



# WHITE PAPER

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# HIGHLIGHT



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## HIGHLIGHT

### INTRODUCTION:

From New York to Seoul of Alasca to Patagonia the “new”energy consumers are looking for confort, safety, ecologically accepted solutions and economy. They also wish a future ecologically sustainable for the next generations and for this reason they participate directly of the decisions of how the production of the energy they will consume must be done.

To answer the need of this new and conscious consumer, it was created the platform “**ECOGRID**”, based on the global Project of a green cryptocoin called HIGHLIGHT! It’s expected with the platform a drastic change in how people relates with energy, recreating the relation among *producers* and consumers, making the global energy markets more open, competitive and disruptive.

### THE PROBLEM:

Since the beginning, our society was moved for the constant search for energy. Our economy moves orbiting to the oil, coal, natural gas, and biomass, sources of energy that have always been under the power of multimillionaires corporations and powerful cartels that had never allowed the democratization of the energy production and/or transmission by small groups or organizations imposing prices and conditions almost always not so good.

This kind of energy system adopted worldwide is expensive, centralized, inefficient and extremely polluting. Even in their less



impacting places, as the hydric causes damages to the environment and the local ecosystem because is mandatory the inundation of huge areas, usually productive and from small producers and that even not enjoying are removed from their communities to give space for big projects.

Besides the big production cost, the current system of energy production available is highly inefficient. According to specialist, 83% of the all energy produced in plants is usually on hundreds kilometers of the consumer, running lots of lines and being wasted even before the use.

The current owners of energy for having their cartels intact in years and knowing that the consumers are their hostages, independent of giving or not a good service, uses obsoletes and polluted installations because they don't have direct rival, transferring all the cost of their operations directly to the consumers without worrying with how ineficiente and expensive they are.

But this classic scene is about to change, a wave of new technologies and smarter systems are demanding passage and changing the current scene. Smart services, batteries and solar panels are contributing to avoid the worse of the climate change in the planet and are making people, besides saving their money, start to produce their own energy, making the centralized and inefficient system past scene.

In a recente research made in a worldwide level, 73% of the interviewed said interested in adopte alternative energy systems than the old centralized, expansive and polluting plant.

The new reality demanded by the energy consumers, being residencial, commerce or industry, show a new scene where

everyone that wants to participate on the decisions involving the productions and or transmission of the energy they consume, always making sure that it will be more environmentally friendly and as cheap as possible.

Such radical change of the concept is based on the new reality of the modern consumer. **NETFLIX**, **AMAZON** and **UBER** showed us a new path, where the controlled solutions and "on-demand" are Always welcomed, running from the old obligation of being linked to a energy producer or distributor, not being able to dose the consume or the services that you intend or want to have.

This link mandatory bother those that do not feel comfortable knowing that the energy needed in their leisure time or Family time are only possible with the use of a more impacting and highly polluting energy and most of the times, dangerous.

That is the reason the consumer, since knowing their options, moves away from sources based on coal, natural gas, petroleum products and nuclear generation, preferring that their day-to-day energy is derived from green and renewable sources such as solar and wind .

This new environmentally conscious scenario that tries to avoid the advance of climate change, further driven by the entry into the market of modern and economical electric vehicles, which will completely change the way we move and make this act much more citizen and environmentally correct, unlocks a new and important track of business.

In this scenario, modern society, now a lady and the owner of the means of producing a socially sound and environmentally conscious energy, will have a new economic engine to be explored, especially based on the modern technologies of wind-power and solar panels. It is a path with no return!

Such a paradigm shift is necessary and urgent, and opens a window of opportunity for investors and responsible citizens, aware of the need to democratize the production and distribution of energy.

This is a unique global opportunity that is relevant from the economic and social point of view and whose main objective is social justice and development in previously unexplored areas, especially in developing and emerging countries such as India, Southeast Asia, Africa and South Americans. Places where, in addition to being scarce, energy can cost up to five times more than in Europe or the United States.

The shift from the energy paradigm with the inclusion of distributed generation systems, strongly favoring renewable and green sources, is transforming how people relate to energy, creating an environment of autonomy in their production, and generating safe and cheap sources of distribution and storage.

In this way, the use of management, negotiation and energy use platforms in distributed generation models, in cooperative systems of production, purchase and negotiation will allow the creation of even more complex assets, with the flexibility and cooperation of several consumers / producers - prosumers (those who at the same time consume and produce energy) - in organized blocks of production, distribution and sale of energy in an agile, cheap and ecological way.

The moment is to reinvent the traditional format, create a new paradigm of energy production and consumption in a distributed and shared way, through a global energy asset trading platform, rewarding energy prosumers with a better quality service, low cost and little environmental impact, using the existing physical network with the addition of technology devices

that will provide the necessary change to fulfill this purpose, thus justifying the urgency in the construction of a transaction management platform with energy, in order to organize the model and enable the smooth operation of this new business.

## OUR SOLUTION - GREEN ENERGY BLOCKCHAIN

Over the last ten years, experts and consultants who have developed the concept of the **EcoGrid** platform have seen the costs of the energy resources of micro and distributed mini-generation systems, GD as they are known, such as solar panels and wind turbines, drop significantly. This has led to a generalized and individualized adoption of such solutions, with the production of energy at the point where it will be consumed.

Besides, battery prices are dropping fast. Programs such as those developed by Tesla Powerwall, Panasonic and Mercedes Benz, are making the adoption of this economically viable technology to complement variable-generation renewable resources, storing energy to be consumed in times when there is no wind or shining sun.

The confluence of these developments has created a new emerging energy reality, where production will be less centralized, and control systems less likely to be held in the hands of large corporations

The concept of independently owned and controlled GD is known as the decentralized power grid. The grid promises to increase the durability of the grid, while simultaneously increasing efficiency and allowing the adoption of more renewable energy.

Decentralized and individualized production does not allow the pool of energy prosumers to talk to each other, making each power system unique and completely watertight from the rest of



the grid, making it unfeasible for the power producer to freely market the "excess" of his with your neighbors or even with people on the other side of the state or even the country.

In this way the solution found by **EcoGrid** technicians is the adoption of an energy trading platform where prosumers, producers and consumers of energy can operate freely through a single database that provides the highest and best profitability for the "leftovers" generated on the roofs of each limb, or of the totality of the energy generated in the plants dedicated to the production of solar and wind energy that will be created by all the countries target of the project

The "**EcoGrid**" allows the energy prosumer to be fully rewarded. The GD energy, properly implemented, represents the most fair allocation of risk and reward, allowing new commercial models that offer services to the participants. By rewarding efficiency and flexibility, the system has the potential to activate value for customers and create new ways to manage and invest in the responsive grid of the future, which is beneficial in developed economies and can be transformative in new markets and business partners

It is important to emphasize that in addition to the dedicated plants, the prosumers who are signatories of the platform through the energy blockchain, will become part of a truly decentralized world network of energy, will add forces for the growth of the energy management ecosystem and even at a distance, legally, will be part of the same integrated system and may join forces to offer energy in quantity and prices sufficiently attractive to attract large consumers who usually pay values expressive for the energy they consume.

The big villain and limiter in the use of green power generation technologies are obviously the high rates charged by banks and financial agents that, even in developed countries such as the United States, are making operation difficult. Banks and financial agents are the only ones to profit from the

implementation of power plants and production parks through interest and fees perceived by companies implementing these technologies, whether on intelligent roofs, and / or solar and wind farms.

To avoid such a problem, HIGHLIGHT development teams have built one of the brightest alternatives in attracting and concentrating investments and revenue for the purpose of implementing these projects. The partnership between HIGHLIGHT and the **EcoGrid** platform will enable the investment and financing of medium- and large-sized plants using HIGHLIGHT, which will enable the commercialization of energy intermediated within the platform, world-wide.

In this way, once the platform is implemented, adding forces with the cryptocurrency HIGHLIGHT, the project's feasibility . A new world reality will be formed to build the process of production and decentralized energy commercialization through the blockchain of green energy.

Global electricity markets are simply gigantic. In 2016 alone, \$ 718 billion was invested in the electric power sector worldwide. According to the International Energy Agency, the world will need to invest \$ 44 trillion in global energy supply and another \$ 23 trillion in energy efficiency to meet current climate policy goals and projected growth in energy demand by 2040. We estimate that only 1% of energy savings will cost \$ 670 billion by 2040. In other words, we are working in a market that is eager for resources and solutions and that usually compensates for investments in the sector by up to 50%.

As industry and trade trends accelerate, we believe the value of assets and services can be extremely well paid in a decentralized energy production system run by an Exchange platform. The market is much larger than simply power generation and consumption measures, it includes the wealth of value

associated with the availability of new data and the services of an incredibly flexible network.

In addition, the value is accumulated for a wide range of market participants: consumers, utilities, generators and other technology vendors. It is estimated that by mid-2025 the market value based on short-term use cases with today's compensation mechanisms will be at least \$ 80 billion for the EcoGrid platform and HIGHLIGHT.

### **CHALLENGE: LIMITED AND EXPANSIVE CAPITAL FOR PROJECT DEVELOPERS OF GREEN ENERGY**

The companies that most profit from the increase in green energy, unfortunately are the banks. Such assertion is global! In no country, whether in the first or third world, the interest charged is consistent with the urgency and altruism of the decentralized projects for the generation and distribution of green energy, a fact that often leaves the interested party to implement a system totally unrelated to a platform. at the mercy of the gluttony of the banks, a fact that usually makes projects of any size impossible.

It is not without reason that the global market of energy is dominated in 78.4% by energy of dirty matrices, aggressive to the environment, but relatively inexpensive to enjoy enormous governmental contribution.

Transmutation of this energy market is a difficult and enormously costly but urgent task in view of the consequences of climate change. Although many developed countries have given their support to the Kyoto protocol, their governments have established renewable energy programs with variable success and far from achieving the objectives described and ratified in such a protocol.

For this unique effort, we put our best brains to work on one of the most innovative approaches to producing and selling decentralized energy via blockchain. This platform, which is in the process development, testing and adjustments, requires the injection of funds for its implementation, as well as the implementation of solar and wind power plants that require the injection of heavy sums.

But the **EcoGrid** does not even consider the injection of resources by conservative means, loans to banking institutions and pension funds, since such sources of income are unthinkable in a project so original, modern and transformative. What is considered at that moment is the best and most democratic form of financing of our day. The possibility presented to us by the "blockchain" and its encrypted coins surely is the perfect alternative for such projects and novelty.

In this sense, the issuance of HIGHLIGHT tokens is the most obvious option since it is fast, decentralized and extremely democratic, allowing the small investor and prosumer to participate in a real revolution in the energy market, based on the production of green and renewable energy , completely independent of large economic groups imposing absurd charges and costs on individual, commercial and industrial consumers.

In addition to these standard consumers, the real revolution brought about by the exponential growth in the use of electric vehicles is creating global demand for supply ecopoints.

Most of the world's governments, especially European countries, have a tight agenda regarding the general ban on the manufacture and use of fossil fuel vehicles.

The British government, which no longer belongs to the European Union, announced by 2040 the end of the

commercialization of vehicles driven by gasoline or diesel. Germany has approved a resolution in favor of a veto of combustion vehicles starting in 2030 in its parliament. Norway, for its part, has already signaled that it will establish a "100% green" fleet of cars in less than ten years. In development like Brazil, set the ambitious goal of ending sales of cars that are not electric for 12 years from now.

Scholars point out that in a time span of at most 5 years, at least 50% of the vehicles in use will be electric, and as we know the EVs will need ecopoints of supply, which today practically do not exist. The **EcoGrid** team detected such a demand and quickly started producing an application to map the mesh of existing ecopoints and through the Waze or Google Maps applications, guide the owner of those vehicles where to locate such ecopoints.

However, to the surprise of the study group, the existence of these ecopoints is rare, centralized and virtually non-existent on long routes such as roads and highways. With these data, it became easy to identify another potentially huge niche for the decentralized power platform business. From this need was born a derivative of the **EcoGrid** energy platform, with the use and transformation of decentralized energy production points, located in the residences of the adepts to the platform, in ecopoints for global energy recharge in electric vehicles.

With this system, all the residences included in the platform, would constitute a true global network of electric vehicle refueling, using the green energy surplus produced in the residences for direct use in EV vehicles, that is, each residence, parking or parking space, once participating in the platform would automatically become an ecopoint, able to be found via GPS application.

Every system will be incorporated into a mesh managed by geolocation and the payment and transfer of energy will be by application with QR code, using HIGHLIGHT tokens or any fiduciary currency, which will enable an electric vehicle owner to travel



around the globe without the need to effect currency exchange or to carry currency in kind for its refueling anywhere in the world.

Given that the beginning of the process of implementation of the solar power plants would occur in countries where energy is more costly and difficult to access to the consumer, as a means of, through the remuneration of the platform, obtained from the sale of energy produced in the own plants or the intermediation of the purchase and sale of surplus energy within the global marketing platform, costing the implantation of the project worldwide.

## **ECOGRID AND THE ENERGY TOKENS HIGHLIGHT**

The **EcoGrid** platform will allow renewable energy producers to index and sell the energy they produce freely. A renewable energy prosumer connected on the platform, using the energy tokens to market its energy within the platform worldwide.

Each renewable energy plant connected to the **EcoGrid** platform will organize an auction for the sale of energy. Each new plant will create an auction on the **EcoGrid** platform for the sale of energy tokens to buyers with the minimum price set for each token that will represent the energy to be deducted from the consumption of each acquirer, regardless of whether or not it is platform adept of the condition of prosumer.

## **GOALS OF TOKEN HIGHLIGHT SEEL**

Funds raised during the pre-launch period until soft cap remuneration is achieved will be used exclusively for the development and implementation of the **EcoGrid** blockchain-based marketing platform, as follows:

**EcoGrid** will use 20% of the funds received for the development of the platform, with 15% of the funds being used to



integrate the **EcoGrid** platform with existing energy infrastructures through target markets and the other 5% of funds will be allocated to ensure that the platform complies with energy industry requirements.

Another 20% will be employed in the development of the application for geolocation and payment of energy recharges in electric vehicles across the globe, with the adoption of payment systems via Scan To Pay.

The entire system will be implemented without the need to use fiduciary money in kind or through any type of credit or debit card. It will be operated through the handling of HIGHLIGHT tokens, a fact that will enable the global payment in a single kind of compensation, without the need for exchange.

The remaining 60% will be used for the implementation and development of a network of solar generation plants through photovoltaic panels, which will be implemented in the target states of the present project, whose generated energy will have as scope the guarantee of renewable and green energy supply for the decentralized energy platform to be used in homes, businesses and industry and the guarantee of green power supply for EV electric vehicles in all states where the platform is active.

**EcoGrid** is the solution to solve the market challenges and energy inefficiency, through a complex platform that provides a combination of energy using the benefits of blockchain. The independent trading, distribution and power market dreamed of such a platform. The **EcoGrid** team knows that this combination of essential knowledge expertise is more than necessary to create a next-generation utility to meet this new energy user's yearning.



Thank you for being part of the revolution in energy!