or a request for an offer to buy securities in any jurisdiction where it is illegal. This document is not written in accordance with, and is not subject to, the laws or regulations of any jurisdiction that are designed to protect investors. The US Securities and Exchange Commission nor any other foreign regulatory authority has approved an investment in the VENUS tokens. There is not a regulatory authority which has examined or approved any information established in the Whitepaper.

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

The Whitepaper in English is the main source of official information regarding the VENUS token generator event and the VENUS token. The information contained in the original document can be translated into other languages or it can be used for written or verbal communications with existing and potential members of the community, clients, partners, etc. In the course of such translation or communication, part of the information may be lost, corrupted or misrepresented. The accuracy of such alternative communications cannot be guaranteed. In case of discrepancies or inconsistencies between said translations and communications and the official Whitepaper in English, the provisions of the original document shall prevail.

The Whitepaper, the information provided on the VenusEnergy website and the terms and conditions published by VenusEnergy, any part of them and any copies of them, should not

be taken or transmitted to any country where the distribution or dissemination of these documents / information is prohibited or restricted.

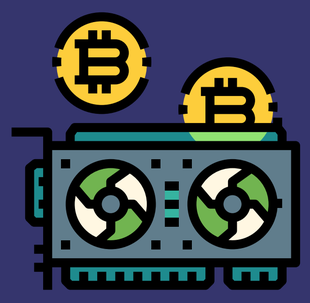
No action of this type has been taken or will be taken under the laws, regulatory requirements or rules of any jurisdiction.

The publication, distribution or dissemination of the Whitepaper does not imply that the applicable laws, regulatory requirements or standards have been met.

Since the VENUS Token is connected to the use of a product that allows exclusive access rights to mining crypto assets, it is legally classified as a Utility Token and, in no case, as a security token, since it does not entitle owners of tokens to receive profits from VenusEnergy. VENUS token is a non-purely speculative investment, due to its possession gives the holders exclusive benefits that are described in this Whitepaper, being considered as a Utility Token. In any case, the certificate holder has no dividend or benefit from the capital of the company. All the legal information related to the token can be found in the Token Purchase Terms and the Tokens Purchase Agreement, which accepts to be accepted by the buyer, as well as the description of the risks associated with its acquisition.

Finally, and due to the legal and regulatory uncertainty in EE. UU., Citizens and holders of the Greencard and people residing in the EE. UU. are not authorized to provide contributions and obtain VenusEnergy tokens. Citizens and holders of the Greencard and people residing in the EE. UU. who participate in fundraising by providing false information about their citizenship, place of residence and nationality will be violating the terms and conditions will give the right to VenusEnergy to request that those persons indemnify the company for any damages and / or losses suffered due to this violation.

Prototype



ASICS FARMS

SOLAR-WIND

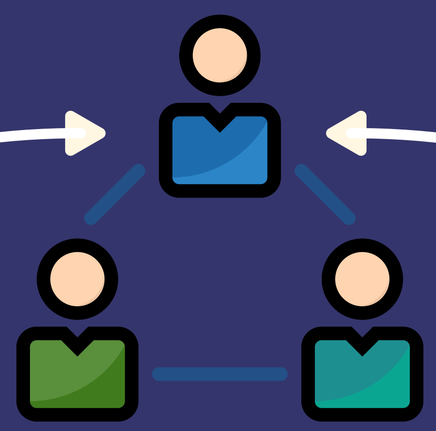
VenusEnergy Platform

Smart Contract

Mining Only

By Profit

Energy Only



*__By Profit & Energy Only__ - *This feature will only be available when the Hard Cap is reached.*

ADDITIONAL

https://venusenergy.io/

https://www.facebook.com/VENUSTOKEN/

https://t.me/VenusEnergyPlatform/

support@venusenergy.io

You can see the verification and review of the VenusEnergy project on the Crypto-Potential platform.