

LEGAL OPINION

THE PROJECT: GRN GRID PLATFORM



Legal Kornet

LEGAL OPINION
THE GRN GRID PROJECT

May 24, 2022

I. Introduction

We have been instructed by GRNBI B.V., (“**Company**”), which is the founder of the GRN GRID (“**Project**”), to issue this legal opinion to advise whether the GRN tokens (“**Tokens**”) issued by the Company can be considered as a security under the United States Federal Securities Laws.

We have not considered any other issues, other than that as set out at the paragraph above, and in particular we will not be aware of the status of any future rights and features that may be added to or removed from the Tokens, and have also not conducted any independent enquires or due diligence in respect of the operation of the Company (or its affiliates). This legal opinion is based on the United States Federal Securities Laws as at the date hereof and must not be read as extending, by implication or otherwise, to any other matter.

This legal opinion should be read together with the appendixes attached hereto, which form an integral part of this legal opinion.

In rendering this legal opinion, we have made the assumptions (without enquiry) as set out in Appendix 1 of this legal opinion (“**Assumptions**”).

This legal opinion is also subject to the qualifications as indicated in Appendix 2 of this legal opinion (“**Qualifications**”).

When issuing this legal opinion, we also relied on the reliability of the Representation and Guaranties as stipulated in Appendix 3 of this legal opinion (“**Legal Representation and Guaranties**”).



II. Legal Framework

A. Security Law

Congress enacted the Securities Act of 1933 (“**Securities Act**” or “**Security Law**”) to regulate the offer and sale of securities. The Securities Act establishes a set of requirements with the aim to provide investors with the opportunity to make an informed decision as well as to eliminate information asymmetry between the promoters and investors. Among these requirements are such as:

- To register offers and sales of the securities to the public with the SEC.
- To disclose material information about the issuer, its affiliates, and the securities, including financial and management information, as well as risks affecting the project.
- To make periodic public disclosures, including significant events and annual reports.

The definition of a “*security*” under the Securities Act includes a wide range of forms. Within the framework of this legal opinion, we will consider such investment vehicle as “*investment contract*.” The law and law enforcement practice have formed an approach according to which an investment contract is understood as investment of money in a common enterprise with an expectation of profits derived solely from the managerial efforts of others.

As the United States Supreme Court noted in SEC v. W.J. Howey Co., Congress defined “*security*” broadly to embody a “*flexible rather than a static principle, one that is capable of adaptation to meet the countless and variable schemes devised by those who seek the use of the money of others on the promise of profits.*”

The courts further have established that, subject to certain conditions, investment contracts can even be recognized as transactions where the assets are the orange groves, exclusive drinks, and the shares in virtual enterprises.

B. Security Law for Blockchain Tokens in Light of SEC Report

In re SEC v C.M. Joiner Leasing Corp., 320 U.S..344, 351 (1943), it is established that:



“The reach of the Securities Act does not stop with the obvious and commonplace. Novel, uncommon, or regular devices, whatever they appear to be, are also reached if it be proved as a matter of fact that they were widely offered or dealt in under terms or courses of dealing which established their character in commerce as “investment contract”, or any interest or instrument commonly known as security.”

The same was held in *Reves v. Ernst and Young*, 494 U.S. 56, 61 (1990):

“Congress purpose in enacting the securities laws was to regulate investments, in whatever form they are made and whatever name they are called.”

The US Securities and Exchange Commission (“**Commission**” or “**SEC**”) adheres to this position and declares that any new forms of investments via smart contracts or blockchain technology fall under the purview of US federal securities laws and on July 25, 2017, it issued a Section 21(a) investigative report, Release No. 81207, on investigation of DAO case. Among others, the aforementioned SEC report distinguishes projects where tokens represent securities as described above.

Hence, in this analysis, we shall investigate and provide our legal opinion as to whether the Token is a type of an investment vehicle that triggers relevant federal security law provisions of the United States.

III. Findings of Fact

We begin our legal analysis by providing information about the facts related to the Project and the Tokens. At this stage, our goal is to identify and describe the facts that will allow us to understand the model underlying the Project as well as the nature of the Tokens.

Investigating the facts, we take into account the position of the US courts that form should be disregarded for substance and the emphasis should be on economic reality.

Having said that, we note that our findings of facts are limited to the Company's instructions and the scope of this legal opinion, as indicated in section I [Introduction] of this legal opinion.



A. White Paper

For the purposes of this legal opinion, we have examined the White Paper (“WP”) (*Appendix 4 hereto*) submitted to us by the Company and posted on the Project website at <https://grngrid.com>.

According to the WP:

- The Project is aimed at solving the main problems of the cryptocurrency industry related to ecology. In the Company opinion, despite the many advantages of blockchain technology and the digital asset industry, the most serious problem and disadvantage of this area is the wasteful use of energy and, as a result, the rapid growth of electronic waste. The Company reports that environmental issues and the carbon footprint hinder the development of the cryptocurrency market and its wider adoption.

The White Paper states that the Platform can be a solution to these problems by promoting the use of renewable energy sources and technologies aimed at reducing the environmental damage caused by the digital currency industry.

«Through the use of its novel and unique Proof of Stake v2 algorithm, GRN Grid is designed to be an energy-efficient, high performance, low fee smartchain that actively supports decentralization and security.»

«Since our technology enables green-only transactions, Grid emerges as the first smartchain to be created with the capability of operating entirely on renewable energy sources.»

- According to the information provided by the Company, the Platform has a number of significant advantages in comparison with other projects working in the field of cryptocurrencies. The technology developed and launched within the Platform will allow participants to conduct environmentally friendly transactions. This is due to the fact that the Project has the ability to operate exclusively on renewable energy sources.

«The GRN Grid smartchain has been constructed to run completely on renewable energy. By significantly decreasing its carbon footprint, Grid eliminates one of the major drawbacks of blockchain.»



- To achieve the set goals, the Company has developed a system to encourage the Project participants using renewable energy sources.

«To encourage the usage of renewable energy, GRN introduces green certificates to validators that meet given requirements (i.e., proof their energy source is green). The verification procedure is completely free, and the application is accessible to everyone without any restrictions.»

- In addition to the ability to conduct transactions, the Platform has a number of other features that may be useful and interesting for cryptocurrency holders interested in using digital assets and reducing their carbon footprint. These features include access to an exchange to exchange tokens, the ability to send encrypted messages between parties, the ability to send billing requests, an integrated payment and escrow system.

The Platform has a number of built-in products that provide these functions. The following products of the GRN Wallet Project, EnScript, ExNode, GRNPay are indicated in the White Paper.

GRNPay is used by members to send and receive payment requests. Paying for requests can be done easily using the wallet app. GRN Wallet was created for the convenience of users making transactions within the Platform. The company announced that the wallet app will be cross-platform and cross-browser compatible.

The EnScript feature will allow Platform participants to send encrypted messages both together with a transaction and individually.

ExNode is an exchange through which users can stake and exchange tokens.

GRNPay can be used to reserve currency at the sender's address until a pre-defined condition is met. GRNPay will automatically transfer the money to the recipient.

- According to Section 9 of the White Paper, the Platform assumes decentralized governance.



«All functionalities and Grid validator nodes are permissionless, decentralized, and open source, which enables developers to create applications on top of them.»

- In connection with the Project, the Company will distribute a fixed number of Tokens to buyers by selling such Tokens;
- The Tokens can be practically used as follows:
 - GRN Tokens can be used by the Platform participants as a unit of payment in the payment structure built into the Project. Thus, with the help of Tokens, users can pay for services in the GRN Grid blockchain, make an NFT purchase on the network, and pay transaction fees.
 - GRN can be used by Project Token holders for staking available to participants within the Platform.
 - The Token is a means of encouraging the participants of the Platform. The company uses GRN to reward validators.
 - GRN GRID provides Token holders with the opportunity to participate in the management of the Platform by making decisions on certain issues related to the functions of the Project. Participation in the resolution of these issues is allowed by voting of Token holders.

«Green will serve as the native token on Grid and will primarily be used for:

- *Paying for transaction and computing fees*

- *Validation and staking rewards*

- *Voting for features*

- *Shopping on the Grid (NFTs)»*

- The Company is working to establish partnerships with various organizations involved in the production of renewable energy sources. In the future, the Company plans to use the Project Tokens to access the services of partners.



«In addition, GRN is a utility token that can be used for payment to access corporate services of GRN Energy and some of their partners in the renewable mining sector, after it has become tradeable.»

- Analysis of the WP (in connection with the information from the sources specified in paragraphs 2 and 3 of this section III [Findings of Fact] of the legal opinion) allows us to draw a conclusion about the role of the founders in the current work and development of the Project. We believe that the founders are a separate category of users of the Project who have certain rights and obligations in relation to the Project.

The Project is currently at the development stage. For this reason, most of the founders' functions are related to the development of the Platform and preparations for its launch. The founders are primarily concerned with organizational and technical issues.

In particular, the founders are negotiating with partners to establish cooperation; are engaged in the development and maintenance of the Platform website. In addition, the founders develop products and functions presented on the Platform, as well as carry out marketing work aimed at the development of the Project.

- The users of the Project are token holders who are interested not only in the most profitable and convenient symbolization of digital assets, but also in reducing the carbon footprint resulting from the active use of cryptocurrencies.

According to the information provided by the Company, thanks to the capabilities of the Platform, users will be able to store and exchange digital assets, participate in charity, use Tokens in an environmentally friendly manner, and exchange encrypted messages. The White Paper states that these functions can be interesting and useful not only for private users, but also for organizations using cryptocurrencies and blockchain technology in their activities.

«However, GRN Grid will provide companies and consumers with several critical decentralized functionalities. These include the capacity to transmit encrypted notes between parties, the ability to submit invoice requests, and an integrated exchanging system (DEX / P2P).»



Analysis of the White Paper (in connection with the information from the sources specified in paragraphs 2 and 3 of this section III [*Findings of Fact*] of the legal opinion) allows us to conclude that all users of the Project are actively involved in the operation/development of the Project, since the more people become users of the Project, the more complex and flexible the Project becomes. This finding also applies to the Project mechanism. At the same time, users performing transactions using the Tokens and the Project can determine its shortcomings and functions, which, in turn, may affect the further development and improvement of the Project.

Obviously, no legal opinion on the Howey Test may obviate the token analysis and we will scrutinize it not only in this part hereof. Just ensuring a practical use at the time of launch is insufficient to exempt the token from the securities laws. However, we describe what we have in our case.

B. Statements of Facts

In preparation for our legal analysis, we asked the Company to answer a number of questions concerning the basic features of the Project and the Tokens. We also asked the Company to issue these answers in the form of Statements of Facts (*Appendix 5 hereto*) (“**Statements of Facts**”), which we provide below.

According to the Statements of Facts, as at the date hereof:

- The Company has started selling Tokens.
- The Project is still under development.
- The Company will use the funds from the sale of Tokens for the development of the Project.
- The Token holders cannot exercise real and significant control over the Project via voting.
- The Company does not promise any ownership or equity interest in a legal entity, including a general partnership.
- The Project Founders do not retain any ownership interest in the Project.



- Tokens are not sold to a certain group of potential users of the Project.
- It is assumed that the Tokens are primarily held in amounts needed for expected use.
- The Tokens can be practically used in the Project.
- The Company does not promise any passive income or dividend distribution.
- The Project does not have built-in incentives that encourage the rapid use of Tokens in the Project, such as declining value over time.
- The Company will sell the Tokens to general public, not to sophisticated investors.
- The marketing materials distributed do not contain any information about how the Tokens can be used for profit.
- The amount of benefits, which can be obtained by the users of the Project, depends on their own actions/amount of spending.
- The Community does not play a central role in the development and growth of the Project.
- The Project is sufficiently decentralized so the Token holders would no longer reasonably expect the founders of the Project to carry out essential managerial efforts.
- The Company does not plan to support the secondary market for the Tokens.

Further in the text of this legal opinion, the WP and the Statements of Facts are also collectively referred to as the **“Project Documents”**.

Considering that, as at the date hereof, we are not aware of any circumstances giving a reason to assume that the Project Documents contain incomplete and/or inaccurate and/or misleading information, our legal opinion is based on the information contained in the Project Documents. The Company is exclusively responsible for the preparation and fair presentation of the Project Documents in accordance with the applicable laws.



This legal opinion has no objective to obtain a reasonable assurance about whether the Project Documents as a whole are free from material misstatement, whether due to fraud or error. Under no circumstances will we be liable if the information contained in the Project Documents, in full or in any part, is incomplete and/or inaccurate and/or misleading.

IV. Law Enforcement Practice

Further in this section IV [*Law Enforcement Practice*] of the legal opinion, we provide references to legislation and key law enforcement practice, on the basis of which, *inter alia*, we analyzed the facts specified in section III [*Findings of Fact*] of this legal opinion and evaluated them in accordance with the elements of the Howey Test as specified in section V [*Analysis Under the Howey Test*] of this legal opinion.

A. The Howey Test and Its Adoption by the Federal Courts (will be analyzed further in the case)

In accordance with Section 2(a)(1) of the Securities Act, a security is:

“any note, stock, treasury stock, security future, security-based swap, bond, debenture, evidence of indebtedness, certificate of interest or participation in any profit-sharing agreement ... investment contract ... or, in general, any interest or instrument commonly known as a ‘security,’ or any certificate of interest or participation in, temporary or interim certificate for, receipt for, guarantee of, or warrant or right to subscribe to or purchase, any of the foregoing.”

The federal Exchange and Securities Acts tend to control issuing of securities and to confirm particular interests attached to them. However, the Securities Act promotes a priority of the substance over the form. Therefore, if the Commission reveals any type of cooperation promising any future profits merely out of signing particular contract, it may investigate the case and declare this contract a security. Under such circumstances, promoters of such instrument shall disclose particular information and submit it to the SEC.

The Supreme Court case for determining whether an instrument meets the definition of a security is SEC v. Howey, 328 U.S. 293 (1946). In that case, a promoter offered to purchase certain services (cultivation of land) for the fixed price and cost of services. The promoter was delegated to distribute the net profits derived from the sale of fertile land among the holders of land plots during the harvesting period. There were only 42 investors interested in purchasing the land.



The Court construes the “*investment contract*” term within the definition of a security and notes that it has been used to classify those instruments that are of a “*more variable character*” that may be considered as a form of “*contract, transaction, or scheme whereby an investor lays out money in a way intended to secure income or profit from its employment.*” 11 Howey, 328 U.S. at 298; *Golden v. Garafolo*, 678 F.2d 1139, 1144 (2d. Cir. 1982).

More specifically, the court comes to the conclusion that the contract between the promoter and investor constitutes an investment contract. The court explains the definition of the security transaction as follows:

“a contract, transaction or scheme whereby a person invests his money in a common enterprise and is led to expect profits solely from the efforts of the promoter or a third party.”

Moreover, the court said that this definition was “*crystallized*” in the state courts cases long before adoption of the federal act. The Supreme Court continues that the term

“had been broadly construed by state courts so as to afford the investing public a full measure of protection. Form was disregarded for substance and emphasis was placed on economic reality.”

The Court stated that its definition of investment contracts

“embodies a flexible rather than a static principle, one that is capable of adaptation to meet the countless and variable schemes devised by those who seek the use of the money of others on the promise of profits.”

Eventually, to determine that this is an investment contract, the court has to establish that the following applies: (i) *investment of money*; (ii) *common enterprise*; (iii) *expectation of profits*; (iv) *solely from the efforts of others* (e.g., from a promoter or third party).

With regard to the first prong “*investment of money*”, there is no basis for disagreement. The only issue that may arise here is whether cryptocurrency may constitute viable consideration interest in lieu of the obtained interests attached to the token. This issue is addressed by the Supreme Court itself holding that the first prong requires only



“tangible and definable consideration in return for an interest that had substantially the characteristics of a security.”

One of the legal issues related to the “*investment of money*” criterion, related to blockchain technologies, is that there could be smart contracts that are acting autonomously and independently: cryptocurrency may be transferred under one contract while tokens, in lieu thereof, will be transferred (“*airdropped*”) under another smart contract.

However, the Supreme Court fails to specify the definition of a common enterprise. Federal Court developed two different concepts to analyze underlying contractual relationships of the parties. The first doctrine is “*horizontal commonality*” and the second is “*vertical commonality*.”

Horizontal commonality is found when a) investors’ contributions are pooled together (and according to some courts, there is a pro rata sharing of profits) and b) the fortune of each investor depends on the success of the overall enterprise.

In contrast, vertical commonality presupposes that common enterprise may be found where the investors’ fortune is dependent on the expertise of the promoter or third parties. In case of narrow vertical commonality, investors’ profits shall be tied to the profits of promoters.

It is not necessary that the funds of investors are pooled; what must be shown is that the fortunes of the investors are linked with those of the promoters, thereby establishing the requisite element of vertical commonality. Thus, a common enterprise exists if a direct correlation has been established between success or failure of the promoter's efforts and success or failure of the investment.

According to this view, the test is satisfied if the promoter and the investor are both exposed to risk and the profits and losses of investor and promoter are correlated.

In broad vertical commonality, investors’ success depends on the efficacy of the managers or third parties. Both the Fifth Circuit and the Eleventh Circuit follow this view. If the investor relies on the promoter's expertise, then the transaction or scheme represents a common enterprise and satisfies the second prong of the Howey Test.

As mentioned above, the circuits now disagree over the term “*common enterprise*.”



The third prong is an *“expectation of profit derived from the entrepreneurial or managerial efforts of others.”* Analyzing this prong, courts consider whether potential investors expect to receive profits 1) from their own efforts (use of rights or services obtained from promoters) or 2) from the efforts (managerial expertise) of the founders.

Even though in *re Howey*, the Court used the phrase “solely” from the efforts of others, the lower courts relaxed this prong, adopting concepts of *“undeniably significant”* or *“predominantly”* (*Rivanna Trawlers Unlimited v. Thompson Trawlers, Inc.*, 840 F.2d 236, 240 n.4 (4th Cir. 1988) *SEC v. Life Partners, Inc.*, 87 F.3d 536, 545 (D.C. Cir. 1996); *SEC v. Int’l Loan Network, Inc.*, 968 F.2d 1304, 1308 (D.C. Cir. 1992). *SEC v. Koscot Interplanetary, Inc.*, 497 F.2d 473, 483 (5th Cir. 1974) (quoting *SEC v. Glenn W. Turner Enters., Inc.*, 474 F.2d 476, 482 (9th Cir. 1973).

In *United Housing Foundation, Inc. v. Forman*, the Supreme Court stated, *“The touchstone is the presence of an investment in a common venture premised on a reasonable expectation of profits to be derived from the entrepreneurial or managerial efforts of others.”* 421 U.S. 837, 852 (1975).

Since that time, some courts are investigating whether there is *de minimis* efforts of investors and whether efforts of them are insubstantial factor for the investor to participate in the contract.

Other courts check whether the efforts of offerors of the contract are predominant and more significant in comparison with those of investors in light of future expectation of profits or whether efforts of those other than the investors are *“the undeniably significant ones.”*

Finally, some courts hold that the fourth prong is satisfied when the expectations of profits derive from the managerial and entrepreneurial efforts of the offerors, *“in unspecified measure and unspecified comparative weight as to the relative significance with investors’ efforts and offerors’ or third parties’ efforts.”*

B. Considerations of DAO Case by the SEC

Report of Investigation Pursuant to Section 21(a) of the Securities Exchange Act of 1934: the DAO (hereinafter the **“DAO case”** or **“Report”** or **“Investigation”**) is the first investigation of the Commission in attempt to provide the ICO market with an interpretation or application of the US Security regulations (Securities Act of 1933) to a new paradigm of decentralized economy with the *“rule of code.”*



“The investigation raised questions regarding the application of the U.S. federal securities laws to the offer and sale of DAO Tokens, including the threshold question whether DAO Tokens are securities. Based on the investigation, and under the facts presented, the Commission has determined that DAO Tokens are securities under the Securities Act of 1933 (“Securities Act”) and the Securities Exchange Act of 1934 (“Exchange Act”).”

The Report revealed that tokens introduced by the DAO were security instruments, hence being subject to the federal securities laws. Among others, the Report claims that blockchain technology-based securities must be registered unless a valid exemption applies. Those participating in unregistered offerings may be liable for violations of the securities laws.

The Commission confidently stresses that federal law shall be equally applied both to conventional corporations issuing investment instruments and to virtual structures such as decentralized autonomous organizations—the DAO.

The four cornerstones formed by US judicial law shall be intact. And in this regard, the Report looks at the DAO Token through the prism of four elements of the well-known Howey Test: investment of money in a common enterprise for the expectation of profits solely from the managerial efforts of others.

As it is stated in the Investigation:

“This Report reiterates these fundamental principles of the U.S. federal securities laws and describes their applicability to a new paradigm—virtual organizations or capital raising entities that use distributed ledger or blockchain technology to facilitate capital raising and/or investment and the related offer and sale of securities.

The automation of certain functions through this technology, “smart contracts” or computer code, does not remove conduct from the purview of the U.S. federal securities laws. This Report also serves to stress the obligation to comply with the registration provisions of the federal securities laws with respect to products and platforms involving emerging technologies and new investor interfaces.”

Without any doubt, DAOs have dramatic effect on legal reasoning as to whether a token is a security instrument. This Legal Opinion is not an exception, as it will apply conclusions of the Commission and the four-prong test.



It is clearly stated in the Report that registration of securities is required for the purposes of full disclosure of information to the investors. Such disclosure enables purchasers to make a considerable decision and facilitates legal scrutiny for investor protection.

Section 5 of the Securities Act declares:

“The registration provisions of the Securities Act contemplate that the offer or sale of securities to the public must be accompanied by the “full and fair disclosure” afforded by registration with the Commission and delivery of a statutory prospectus containing information necessary to enable prospective purchasers to make an informed investment decision. Registration entails disclosure of detailed “information about the issuer’s financial condition, the identity and background of management, and the price and amount of securities to be offered ...”

The DAO is a drastic example that was used by the founders as a representation of a “virtual” organization incorporated in a form of a code. The DAO was thought as a for-profit organization that emits tokens to investors in order to form a set of assets that would be then used to fund “projects.”

Prospective holders of DAO tokens are supposed to share earnings from these projects as a return on their investment in DAO tokens. In addition, DAO token holders can monetize their investments re-selling tokens on a number of web-based platforms that support secondary trading in the DAO Tokens.

“DAO Token holders were not restricted from re-selling DAO Tokens acquired in the offering, and DAO Token holders could sell their DAO Tokens in a variety of ways in the secondary market and thereby monetize their investment as discussed below. Prior to the Offering Period, Slock.it solicited at least one U.S. web-based platform to trade DAO Tokens on its system and, at the time of the offering, The DAO Website and other promotional materials disseminated by Slock.it included representations that DAO Tokens would be available for secondary market trading after the Offering Period via several platforms.

During the Offering Period and afterwards, the Platforms posted notices on their own websites and on social media that each planned to support secondary market trading of DAO Tokens.”



“For example, customers of each Platform could buy or sell DAO Tokens by entering a market order on the Platform’s system, which would then match with orders from other customers residing on the system. Each Platform’s system would automatically execute these orders based on pre-programmed order interaction protocols established by the Platform.”

DAO construction was built in a way to allow any DAO token holder to have a vote right for a project that would promise certain investment returns. Each action of a token holder was executed via a smart contract.

“According to the White Paper, in order for a project to be considered for funding with “a DAO [Entity]’s [ETH],” a “Contractor” first must submit a proposal to the DAO Entity. Specifically, DAO Token holders expected Contractors to submit proposals for projects that could provide DAO Token holders returns on their investments. Submitting a proposal to The DAO involved: (1) writing a smart contract, and then deploying and publishing it on the public ledger.”

The Report starts its legal analysis by applying each element of the Howey Test. The first one is straightforward. Each DAO participant invests a certain amount of funds to acquire tokens that would provide him with ownership rights and the right to vote in a project that promises to be profitable. Hence, the Commission finds the first element of the Howey Test to be satisfied.

“In exchange for ETH, The DAO created DAO Tokens (proportional to the amount of ETH paid) that were then assigned to the Ethereum Blockchain address of the person or entity remitting the ETH. A DAO Token granted the DAO Token holder certain voting and ownership rights. According to promotional materials, the DAO would earn profits by funding projects that would provide DAO Token holders a return on investment.”

The second element was found to be positive as well since the DAO was clear in its intentions and provided on its website information on the for-profit purpose of organization.

“[P]rofits” include “dividends, other periodic payments, or the increased value of the investment,” Edwards, 540 U.S. at 394. As described above, the various promotional materials disseminated by Slock.it and its cofounders informed investors that The DAO was a for-profit entity whose objective was to fund 12 projects in exchange for a return on investment. The ETH was pooled and available to The DAO to fund projects.”



The final element has been met as token holders were fully reliant on the actions of third parties.

“Investors in The DAO reasonably expected Slock.it and its co-founders, and The DAO’s Curators, to provide significant managerial efforts after The DAO’s launch. The expertise of The DAO’s creators and Curators was critical in monitoring the operation of The DAO, safeguarding investor funds, and determining whether proposed contracts should be put for a vote.”

C. **Consideration of Munchee Case by the SEC**

After the DAO Report, the next case of a paramount importance is the cease-and-desist order (hereinafter the **“Order”**) against a Californian corporation, Munchee Inc. (hereinafter **“Munchee”**) where the latter was declared to be a company that organized the unregistered sale of security instruments.

After the Howey Test scrutiny, the Commission found that Munchee tokens did not satisfy the third and fourth element of the test. The SEC implications in Munchee’s Order has a long-standing effect on the legal reasoning applied to the tokens of any ICO project.

Thereby the SEC has sent a clear message that it will take substantial approach to any ICO project.

That said, factual actions of a company may implicate that tokens are considered to be traded on a secondary market. For instance, if it is marketed beyond the targeted audience or burned for its price appreciation or endorsed for third-party statements on token attraction for investment purposes. All these factors, though not being explicitly stated, shall be weighted in every ICO project, and in this Legal Opinion we analyze this fact pattern also.

Munchee created an iPhone application for people to review restaurant meals. In October and November 2017, Munchee launched an offer of the digital tokens (hereinafter **“MUN”** or **“MUN token”**) to be issued on a blockchain.

Munchee offered MUN tokens to raise about \$15 million in cash so that it could, firstly, improve its existing application and, secondly, recruit application users (restaurants) to purchase advertisements, write reviews, post photographs or to buy food and conduct other transactions using MUN. The company communicated through its website, a white paper, and other means that it would use the proceeds to create the platform.



The SEC has investigated in the Order that in the white paper Munchee ensured investors that token shall be listed on several prominent US exchange markets or at least it will take all reasonable steps for that. Then, the trade has occurred far beyond the US while the visitors of the restaurants were in California.

What is more, Munchee declared support of token price appreciation. Hence, any prospective token holder may reasonably believe that their investments in tokens can generate a considerable profit. The following is stated in the Order by the SEC:

“In the MUN White Paper, Munchee stated that it would work to ensure that MUN holders would be able to sell their MUN tokens on secondary markets, saying that “Munchee will ensure that MUN token is available on a number of exchanges in varying jurisdictions to ensure that this is an option for all token-holders.”

“Munchee represented that MUN tokens would be available for trading on at least one U.S.-based exchange within 30 days of the conclusion of the offering. It also stated that Munchee would buy or sell MUN tokens using its retained holdings in order to ensure there was a liquid secondary market in MUN tokens.”

In the white paper, Munchee has tried to persuade investors that it would run its business in a way that would cause MUN tokens to rise in value. The so-called platform is structured to burn tokens taking them out of circulation and thereby raising their price. Or, in another case, it was stated in the white paper that the holder of more tokens would be rewarded with a major number of tokens.

Besides that, the SEC defined that despite of Munchee statements in the white paper, no economic circulation has finally occurred within the platform. Thereby, it may be concluded that Munchee artificially intensified appreciation of token value. The following is stated in the Order of the Commission:

“In the MUN White Paper, on the Munchee Website and elsewhere, Munchee and its agents further emphasized that the company would run its business in ways that would cause MUN tokens to rise in value. First, Munchee described a “tier” plan in which the amount it would pay for a Munchee App review would depend on the amount of the author’s holdings of MUN tokens.

For example, a “Diamond Level” holder having at least 300 MUN tokens would be paid more for a 5 review than a “Gold Level” holder having only 200 MUN tokens. Also, Munchee said it could or would “burn” MUN tokens in the future when restaurants pay for advertising with MUN tokens, thereby taking MUN tokens out of circulation. Munchee emphasized to potential purchasers how they could profit from those efforts:



While Munchee told potential purchasers that they would be able to use MUN tokens to buy goods or services in the future after Munchee created a “Platform,” no one was able to buy any good or service with MUN throughout the relevant period.”



As follows from the Order, the Munchee marketing campaign was aggressively designed as to deliver to investors an idea that MUN will be traded on a secondary market with an exponential growth. The more actively Munchee echoes this message, the less meaningful the economical use of the platform becomes. The SEC has traced the following blog post commercials that among others prove investors’ expectations of profits.

“Munchee published a blog post on October 30, 2017, that was titled “7 Reasons You Need To Join The Munchee Token Generation Event.” Reason 4 listed on the post was “As more users get on the platform, the more valuable your MUN tokens will become” and then went on to describe how MUN purchasers could “watch their value increase over time” and could count on the “burning” of MUN tokens to raise the value of remaining MUN tokens.”

Munchee underlines the strong linkage between the number of participants, building of the platform and growth of MUN token value.

“Similarly, on or about October 23, 2017, one of Munchee’s founders described the opportunity on a podcast about the MUN offering: So, they [users] will create more quality content to attract more restaurants onto the platform.

So, the more restaurants we have, the more quality content Munchee has, the value of the MUN token will go up—it's like an underlying incentive for users to actually contribute and actually build the community."

What is more, Munchee was negligent to endorse third party statements that touted the opportunity to profit.

"On October 25, 2017, Munchee created a public posting on Facebook, linked to a third-party YouTube video, and wrote "199% GAINS on MUN token at ICO price! Sign up for PRE-SALE NOW!" The linked video featured a person who said "Today we are going to talk about Munchee. Munchee is a crazy ICO."

If you don't know what an ICO is, it is called an initial coin offering. Pretty much, if you get into it early enough, you'll probably most likely get a return on it."

This person went on to use his "ICO investing sheet" to compare the MUN token offering to what he called the "Top 15 ICOs of all time" and "speculate[d] that a \$1,000 investment could create a \$94,000 return."

Finally, the MUN token marketing campaign strengthened beyond the United States where the restaurants were not located and focused primarily on the forums of people who are interested in crypto assets investments.

"Instead, Munchee and its agents promoted the MUN token offering in forums aimed at people interested in investing in Bitcoin and other digital assets, including on BitcoinTalk.org, a message board where people discuss investing in digital assets. These forums are available and attract viewers worldwide, even though the Munchee App was only available in the United States."

Similarly, Munchee offered to provide MUN tokens to people who published promotional videos, articles or blog posts in forums such as BitcoinTalk.org or otherwise helped Munchee promote the MUN token offering. More than 300 people promoted the MUN token offering through social media and by translating MUN token offering documents into multiple languages so that Munchee could reach potential investors in South Korea, Russia, and other countries where the Munchee App was unavailable"



In conclusion and for the purposes of this legal opinion, we note that in accordance with the SEC position in *Re Munchie* any ICO project may not meet the third and fourth prong (expectation of profits solely from the managerial benefits of others) of the Howey Test if the project represents only a veil without substantial economical underlying platform.

D. Comparison with the Verge Crypto-Currency General Partnership case

Plaintiffs Cameron James and the other plaintiffs filed their Complaint against Justin E. Valo. The case allegedly arises out of the theft of Plaintiffs' Verge virtual currency (the "**Verge Coins**"), which were themselves unregistered securities, from a smart phone "hot wallet" application called CoinPouch that was developed and marketed by two related Texas entities that are now in bankruptcy—Touch Titans, LLC, and Touch Titan Labs, LLC.

Among others, plaintiffs claim a Defendant Valo, the Lead Developer of Verge, and the Verge Crypto-Currency General Partnership, a common law general partnership formed to develop, market and benefit from the use of the Verge Coins (collectively the "**Partnership**"), engaged in intentional, reckless or negligent acts leading to the theft of their Verge Coins.

In accordance with the complaint, the Partnership violated Sections 5 and 12(a) of the Securities Act and the Computer Fraud and Abuse Act ("CFAA") [18 U.S.C. § 1030], in addition to other relevant Texas state law claims pleaded. The second count was securities law violation, the third count—conversion, the fourth—unjust enrichment, and the fifth claim was based on product liability.

For the purposes of this legal opinion, we consider one issue that, from our point of view, might be relevant to the fact pattern provided in the WP even though there is no court decision in the Justin E Valo case.

We do not consider how Plaintiffs came to the conclusion that Verge token *is not a security* in accordance with the Howey Test, since they do not provide explanations on the reasoning behind the claim. However, the question we have proposed is whether the Project amounts to a partnership.



In accordance with Uniform Partnership Act of 1997 Section 202:

- a) ...Association of two or more persons to carry on as co-owners a business for profit forms a partnership, whether or not the persons intend to form a partnership.
- b) In determining whether a partnership is formed, the following rules apply:
 - (1) Joint tenancy, tenancy in common, tenancy by the entireties, joint property, common property, or part ownership does not by itself establish a partnership, even if the co-owners share profits made by the use of the property.
 - (2) The sharing of gross returns does not by itself establish a partnership, even if the persons sharing them have a joint or common right or interest in property from which the returns are derived.
 - (3) A person who receives a share of the profits of a business is presumed to be a partner in the business, unless the profits were received in payment:

From the uniform law provided above, it can be inferred that a major difference between a partnership and other forms of incorporation relates to whether and to which extent the entire business may be declared to be a legal entity.

In this respect, it can be defined that legal entity is a separate subject of law having its own rights such as the right to own and dispose of property, to sue and be sued, and to enter into contracts. In other words, there are two separate subjects recognized by the law.

When individuals carry out a common enterprise as partners, the common law dictates that partnership does not exist. Under the common-law theory, a partnership is an aggregate word for individuals. The rights and duties recognized and imposed by common law are those of the individual partners.

Plaintiffs in their lawsuit did not unfold the doctrine of joint partnerships but did make such a conclusion as several people were listed in the Black Paper with the main goal of investment collection, such as founders, developers, marketers.



In this respect and considering the alleged claims to be true that people involved in building an ecosystem are those that “*receive a share of the profits*” members of the decentralized system could fall into the domain of Section 202 (a) (3) of the Uniform Partnership Act 1997.

Based on the Project Documents, we note that the profit-sharing element is not satisfied with respect to the Project tokens because:

- (a) Functions of the Tokens do not grant users any rights to participate in or receive any profit, income or other payments by virtue of their possession of the Tokens. An exception in this case may be the reward that participants can receive due to the staking available within the Project; and
- (b) Although a user using the Project may be able to receive tokens for their contribution to the Project, such distribution of rewards and / or incentives is based on the user contributing to the Project by providing liquidity to the Project's liquidity pool. Accordingly, rewards and / or incentives are allocated in accordance with such contributions of such user to the Project, and not because such user owns tokens.

The Project case is different since it is more likely that Tokens do not represent an investment instrument as analyzed below. Taking for granted that Tokens are not securities, we may come to the conclusion that Section 202 (a) (3) is not applicable here. Each user is not a partner to the Project and is not promised any share in any Project company.

Then, unlike with the Verge Case, in the Project none of the materials identify persons involved in the promotion of the Project, its tight circle, bonds, investments interests or forms of incorporation.

Yet, the Project might fall into a “safe harbor” under section 202 (a) 2 of the Uniform Partnership Act 1997 providing the mere sharing of gross returns does not establish partnership even if the persons sharing them have a joint or common right or interest in property from which the returns are derived.

Considering all the above, we note that the Verge case is a mere claim of a Plaintiff. No competent court has yet introduced the decision and underlined its point of view, therefore this case is not decisive to this legal opinion.



E. Consideration of the SEC vs. TELEGRAM GROUP INC. and TON ISSUER INC.

In the SEC vs. TELEGRAM GROUP INC. and TON ISSUER INC., the SEC sought to prevent Telegram Group Inc. and TON Issuer Inc. (collectively “**Telegram**”) from engaging in a plan to distribute Telegram’s tokens (“**Grams**”) in what it considered to be an unregistered offering of securities.

As established by the court decision, in early 2018, Telegram received \$1.7 billion from 175 sophisticated entities and high net-worth individuals in exchange for a promise to deliver 2.9 billion Grams. Telegram contended that the agreements to sell the 2.9 billion Grams were *“lawful private placements of securities covered by an exemption from the registration requirement.”* In Telegram’s view, *“only the agreements with the individual purchasers are securities.”* According to Telegram, the Grams were not to be delivered to these purchasers until the launch of Telegram’s new blockchain, the Telegram Open Network (“**TON**”). Telegram viewed the anticipated resales of Grams by the 175 purchasers into a secondary public market via the TON as *“wholly-unrelated transactions”* and argued *“they would not be the offering of securities.”*

The SEC saw things differently. The initial purchasers are, in its view, *“underwriters” who, unless Telegram is enjoined from providing them Grams, will soon engage in a distribution of Grams in the public market, whose participants would have been deprived of the information that a registration statement would reveal.”*

The Court found that the SEC showed *“a substantial likelihood of success in proving that the contracts and understandings at issue, including the sale of 2.9 billion Grams to 175 purchasers in exchange for \$1.7 billion, are part of a larger scheme to distribute those Grams into a secondary public market, which would be supported by Telegram’s ongoing efforts.”* Considering the economic realities under the Howey test, the Court came to a conclusion that, *“in the context of that scheme, the resale of Grams into the secondary public market would be an integral part of the sale of securities without a required registration statement.”* Therefore, the Court granted the SEC’s motion for a preliminary injunction.

The case under consideration is valuable for understanding, as in its Opinion and Order dated March 24, 2020, the Court summarized the law enforcement practice in the field of securities legislation and formulated a number of conclusions concerning the public sale of cryptocurrencies.



Among other things, the Court introduced a position regarding at what point in time it is necessary to evaluate the token under the Howey Test. The Court rejected the Telegram's arguments that Grams had to be evaluated under the Howey Test at the time of their delivery to the purchasers, i.e., at the launch of the TON Blockchain (in view of the Telegram, once the TON Blockchain is launched the delivery of the Grams is not to be part of a common enterprise and will not provide essential managerial efforts). The Court stated that *"Howey requires the Court to examine the series of understandings, transactions, and undertakings at the time they were made"* and *"for the purposes of the securities laws, a sale occurs when 'the parties obligated themselves to perform what they had agreed to perform even if the formal performance of their agreement is to be after a lapse of time ...'"*

Of great importance is the Court's position in relation to such Howey prong as "Common Enterprise." According to the previous law enforcement practice, the existence of a common enterprise may be demonstrated through either horizontal commonality or vertical commonality. Horizontal commonality is established when investors' assets are pooled and the fortune of each investor is tied to the fortunes of other investors as well as to the success of the overall enterprise. In contrast, vertical commonality requires that the fortunes of investors are tied to the fortunes of the promoter.

In the SEC vs. TELEGRAM GROUP INC. and TON ISSUER INC., the Court expands this approach based on whether the project was launched on the date of the token sale or not.

The Court states that *"the ability of each Initial Purchaser to profit was entirely dependent on the successful launch of the TON Blockchain. If the TON Blockchain's development failed prior to launch, all Initial Purchasers would be equally affected as all would lose their opportunity to profit, thereby establishing horizontal commonality at the time of 2018 Sales."*

The Court notes that *"the SEC has made a substantial showing of strict vertical commonality ... Telegram's own fortunes were similarly dependent on the successful launch of the TON Blockchain as Telegram would suffer financial and reputational harm if the TON Blockchain failed prior to launch."*

Thus, in the context of the SEC vs. TELEGRAM GROUP INC. and TON ISSUER INC., we can conclude that should the sale of tokens take place before the launch of the project, such tokens may be qualified by American courts as securities.



The Court also expressed its opinion as to which circumstances are of the greatest importance for evaluating the tokens under the Howey Test. We will explain this in more detail in the Section V [*Analysis Under the Howey Test*] of this legal opinion.

F. Consideration of SEC vs. RIPPLE LABS, INC., BRADLEY GARLINGHOUSE, and CHRISTIAN A. LARSEN

On December 22, 2020, the SEC filed an action against Ripple Labs Inc. and two of its executives, who are also significant security holders, alleging that they raised over \$1.3 billion through an unregistered, ongoing digital asset securities offering.

According to the SEC, Ripple and its executives raised capital to finance the company's business. The complaint alleged that Ripple raised funds, beginning in 2013, through the sale of digital assets known as XRP in an unregistered securities offering to investors in the U.S. and worldwide. Ripple also allegedly distributed billions of XRP in exchange “*for non-cash consideration, such as labor and market-making services.*” The complaint alleged that the defendants failed to register their offers and sales of XRP or satisfy any exemption from registration, in violation of the registration provisions of the federal securities laws.

According to the SEC, “*Issuers seeking the benefits of a public offering, including access to retail investors, broad distribution and a secondary trading market, must comply with the federal securities laws that require registration of offerings unless an exemption from registration applies ... ,*” and “*The registration requirements are designed to ensure that potential investors—including, importantly, retail investors—receive important information about an issuer's business operations and financial condition*”

The SEC stated that Ripple never filed a registration statement, thus, it never provided investors with the material information that other issuers included in such statements when soliciting public investment. Instead, Ripple “*created an information vacuum*” such that Ripple could sell XRP into a market that possessed only the information Ripple chose to share about the project.

The SEC accused the defendants that they continue to hold substantial amounts of XRP and—with no registration statement in effect—can continue “*to monetize their XRP while using the information asymmetry they created in the market for their own gain, creating substantial risk to investors.*”



When determining whether XRP counted as a security, the SEC applied the Howey test.

The SEC claimed that because XRP was fungible, the fortunes of XRP purchasers were tied to one another, and each depended on the success of Ripple's XRP strategy; XRP investors stood *"to profit equally if XRP's popularity and price increase, and no investor will be entitled to a higher proportion of price increases"*; Ripple pooled the funds it raised due to the offer of XRP and used them *"to fund its operations, including to finance building out potential "use" cases for XRP, paying others to assist it in developing a "use" case, constructing the digital platform it promoted"*; Ripple recognized and repeatedly emphasized *"these common interests to prospective investors, including by explaining to the market that Ripple used proceeds from XRP sales to fund its operations and that Ripple wanted XRP to succeed,"* and these circumstances were qualified by the SEC as though purchasers of XRP invested into a common enterprise.

The SEC pointed out that Ripple's publicly stated goal was *"to increase demand for XRP"*; Ripple assured investors that Ripple would *"protect the trading markets for XRP"*; Ripple *"touted investors' ability to easily buy and sell XRP"* highlighting XRP price was increasing, and in this regard, the SEC stated that Ripple led investors to reasonably expect a profit from their investment.

According to the SEC, Ripple promised to undertake significant efforts to build value for XRP as well as to develop and maintain a public market for XRP investors to resell XRP; Ripple promoted *"the ability of its team to succeed in its promised efforts"*; economic reality dictated that XRP purchasers had *"no choice but to rely on Ripple's efforts for the success or failure of their investment,"* and all the above indicates that Ripple led investors to reasonably expect that Ripple's entrepreneurial and managerial efforts would drive the success of Ripple's XRP project.

Based on the above, the SEC concluded that, *"at all relevant times during the offering, XRP was an investment contract and therefore a security subject to the registration requirements of the federal securities laws."*

As objections, Ripple stated that it did not violate Section 5 of the Securities Act because XRP was not a security or "investment contract," and Ripple's distributions or sales of XRP were not "investment contracts"; no registration was required in connection with any distribution or sale of XRP by Ripple.



One of the main arguments in Ripple's defense was that XRP had a variety of functions that differ from the concept of a "security" as the law understands it. XRP functioned as a virtual currency, a "*medium of exchange*" to facilitate transactions locally and internationally. Moreover, Ripple noted that nowhere in the world has XRP been considered a "security," citing interpretations by regulators in the UK, Singapore and Japan, where it has been defined as a virtual currency outside the scope of securities regulation:

"Securities regulators in the United Kingdom, Japan, and Singapore have likewise concluded that XRP is a virtual currency not subject to securities regulation. As the U.K. Treasury recently explained, "widely known cryptoassets such as Bitcoin, Ether and XRP" are not securities, but "[e]xchange tokens" that "are primarily used as a means of exchange."

Further, Ripple claimed that it did not have, and the SEC failed to provide, fair notice that Ripple's "*conduct was in violation of law, in contravention of Ripple's due process rights. Due process requires that laws give a person of ordinary intelligence a reasonable opportunity to know what is prohibited. Here, due to the lack of clarity and fair notice regarding Defendants' obligations under the law, in addition to the lack of clarity and fair notice regarding Plaintiffs' interpretation of the law, Ripple lacked fair notice that its conduct was prohibited.*"

Ripple also asserted that the SEC lacked "*extraterritorial authority over all or some of the transactions alleged in the Complaint that took place outside the United States and/or were made on foreign exchanges.*"

As at the date of this legal opinion, this case is under consideration and the court has not made a final decision.

G. Guidelines, Report on ICO and Other Sources Taken into Consideration in This Legal Opinion

- 1) SEC's order against blockchain company Block.one. to pay \$24 million penalty for unregistered ICO.
- 2) SEC's order against EtherDelta for operating an unregistered exchange.
- 3) SEC's order against international security-based swaps dealer XBT Corp that targeted U.S. investors.



- 4) SEC's order against ICO incubator ICOBox and founder for unregistered offering and unregistered broker activity.
- 5) SEC's order against Bitqy and BitqyM and its founders for defrauding investors in unregistered offering and operating unregistered digital asset exchange.
- 6) SEC's order against research and rating provider ICORating for failing to disclose it was paid to tout digital assets.
- 7) SEC against Kik Interactive, No. 19-cv-5244 (S.D.N.Y., filed June 4, 2018).
- 8) SEC's Investor Bulletin: Initial Coin Offerings, July 25, 2017.
- 9) SEC Investor Alert: "Bitcoin and Other Virtual Currency-Related Investments."
- 10) SEC Investor Alert: "Ponzi Schemes Using Virtual Currencies."
- 11) SEC Investor Alert: "Social Media and Investing—Avoiding Fraud."
- 12) SEC Investor Alert: "Public Companies Making ICO-Related Claims" Aug. 28, 2017.
- 13) Statement on framework for investment contract' analysis of digital assets, Bill Hinman, Director of Division of Corporation Finance, Valerie Szczepanik, Senior Advisor for Digital Assets and Innovation.
- 14) Chairman's testimony on virtual currencies: "The Roles of the SEC and CFTC" Chairman Jay Clayton, Washington D.C., February 6, 2018.
- 15) Framework for "Investment Contract" Analysis of Digital Assets by the Strategic Hub for Innovation and Financial Technology.

V. Analysis Under the Howey Test

We provide our analysis of the token below based on each Howey Test factor.



A. Investment of Money

In determining whether an investment contract exists, the investment of “money” need not take the form of cash. See, e.g., *Uselton v. Comm. Lovelace Motor Freight, Inc.*, 940 F.2d 564, 574 (10th Cir. 1991).

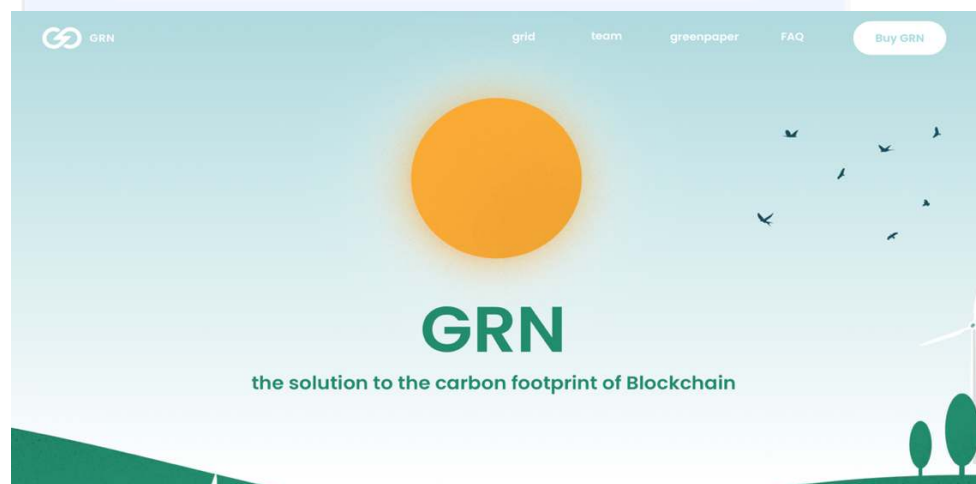
“In spite of Howey’s reference to an ‘investment of money,’ it is well established that cash is not the only form of contribution or investment that will create an investment contract.”

In Re DAO Report:

*“Investors in The DAO used ETH to make their investments, and DAO Tokens were received in exchange for ETH. Such investment is the type of contribution of value that can create an investment contract under Howey. See SEC v. Shavers, No. 4:13-CV-416, 2014 WL 4652121, at *1 (E.D. Tex. Sept. 18, 2014) (holding that an investment of Bitcoin, a virtual currency, meets the first prong of Howey); Uselton, 940 F.2d at 574 (“[T]he ‘investment’ may take the form of ‘goods and services,’ or some other ‘exchange of value’.”*

As we can see in the case law analysis above, it was not difficult for courts to establish the “investment money” prong.

There are no questions regarding the public offer, since at the time of preparing the legal opinion, the WP was published by the Company on the official website. The White Paper is hosted on the Project website (link: <https://grngrid.com>) and is available on it for all third parties. In addition, the Project website itself contains information about Tokens and their purchase.



However, further distribution of the Tokens will ultimately be outside of the Project's control. Hence, we may treat this as broad communications to the general public. It is stated in the court's decision that Bitcoin may be used to purchase goods or services or to pay for individual living expenses. The only limitation of Bitcoin is that it is limited to those places that accept it as currency.

Since Bitcoin or any other cryptocurrency has all functions inherent to a real currency, it can be considered as the "money" when it is used as consideration in forming an investment contract.

Therefore, this element of the test is straightforward for us and points toward the Tokens being an *"Investment of Money."*

B. Common Enterprise

In contrast with *"Investment of Money"* prong, the Token does not satisfy *"Common Enterprise"* element of the Howey Test.

A common enterprise exists if there is *"commonality"* between the promoter and investor. The law enforcement practice recognizes *"Horizontal Common Enterprise"* and *"Vertical Common Enterprise."*

"Horizontal Common Enterprise" is found where investors combine their investments in one pool and the fortune of each investor depends on the success of the overall enterprise. In some courts, judges are seeking to decide whether a pro rata sharing of profits takes place. However, it would be fair to note that, according to the general approach, while schemes with horizontal commonality often include a pro rata distribution of revenues or income, such a pro rata distribution is not obligatory for horizontal commonality.

The essence of *"Horizontal Common Enterprise"* is that investors are tied together in their risks either to receive or to lose everything. An example of this approach is the SEC vs. TELEGRAM GROUP INC. and TON ISSUER INC., where the court stated:

"The ability of each Initial Purchaser to profit was entirely dependent on the successful launch of the TON Blockchain. If the TON Blockchain's development failed prior to launch, all Initial Purchasers would be equally affected as all would lose their opportunity to profit, thereby establishing horizontal commonality"



Based on the analyzes of the Project Documents, we came to the conclusion that the Token does not contain any signs of “*Horizontal Common Enterprise*” for the following reasons.

The economic reality underlying the Project provides a wide autonomy to each individual user who has the opportunity to use various financial instruments. Among them are such as a payment transfer system, an electronic wallet, an exchange, an escrow system, and staking. The combination of these functions can be used by any interested participant of the Platform who owns Tokens.

Looking at the technical side of the Project, we see that any user of the Project acts as an independent consumer of services and features available within the platform. In turn, the Project provides IT support that can be used by each user to meet a set of personal needs.

Among the products of the Project are ecological solutions for the blockchain, a program for recycling equipment, the ability to transfer encrypted notes between parties, the ability to send billing requests, and charity.

We also take into account that, according to the Statements of Facts, “*the amount of benefits, which can be obtained by the users of the Project, depends on their own actions/amount of spending.*” The Platform does not provide rewards for users who simply own Tokens. In this regard, the users of the Project are likely to be independent and bear the risks of adverse consequences caused mainly by their own actions or inaction.

As it was stated above, a pro rata distribution is not an absolute criterion for horizontal communality. However, since some judges examine it as an auxiliary criterion, we note that the Project Documents do not contain any mention of pro rata distribution.

Moreover, it is expressly indicated in the Statements of Facts that “*the Company does not promise any passive income or dividend distribution.*” With the exception of staking, the features of the Tokens do not grant users any rights to receive any profit, income or other benefits by virtue of their holding of the Tokens. Thus, according to the statements of the Company, there are several available scenarios for the use of Tokens, and all of them assume that the success of the user depends on his own efforts and actions. Passive income and dividends for Token holders are not expected.



Regarding the risk of loss due to the Project failure prior to launch, we note that according to the Statements of Facts “*the Project is still under development*”. In addition, according to the information provided in the Roadmap section on the official website of the Project, the Project will be launched in the near future, therefore, as of the date of this document, the above risk does not exist.



Summing up, it cannot be concluded that in the case under consideration the fate of each investor depends on the success of the entire Project. The project has multifaceted functions based both on the activities of companies and on the activities of individual users. The successful use of the functions of the Token depends on the efforts made by the participants of the Platform.

Speaking of the “*Vertical Common Enterprise*,” it should be noted that there are two principal approaches to determining if a vertical commonality exists: 1) strict vertical commonality, and 2) broad vertical commonality.

In strict vertical commonality, it is not necessary that the funds of investors are pooled; what must be shown is that the fortunes of the investors are linked to those of the promoters, thereby establishing the requisite element of strict vertical commonality. Thus, a strict vertical enterprise exists if a direct correlation has been established between the profits and losses of the promoters and the profits and losses of the investors.

As an example of strict vertical commonality, we would like to quote another conclusion of the court in the SEC vs. TELEGRAM GROUP INC. and TON ISSUER INC.:



“Alternatively, the SEC has made a substantial showing of strict vertical commonality. Each Initial Purchaser’s anticipated profits were directly dependent on Telegram’s success in developing and launching the TON Blockchain. Telegram’s own fortunes were similarly dependent on the successful launch of the TON Blockchain as Telegram would suffer financial and reputational harm if the TON Blockchain failed prior to launch.”

In broad vertical commonality, investors’ success depends on the efficacy of the managers or third parties. If the investor relies on the promoter's expertise, then the transaction or scheme represents a common enterprise and satisfies the second prong of the Howey Test.

The approach of broad vertical commonality has been heavily criticized recently. The fact is that there is no real difference between the broad vertical commonality and the fourth stage of the Howey Test *“Solely from the Managerial Efforts of Others.”* If a broad vertical commonality test is applied, then there is no reason to apply the fourth element of the Howey Test, since the result will be the same. Opponents of using the broad vertical commonality method say that if the Supreme Court in Howey had intended to provide a broad vertical commonality to satisfy the element of the *“Common Enterprise,”* the Court would not have added the fourth element of the test *“Solely from the Managerial Efforts of Others.”*

We believe that the above position is reasonable. For this reason, in this section of the legal opinion we only describe what the broad vertical commonality is, while a detailed assessment of whether the investors’ success in the Project depends on the efficacy of the managers or third parties will be given in section V(D) *[Solely from the Managerial Efforts of Others]* of this legal opinion.

Analyzing the Project Documents, as well as the economic reality underlying the Project, we came to the conclusion that the risks that the holders of Tokens take on are rather different in nature compared to those risks that the promoters bear.

Project risks are related to the inability to use funds, or lack of interest on the part of potential participants or misuse of funds, or a fiasco either in terms of using funds, or the absence of a critical number of users that could increase the economy of the Project.

In all other cases, it is more likely that promoter risks do not correlate with user risks. We tend to believe that, in general, Token users will only face risk if the statements contained in WP are not implemented.



Once the Project is launched and made available for use by any authorized user, each participant in the Project begins to pursue its own goals and thus, in such an endeavor, is likely to face its own risks, misfortunes and failures that will not mix with the fate of the Project.

This is due to the fact that in the Project each individual user's profits are independent from those of the promoters. For example, a user may be unsuccessful in his operations and efforts and ultimately realize a net loss after business expenses are taken into account.

The Project, in contrast, can turn a profit during the same period of time. Similarly, a company may have a down year, whereas individual users may find that despite the Project's losses, they generate a profit. In both scenarios, the profits and losses of the users and the promoters do not rise and fall synchronously, so the strict vertical commonality does not really exist.

It might be inferred that the Token is more likely to be a consumer goods than a security since consumer goods companies do not generally induce purchasers to purchase their products by advertising how the purchase money will be used. The WP sets out the Company's current plans, which are subject to change at the discretion of the founders. It is likely that the data provided by the Company in the White Paper is there for informational purposes only and not to encourage potential buyers to purchase Tokens.

Analyzing “*Common Enterprise*” prong, we also take into account that according to the Statements of Facts “*the Token holders cannot exercise real and significant control over the Project via voting,*” which also indicates the absence of signs of common enterprise.

Based on the above, the Token is more likely not to match “*Common Enterprise*” element of the Howey Test.

C. Expectation of Profits

We consider that the “*Expectation of Profits*” element is not matched for the following reasons.

In Re DAO Report, it was stated as follows:



“The ETH was pooled and available to The DAO to fund projects. The projects (or “contracts”) would be proposed by Contractors. If the proposed contracts were whitelisted by Curators, DAO Token holders could vote on whether The DAO should fund the proposed contracts. Depending on the terms of each particular contract, DAO Token holders stood to share in potential profits from the contracts. Thus, a reasonable investor would have been motivated, at least in part, by the prospect of profits on their investment of ETH in The DAO.”

At the same time, in consideration of the Munchee case, an interesting point has been made:

“Like many other instruments, the MUN token did not promise investors any dividend or other periodic payment. Rather, as indicated by Munchee and as would have reasonably been understood by investors, investors could expect to profit from the appreciation of value of MUN tokens resulting from Munchee’s efforts.”

The SEC goes further in Munchee and underlines the uselessness of merely denoting token a utility as such:

“Even if MUN tokens had a practical use at the time of the offering, it would not preclude the token from being a security. Determining whether a transaction involves a security does not turn on labelling—such as characterizing an ICO as involving a “utility token”—but instead requires an assessment of “the economic realities underlying a transaction.” Forman, 421 U.S. at 849. All of the relevant facts and circumstances are considered in making that determination. See Forman, 421 U.S. at 849 (purchases of “stock” solely for purpose of obtaining housing is not the purchase of “investment contract”); see also SEC v. C.M. Joiner Leasing Corp., 320 U.S. 344, 352-53 (1943) (indicating the “test . . . is what character the instrument is given in commerce by the terms of the offer, the plan of distribution, and the economic inducements held out to the prospect”).”

The expectation of profits from a purchase of any subject of value often takes place. One may be motivated and has to have speculative interest, for example, to resell the commodity or the right rather than retain an interest in personally consuming the subject of value.

“It is an investment where one parts with his money in the hope of receiving the profits from the efforts of others, and not where he purchases a commodity for personal consumption or living quarters for personal use.”



Further, we will give an example where the court explain in which cases a purchase can be made without the purpose of making a profit.

In Forman case the court stated that in contrast to an investment intent, an individual may acquire an asset with “*a desire to use or consume the item purchased.*” A transaction does not fall within the scope of the securities laws when a reasonable purchaser is motivated to purchase by a consumptive intent.

In consideration of Warfield v. Alaniz, the court introduced that the inquiry is an objective one focusing on the promises and offers made to investors; it is not a search for the precise motivation of each individual participant:

“Under Howey, courts conduct an objective inquiry into the character of the instrument or transaction offered based on what the purchasers were led to expect.”

The above court’s explanation is, in our opinion, of high importance for understanding. The fact is that expectation of profit is actually an internal subjective feeling. The expectation of profit for each individual person has no objective expression in the material world and can vary depending on age, education, occupation, life experience and many other factors. Realizing this, the court in Warfield v. Alaniz introduced an approach that allows to assess the expectation of profit on the basis of objective criteria, namely on the basis of “*what the purchasers were led to expect.*”

Thus, within “*Expectation of Profits*” prong, it is necessary to consider not the assumptions in relation to person's subjective feelings, but information objectively expressed in the material world that could form expectation of profits.

Having studied the Project Documents, we did not find any information that could lead the users of the Project toward expectation of profit. The Project Documents do not contain any promises and offers that the Token will increase in price or there is any possibility of using the Token for speculative purposes. On the contrary, it is expressly stated in the Statement of Facts that “*the Company does not promise any passive income or dividend distribution*” and “*the marketing materials distributed do not contain any information about how the Tokens can be used for profit.*”

In the White Paper, the Company also does not indicate that over time the Tokens can significantly increase in price and bring any passive income for holders. In addition, the Company warns that the success and viability of the Project concept depends on many factors, which allows it not to give guarantees regarding the growth in prices for Tokens.



Another aspect that the courts traditionally investigate when analyzing the third element of Howey is whether an investor is simply purchasing a commodity for personal use, or if he is purchasing a commodity as a tool for making a profit. If the commodity has a practical application, this may indicate that the purpose is to use it with a consumptive intent, and not as investment of financial assets.

According to the Statements of Facts *“the Tokens can be practically used in the Project.”* The Project White Paper covers the potential consumer use of the Token and highlights Project products such as GRN Wallet, EnScript, ExNode, GRNPay. The token can be used as part of the Project's products, as well as to pay for access to some future features related to the Platform's partners. Considering that the Project does not promise any profit, the useful properties of the Token may indicate that it will be acquired by potential participants of the Platform with consumer intent. We also tend to believe that, taking into account the foregoing, if someone acquires a Token for the purpose of making a profit, then this is due solely to his subjective motivation, and not to the marketing materials of the Project, expressed in an objective form.

The consumer purposes, as a rule, correlate with the purchase of commodity in the amount necessary for personal use. Conversely, when a commodity is purchased for investment purposes, the amount usually significantly exceeds what is reasonably needed for personal consumption. In this regard, we note that according to the Statements of Facts *“it is assumed that the Tokens are primarily held in amounts needed for expected use.”*

An essential criterion for distinguishing consumer goals and investment goals is the target audience to which sales and offers are directed.

In the SEC vs. TELEGRAM GROUP INC. and TON ISSUER INC. the court stated:

“Consumptive uses for Grams were not features that could reasonably be expected to appeal to the Initial Purchasers targeted by Telegram. In seeking participants for the 2018 Sales, Telegram did not focus on cryptocurrency enthusiasts, specialty digital assets firms, or even mass market individuals who had a need for an alternative to fiat currency ... Instead, Telegram selected sophisticated venture capital firms (and other similar entities) as well as high net worth individuals with an inherent preference (i.e., their business model) toward an investment intent rather than a consumptive use”



In contrast to the example described above, and as it is mentioned in the Statements of Facts, *“Tokens are not sold to a certain group of potential users of the Project”* and *“the Company sells/will sell the Tokens to general public, not to sophisticated investors.”* Thus, any participant in the digital currency market, who is close to the concept and functionality provided by the Platform, can become a participant in the Project and use the products he needs.

As it follows from the WP, the Token, among other things, allows users to use it for staking. Whether such use of the Token is connected with the expectation of profits is, in our opinion, the controversial issue.

From a technical point of view, staking ensures the security and operability of a blockchain network using the consensus algorithm known as the Proof of Stake (PoS).

The consensus algorithm is a set of rules by which various participants of the blockchain network approve transactions. Since a decentralized blockchain network does not have a central authority to confirm transactions, consensus algorithm ensures that all network participants agree to one version of the blockchain.

PoS is a kind of consensus algorithm according to which randomly selected validation nodes (validators) put their own tokens to create or confirm new blocks in the current blockchain. Therefore, PoS is the method of protection in cryptocurrencies that allows to maintain reliability and transparency within the blockchain network.

According to the WP, the Project functions using PoS algorithm, thus, within the Project staking is primarily a tool designed to ensure the viability of the Project. It will be also fair to note that it is impossible to use the utility features of the Token without maintaining the proper operability of the Project.

In this context, we tend to assume that the main goal of a user who is engaged in the Tokens staking is to ensure the usability of the Tokens, while receiving a commission for staking is, under such circumstances, not profit, but rather compensation for depositing part of the Tokens, that is, inability to use the deposited part of the Tokens for their intended consumer purpose.

Having described the utility features of the Token, we consider it necessary to take into account the following.



Cryptoassets can be structured in different forms, which are not mutually exclusive. In theory, a token issued as a utility one can be used as a security token during its lifecycle. We also realize that the economic and technical parameters of the project can change over time, which leads to variations in the nature of its native token.

Regarding the Project under consideration, we should note that despite the utility features of the Token, we cannot exclude the possibility of its use for speculative purposes aimed at making a profit, in particular, at the subsequent stages of the Project. Even if the Project promoters did not pursue the goal of issuing the Token as a tool for making profits, the Token can be used, subject to certain assumptions, with this intent giving us a reason to conclude that the Token meets the prong *Expectation of Profits* of the Howey test.

Therefore, we suppose this prong is more likely to push the scale towards the Token can be deemed as a security.

D. Solely from the Managerial Efforts of Others

The fourth prong of the Howey requires a finding that the investors anticipate profits based solely on the managerial efforts of others. Analyzing this prong, courts consider whether the potential investors expect to receive profits from their own efforts (use of rights or services obtained from promoters) or from the efforts of the others (promoters, managers).

As an example of the case where the court found that the investors' anticipation of profit was based solely on the managerial efforts of others, we would like to quote from the SEC vs. TELEGRAM GROUP INC. and TON ISSUER INC.:

“Thus, to realize a return on their investment, the Initial Purchasers were entirely reliant on Telegram’s efforts to develop, launch, and provide ongoing support for the TON Blockchain and Grams ... Initial Purchasers’ dependence on Telegram to develop, launch, and support the TON Blockchain is sufficient to find that the Initial Purchasers’ expectation of profits was reliant on the essential efforts of Telegram.”

We should add that not all the courts share the approach of the Supreme Court using the term “solely” that defines the efforts of others. Some federal courts later relaxed this approach exploiting “*de minimis*” efforts of others or the concept of “*undeniably significant*” or “*predominantly*” after the Re Forman case. So even if the investor has the power to be involved, the transaction may still be an investment contract if the efforts of others predominate.



“Whether the efforts made by those other than the investor are the undeniable significant ones, those essential managerial efforts which affect the failure or success of the enterprise” (The Forman case; SEC v Glenn W Turner Enters., 474 F.2 d 476 sec.28 (Feb. 1, 1973).”

In Re DAO, it was stated based on the facts:

“The Curators exercised significant control over the order and frequency of proposals and could impose their own subjective criteria for whether the proposal should be whitelisted for a vote by DAO Token holders. DAO Token holders’ votes were limited to proposals whitelisted by the Curators, and, although any DAO Token holder could put forth a proposal, each proposal would follow the same protocol, which included vetting and control by the current Curators. While DAO Token holders could put forth proposals to replace a Curator, such proposals were subject to control by the current Curators, including whitelisting and approval of the new address to which the tokens would be directed for such a proposal. In essence, Curators had the power to determine whether a proposal to remove a Curator was put to a vote.”

Then in the DAO case, the SEC underlined that investors mostly rely on the actions of Slock.it.

“Although DAO Token holders were afforded voting rights, these voting rights were limited. DAO Token holders were substantially reliant on the managerial efforts of Slock.it, its co-founders, and the Curators.”

We start the analyze under the fourth prong of Howey with a look at how much development needs to happen for the Token to reach its usefulness. According to the general approach, if a token is sold in an undeveloped state, that provides the stronger argument that purchasers are buying and expect profits *“from the efforts of others”* and the purchase itself is *“a bet on the success.”* Thus, the more work needs to be done on the token, the greater the risk the company takes at the time it sells that token.

First of all, we note that according to the Statements of Facts *“the Project is still under development.”* According to the information provided on the official website of the Project, the Company plans to launch the Platform in the near future. The WP section titled Roadmap also lists the exact dates for testing and launching the Project.

«Off\Grid will be offered to developers and insiders in Q4 of 2022. Additionally, this network will serve as a beta test for Grid.»



In 2018, the SEC's Director of Corporate Finance William Hinman introduced the following approach:

“The impetus of the Securities Act is to remove the information asymmetry between promoters and investors ...But this also points the way to when a digital asset transaction may no longer represent a security offering. If the network on which the token or coin is to function is sufficiently decentralized—where purchasers would no longer reasonably expect a person or group to carry out essential managerial or entrepreneurial efforts—the assets may not represent an investment contract. Moreover, when the efforts of the third party are no longer a key factor for determining the enterprise's success, material information asymmetries recede” and “the ability to identify an issuer or promoter to make the requisite disclosures becomes difficult, and less meaningful.”

Later, this position of the SEC's Director of Corporate Finance was consolidated in the SEC's letters dated April 2, 2019, and July 25, 2019, Re TurnKey Jet, Inc. and Pocketful of Quarters, Inc., accordingly, where the Commission introduced some major criteria exempting from registration under the Securities Act and the Exchange Act. In particular, the SEC concluded that the tokens are not securities providing that the founders “will not use any funds from the token sales” to build the platform, which has been fully developed and will be “fully functional and operational” immediately upon its launch and before any of the tokens are sold.

As it is expressed in the Statements of Facts “the Company will use the funds from the sale of Tokens for the development of the Project”, including the development of the GRN Grid blockchain, which is one of the main elements of the Platform. As stated in the WP, the community does not play a central role in the development of the Project, but may participate in some decisions related to the functions of the Token. The adoption of such decisions is available to Token holders in the form of voting. Based on our review of the Project Documents, we also note that, as of the date of this document, the Project allows all parties involved to communicate within specialized official communities.

Considering the above, we come to the conclusion that in the case under consideration the managerial efforts of the promoters are not “undeniably significant” or “predominant” in terms of development and launch of the Project.

Since any project has not only a development stage, but also an operational stage, for the purpose of a comprehensive analysis, we also consider it necessary to pay attention to how it is planned to maintain the Project at the post-launch stage.



Since any project has not only a development stage, but also an operation stage, for the purposes of a comprehensive analysis, we also consider it necessary to pay attention to how the Company plans to support the Project after its launch.

As it follows from the Statements of Facts *“the Company is not planning to support the secondary market for the Tokens”* and *“the Project is sufficiently decentralized so the Token holders would no longer reasonably expect the founders of the Project to carry out essential managerial efforts.”*

Decentralization is the process by which the actions, in particular those related to planning and decision-making, are distributed or delegated so as not to be concentrated in the hands of a central, authoritarian point or group. In the context of blockchain technologies, decentralization eliminates the need for unified management and promotes distributed and autonomous decision-making by independent participants. Decentralized community is the management model where control belongs to all users, and not to any one person or group.

As can be seen from the concept of decentralization, it is based on the distribution of competencies in such a way that the actions (or efforts) of one individual or group could not have a dominant influence on the entire system.

In the SEC vs. TELEGRAM GROUP INC. and TON ISSUER INC. the court stated:

“In the abstract, an investment of money in a cryptocurrency utilized by members of a decentralized community connected via blockchain technology, which itself is administered by this community of users rather than by a common enterprise, is not likely to be deemed a security under the familiar test laid out in S.E.C. v. W.J. Howey Co., 328 U.S. 293, 298–99 (1946).”

Taking into account the statement of the Company that *“the Project is sufficiently decentralized”*, and with due regard to the court’s position described above, we tend to believe that the viability of the Project at the operational stage does not depend solely on the managerial efforts of others. In addition, according to the information provided in the WP, the work of the Platform is aimed at promoting decentralization. Thus, the Company declares that, thanks to the use of its unique algorithm, the Platform is energy efficient, high-performance with low commission, which actively supports decentralization and security.

Therefore, this prong is more likely not to be satisfied.



VI. Summary and Conclusion

Based on the information and facts described in the previous paragraphs and subject to all assumptions and qualifications, we believe that the Token is not a security.

The Token appears to satisfy the first prong of the Howey Test, and no one may reasonably conclude that the courts will determine otherwise.

The second prong is more difficult and debatable. However, our analysis has concluded that this element is not satisfied under both theories applied by the federal courts.

The third prong is more likely to be satisfied.

The fourth prong of the Howey Test is not satisfied.

To conclude, since not all the elements of the Howey Test are met, in our opinion, the Token does not meet the legal definition of a security under the United States law.

Nevertheless, it should be noted that only the United States court may definitively determine whether the Token is a security, based on its opinion and regulatory enforcement.

IN THE PROCESS OF PREPARING THIS LEGAL OPINION, WE ANALYZED ONLY THE PROJECT TOKEN GRN FOR ITS COMPLIANCE WITH THE HOWEY TEST.

WE HAVE NOT ANALYZED OTHER PROJECTS THAT THE FOUNDERS COULD USE IN THE FUTURE ON THE PLATFORM. ACCORDINGLY, THIS LEGAL OPINION MAY NOT BE COUNTED AS A PROFESSIONAL ASSESSMENT OF THE LEGISLATION BY THE EXCHANGE OR OTHER TOKENIZATION PLATFORMS.

THE ABOVE ANALYSIS IS BASED ON INFORMATION OBTAINED FROM A REPRESENTATIVE OF THE PROJECT, THE PROJECT DOCUMENTS, AND ITS WEBSITE. THE SEC OR A COURT OF COMPETENT JURISDICTION MAY REACH AN ALTERNATIVE CONCLUSION TO THAT STATED IN THIS LEGAL OPINION LETTER.



NO WARRANTIES OR GUARANTEES OF ANY KIND AS TO THE FUTURE TREATMENT OF USERS OR SIMILAR TOKENS ARE BEING MADE HEREIN.

NOTICE TO RESIDENTS OF THE UNITED STATES

IF YOU ARE FROM THE UNITED STATES OF AMERICA, WE HEREBY INFORM YOU THAT TO THE BEST OF OUR KNOWLEDGE, THE OFFER OF SALE OF THE GRN TOKEN DOES NOT REPRESENT THE SALE OF A SECURITY. THEREFORE, THE OFFER OR SALE IS NOT REGISTERED IN ACCORDANCE WITH THE UNITED STATES SECURITY LAWS. IN CASE YOU BELIEVE OTHERWISE, PLEASE CONSULT WITH YOUR LEGAL COUNSEL AND NOTE THAT NO ACTION MAY BE BROUGHT ON THE BASIS OF THIS LEGAL OPINION.

Nikita Tepikin,

Lawyer, LLM, Esq. NY License Attorney

Registration number 5251814

A handwritten signature in blue ink, appearing to read 'Nikita Tepikin', is written over a horizontal line.

APPENDIX NO. 1



Legal Kornet

Appendix 1

ASSUMPTIONS

- (a) All documents are authentic, accurate, and complete and all copies submitted to us as certified or reproduced copies conform to the originals and such originals are authentic, accurate, and complete, and no relevant document, information or arrangement has been withheld from us.
- (b) All facts, statements, representations, and/or information expressed in the documents and Instructions are and remain true, accurate and complete in all respects and not misleading due to the omission of any material matter, and we express no opinion on all such facts and information.
- (c) All documents remain and will remain in the form reviewed by us, without amendment or supplement (whether in writing or otherwise).



APPENDIX № 2



Legal Kornet

Appendix 2

QUALIFICATIONS

- (a) This Legal Opinion is limited and relates solely to US Federal security law as at the date of this Legal Opinion. This Legal Opinion is confined to matters of US laws and is given on the basis that it will be governed by and construed in accordance with the laws of US. Accordingly, we do not express or imply any opinion whatsoever as to any laws other than the laws of US and we have made no investigation of any other laws which may be relevant to the documents submitted to us.
- (b) Our statements on the provisions of Part III of the Securities Exchange Act discussed in this Legal Opinion have been given on the basis of our interpretation of the relevant provisions, current practice, and the positions expressed by the documents, and accordingly, where we provide a statement in this Legal Opinion, we are expressing our view but this does not guarantee that a court or any other regulatory authority of US would necessarily come to the same view.
- (c) This Legal Opinion is also given on the basis that we undertake no responsibility and are under no obligation to advise you of any other matters, including any matters in relation to any additional features of the Tokens that may be introduced in respect of the Tokens that are not set out in the documents and the instructions.
- (d) This Legal Opinion is addressed to, and for the sole benefit of, the Company, and except with our prior written permission, may not be transmitted or disclosed to or used or relied upon by any other person for any purpose or filed with any governmental agency or other person (other than pursuant to an order of a court of US).



APPENDIX №3



Legal Kornet

To whom it may concern

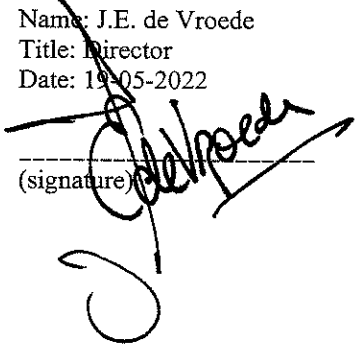
Legal representation and guarantees

You, GRNBI B.V., represented by John Errol de Vroede provide the following representation and guarantees in relation to the GRN Grid (grngrid.com website) hereinafter (the - “**Project**”) and the token of a Project.

- A. that, if you are an individual user, you are 18 years of age or older and that you have the capacity to contract under applicable Laws;
- B. that, if you represent a legal entity, (i) such legal entity is duly organized and validly existing under the applicable laws of the jurisdiction of its organization; and (ii) you are duly authorized by such legal entity to act on its behalf;
- C. that the Project does not intend to sell shares, derivative instruments or securities;
- D. that offer for sale of the Token does not constitute or form part of, and should not be construed as, any offer for sale or subscription of, or any invitation to offer to buy or subscribe for, any shares, derivative instruments or securities, nor should it or any part of it form the basis of, or be relied on in any connection with, any contract or commitment whatsoever.
- E. that Project does not promise any dividends or any other passive income to the holders of the Token and that the Token does not represent a share of the Project or give a rise to request an ownership right from the Project whatsoever.
- F. that you are not from “**Prohibited Jurisdictions**” means Cuba; Democratic People’s Republic of Korea (North Korea); Iran; Pakistan; Singapore; Syria; the Government of Venezuela; and Crimea;
- G. that you are not from “**Sanctions List**”¹ and you are not a “**Sanctioned Person**”²
- H. that you will not use funds received from the token sale in order to conceal or disguise the origin or nature of proceeds of crime or terrorist financing, or blocked property, frozen assets, economic resources, or corruption related to any person or government official under any applicable laws, or to further any breach of applicable AML Laws or CTF Laws, or to deal in any unlawful digital tokens, fiat, property, funds, or proceeds;

Name: J.E. de Vroede
Title: Director
Date: 19-05-2022

(signature)



1

refers to any person or digital tokens address that is: (i) specifically listed in any Sanctions List; or (ii) directly or indirectly owned 50 percent or more by any person or group of persons in the aggregate, or a digital tokens wallet associated with such person or persons, referred to in any Sanctions List, or government or government official of any Prohibited Jurisdiction, and (iii) that is not subject to any government approval or otherwise not sanctioned, restricted, or penalized under applicable laws;

means the “Specially Designated Nationals and Blocked Persons” (“SDN”) List and the Non-SDN List, including the “Sectoral Sanctions Identifications List”, published by OFAC; the Section 311 Special Measures for Jurisdictions, Financial Institutions, or International Transactions of Primary Money Laundering Concern published by FinCEN; and, any other foreign terrorist organization

APPENDIX №4



Legal Kornet



G R N

greenpaper v2

25 February 2022

LEGAL CONSIDERATIONS, RISKS and DISCLAIMER

This greenpaper is a living document. It is an ongoing mechanism to explain the GRID's current and planned technical and governance features and elicit feedback from energy market participants, regulators, and blockchain developers.

GRN (G), the native coin of Grid, qualifies as a utility token. Our content is intended to be used for information purposes only. Therefore, the greenpaper does not give you tax, legal, investment or personal advice on whether to do something.

This Greenpaper is also not a contract and does not legally bind GRN Energy or its affiliates. Nothing in this Greenpaper should be treated or read as a guarantee or promise of how GRN Energy's business or tokens will develop.

This Greenpaper outlines current plans, which could change at its discretion. The success of which will depend on many factors outside GRN Energy's control, including market-based factors and factors within the data and cryptocurrency industries.

Any statements about future events are based solely on GRNbi's analysis of the Use Cases described in this greenpaper. That analysis may prove to be incorrect.

Selling restrictions: Potential subscribers should note that participation in the token sale(s) is subject to limitations imposed by applicable securities laws in various jurisdictions and does not provide the token holder with any ownership or other interest in the Company. The regulation of token and more generally, blockchain is currently in evolution. Therefore, potential subscribers should be aware that some jurisdictions may introduce new regulations or adapt their current regulations and/or definitions / categories of tokens, including the Netherlands.

GRN (G) will not be registered under the US Securities Act of 1933, as amended from time to time, or under any securities laws of any state or other jurisdiction of the United States. This Greenpaper may not be used in any such jurisdictions or in any circumstances in which this Greenpaper, its content and/or GRN (G) are not authorized for distribution and/or unlawful. We reserve the right to amend the rules of this disclaimer

To read our full (detailed) LEGAL CONSIDERATIONS, RISKS and DISCLAIMER
go to www.GRNGRID.com

Now that's out the way
let's continue!

Table of contents

1. introduction.....	6	
1.1 GRN Association	7	
2. blockchain	8;	
3. GRN Grid	9;	
4. Environmental Challenges	10	
4.1 energy usage.....	10;	
4.2 e-waste and silicon shortage.....	11	
5. Environmental Solutions.....	12	
5.1 green Energy	12;	
5.2 circularity and recycling	13	
6. Security and decentralisation	14	
6.1 security.....	14;	
6.2 security pool.....	15	
7. Speed and scalability	16	
7.1 speed, scalability & security	16;	
7.2 GRN Grid.....	17	
8. Proof of Stake v2.....	18	
8.1 a fair stake.....	18;	
8.2 the formula.....	20	
8.2.1 Single entity attack (51 attack)	21;	
8.2.2 Whales pooling an attack (51 attack)	21;	
8.2.3 N@S attack.....	21;	
8.2.4 Verification method	21	
9. GRN Grid	22	
9.2 GRN Decentralized Governance	22;	
9.2 Off\Grid and Power.....	22;	
9.3 GRN Wallet	23;	
9.4 Grid features	24	
9.4.1 EnScript.....	24;	
9.4.2 ExNode.....	24;	
9.4.3 GRNPay.....	25	
10. tokenomics	26	
10.1 GRN (\$G).....	26;	
10.2 distribution	28	
10.2.1 Community fund (rewards).....	28;	
10.2.2 Charity.....	28;	
10.2.3 Liquidity	28;	
10.2.4 Company reserves.....	28;	
10.2.5 Marketing.....	29;	
10.2.6 Product / Tech growth	29	
11. roadmap.....	30	
11.1 ICO.....	30	
12. partners.....	31;	
13. Founding members.....	32;	
14. references	36;	
15. terminology	37	

1. introduction

Since its beginnings, the blockchain industry has been a source of contention due to its wasteful use of power and resultant e-waste. The carbon footprint, along with other shortcomings, prevent them from acting as a viable alternative to the current centralized system or for wider adoption.

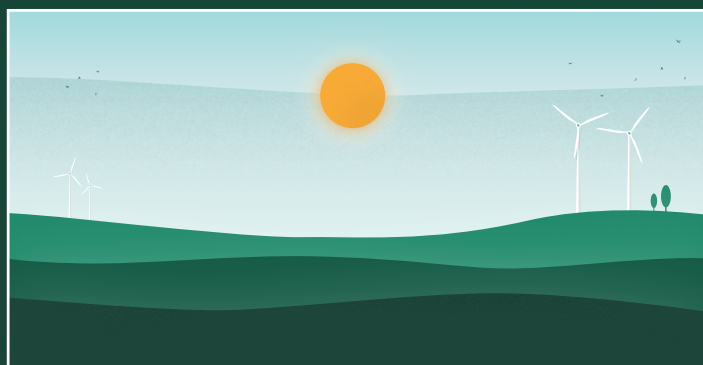
We aim to combat these issues by introducing GRN GRID and its native token GRN (GRN is pronounced as Green).

Through the use of its novel and unique Proof of Stake v2 algorithm, GRN Grid is designed to be an energy-efficient, high performance, low fee smartchain that actively supports decentralization and security.

Since our technology enables green-only transactions, Grid emerges as the first smartchain to be created with the capability of operating entirely on renewable energy sources. Furthermore, Grid incorporates several notable features, such as an integrated payment and escrow system, swapping pools, and encrypted chat between users. No permission is required for the functionality, and the Grid validator nodes are decentralized and permissionless.

The GRN token serves multiple use cases in Grid, including staking, paying for fees and validators incentives. Furthermore, GRN token is also used to promote the adoption of renewable energy by the usage of GRN token in the operations of a renewable energy and mining company.

Grid's objective is to accelerate the adoption of renewable energy in blockchain technology and to provide every company and person with the opportunity to "go green" as soon as WEB3.0 is universally embraced. Additionally, the progressive distribution of GRN for validation supports sustainable development and discourages wealth build-up. These characteristics position GRN as a viable alternative to existing (de)centralized technology.



1.1 GRN Association

The GRN Association is a non-profit initiative of GRNBI B.V. to ensure the sustainability of blockchain technologies. GRNBI HQ is based in the Netherlands and will hand over assets correlated to Grid and GRN to the GRN Association. The GRN Association will be established in Switzerland.

Overall, the GRN Association safeguards the vision of sustainability within the GRN community. Moreover, it will also be responsible for keeping the decentralized nature of the blockchain intact.

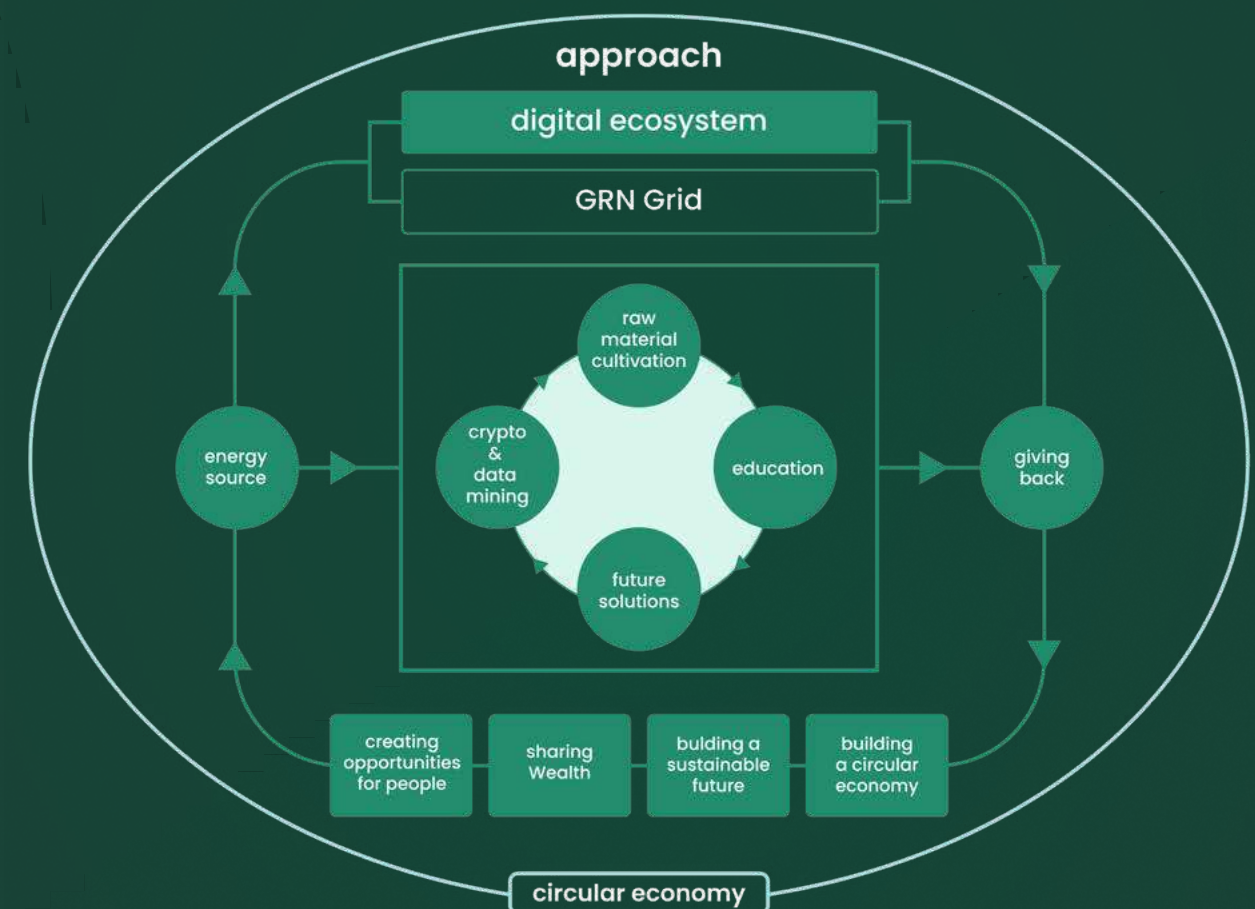


figure 1: GRNBI's circular vision



2. blockchain

Blockchain is a shared, immutable ledger used to record transactions and assets within a network. These assets can be anything tangible or intangible. Blockchain technology is widely known for its capability to be decentralized and “trustless”, see Nakamoto (2008).

In the blockchain sector, “trustless” simply implies that you do not have to invest your whole trust in a stranger, institution, or other third parties in order for a network or payment system to operate.

At its core, blockchain is an open, decentralized ledger that permanently records transactions between two parties without needing third-party authentication. This creates an extremely efficient process, and one people predict will dramatically reduce the cost of transactions.

Furthermore, decentralised blockchain technology forms the backbone of the transition to Web3. In essence, Web3 represents the new iteration of the World Wide Web that incorporates decentralization based on blockchains. Web3 is the solution to the Big Tech problems that are becoming more prevalent every day. However, using blockchain to replace the existing centralized systems introduces a new set of challenges.

3. GRN Grid

GRN Grid is a ground-breaking blockchain technology built on the Proof of Stake V2 consensus mechanism [page 18]. Grid will mainly focus on:

- Setting a framework for creative corporate solutions
- Consumer usability
- Deployment and development of WEB3.0 applications
- Sustainability of blockchain

Grid will introduce novel features to better compete with (de) centralized technologies, detailed in [page 24]. GRN Grid, along with its features and the wallet application, is scheduled to be released according to the roadmap [page 30].

The technical details of the GRN Grid will be explained in the upcoming technical paper.

4. Environmental Challenges



4.1 challenge: energy usage

The blockchain industry has evolved over the past decade to become one of the primary energy and bandwidth consumers of the world.

Over the past decade, the blockchain industry has developed into one of the greatest consumers of energy capacity on the planet. One recent study conducted by Sadlmeir et al. (2020) has explored how decentralized blockchain technology inherently consumes more than non-blockchain based centralized systems, owing to the redundancy in data.

Just powering the current Bitcoin network consumes 0.5% of all electricity used globally. That is 7 times more than the entirety of the power used by Google (Businessinsider, 2021¹). Only 28% of that energy sourced globally came from renewable sources.

The rising energy usage of Bitcoin has sparked a fierce discussion regarding the long-term viability of the digital currency. The prohibition on cryptocurrency mining in China was imposed primarily to reduce the country's energy usage. Overall, 60% of China's energy is generated from coal, which yields astounding pollution levels. This is one of the first steps taken in a string of initiatives to achieve China's pledge to go carbon neutral by 2060, and more countries will follow (SCMP, 2021²).

Some companies have already rejected the idea of accepting cryptocurrencies due to the detrimental environmental effects (BBC News, 2021³).



4.2 challenge: e-waste and silicon shortage

Experts estimate that Bitcoin's e-waste alone adds up to 30.7 metric kilotons annually in May 2021. This is comparable to that of a small IT country such as the Netherlands, [Alex de Vries, 2021⁴]. While these estimations are deemed to be exaggerated by many, there is an undisputable hardware need in blockchain mining. This is particularly apparent in light of the present silicon scarcity.

Blockchain miners continuously cycle through short-lived hardware, which greatly impacts the growth in global e-waste. E-waste contains many toxic chemicals and heavy metals that end up in our air due to incorrect equipment disposal.

The amount of e-waste produced, in conjunction with the shortage in silicon metals, further underscores the critical need for a sustainable blockchain solution.

5. Environmental Solutions



5.1 solution: green Energy

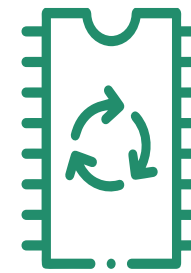
The GRN Grid smartchain has been constructed to run completely on renewable energy. By significantly decreasing its carbon footprint, Grid eliminates one of the major drawbacks of blockchain.

Moving forward, the validation of GRN Grid will be initiated by partners of GRN Energy. These partners are verified users of renewable energy only and will run GRN Grid Nodes in mining campuses across the globe. The involved parties are disclosed on the website of GRN Energy.

To encourage the usage of renewable energy, GRN introduces green certificates to validators that meet given requirements (i.e., proof their energy source is green). The verification procedure is **completely free**, and the application is accessible to **everyone without any restrictions**. The application is fully **decentralised**, hence **no gate keeping occurs**. The verifying method will be based on the latest advancements in this field, such as the paper of Knirsch et al. (2020)⁵.

Everyone is free to run validating nodes of GRN Grid to keep the decentralized nature of the blockchain intact. Certified validators will be marked as renewable nodes. End users can choose to solely use these GRN nodes for their transactions in the wallet application.

Grid allows you to delegate your GRN stake to a known validator, also referred to as the Circuit Program. This functionality allows the GRN community to help validate Grid and earn validating rewards without physically running a node. The validating community hosts these programs to attract more stakes in their nodes.



5.2 solution: circularity and recycling

We will achieve multiple goals concurrently by enforcing rigorous hardware requirements to run nodes. One of these goals is to ensure the durability of a device within the Grids system. With these hardware requirements, we extend the system's life, resulting in decreased replacement costs.

The GRN Grid will also register the devices of validators on Grid through a smart contract and penalize any validator for repeatedly changing their hardware. The exact implementation of the penalty system is elaborated in the technical paper.

Ultimately, this penalty will help combat the hardware "arms race" within the blockchain industry, which is responsible for the high e-waste, scarcity of silicon metals and the pollution caused by mining these metals.

Under its ReCharge initiative, the GRN organization will run a hardware recycling program. As a watchdog for this initiative, Metabolic will guarantee that it has the least amount of negative environmental effects possible. GRN Grid validators will be applicable to this program.



6. Security and decentralisation

6.1 challenge: security

Currently, the blockchain industry relies on validators without a clear penalty system. This exposes institutions and consumers to risk losing all their assets, like the infamous 51 attacks. Lack of active security and a transparent penalty mechanism are primary impediments to blockchain adoption.

One of the assumptions of Proof of Work (PoW) is that the most CPU power (hash rate) is in the hands of many honest operators. In reality, that is not the case. Bitcoin is a great example, as more than 53% of its entire hash rate is in the hands of just 4 distributors, which could collude in a successful attack on the Bitcoin network.

Proof of Stake assumes that those with the highest stake also benefit the most if the system keeps running smoothly. However, this concept assumes that the malevolent actor cannot benefit from a market collapse and that the bad actor did not obtain the staked tokens via deception. In addition,

this method is actively discouraging decentralization since the highest amount of wealth (highest stake) attracts the highest number of reward tokens. This means that the wealth will accumulate, and new validators are faced with high staking costs (Vitalik, 2020⁶). Under this rationale, few high-staking companies will eventually dominate the system, which is the polar opposite of decentralization.

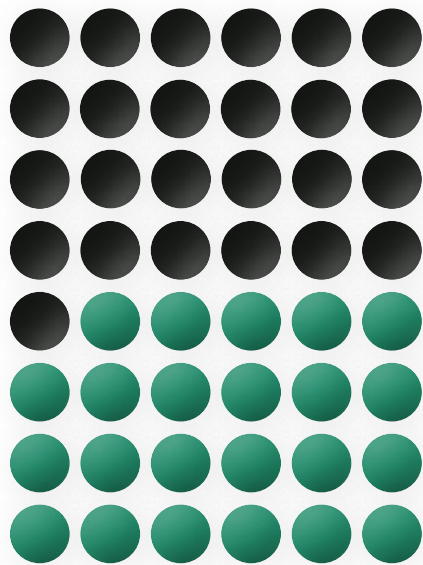


figure 2: visualisation of the infamous 51 attack

6.2 solution: security pool

The GRN Grid introduces security pools and a novel Proof of Stake2 (PoS2) consensus protocol. The advantages of security pools and PoS2 are:
Prevention of destabilisation
Prevention of accumulation of wealth
Protection against the 51% attack.



Security Pool:
Each validator will be required to stake their balance in GRN Grid's security pool to preserve the system's security. A validator will receive a non-transferable interest to a share of the pool. The security deposit will be held for 24 hours and paid out to the validator if there is no act of bad faith detected by most of the validators participating in the pool. This way, each validator will benefit if Grid runs properly without any imperfection and will be penalized otherwise.

Most importantly, each validator within a pool remains anonymous until the pool opens. This will prevent any cartel from forming within the validator community and disrupting the financial equilibrium. Also, the stake of one validator can be split into multiple pools to ensure that no single validator has the majority of voting power within a pool. This way, even if a single entity owns most of the staked GRN coin(s), this entity cannot create a hostile situation and attack Grid, as it does not and never will hold a majority of the voting power within a security pool.

PoS2:
GRN Grid's innovative PoS2 consensus includes criteria for selecting a security pool and its voting power. With PoS2, validators with lower stakes earn a higher APY, making Grid the first progressive blockchain and the first to protect the blockchain against high staking entities. It will also actively encourage new validators (decentralization) and prevent wealth accumulation.

7. Speed and scalability

7.1 challenge: speed, scalability & security

Existing blockchains are often classified into three generations.

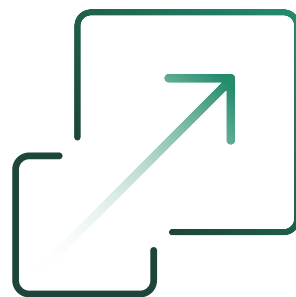
First-generation blockchains, i.e., Bitcoin, is often a simple shared ledger. In general, this generation only records transaction data.

Second generation blockchains, i.e., Ethereum, expands the functionalities of the first generation. This generation is able to run smart contracts and libraries on top of the simple shared ledger. These two generations often work with an inefficient Proof of Work-based consensus method.

Scalability was a problem for both the first and second-generation blockchains. Their increased power consumption and transaction costs rendered it too expensive for the typical user, even if their stability is lauded.

Third generation blockchains, are constructed on top of the previous

two generations and address several scalability difficulties. For instance, Solana boasts a theoretical speed of 50.000 TPS. By expanding bandwidth and lowering expenses, this generation enhances the utility of blockchain for the common customer.



However, this final generation has been plagued with some controversy regarding their decentralization and stability (Investing.com, 2022⁷). While this generation has fixed much of the scalability issues, it has yet to compete with the immense library and development tools available on the first two generations.

7.2 solution: GRN Grid

GRN Grid is a layer 1 blockchain that is built on top of third generation blockchains. Grid is a safe, scalable, and high-performance blockchain, and it takes a sustainable first approach. The initiative's potential is astounding, as the Grid addresses the two most significant shortcomings of the third generation (stability and decentralization) by proposing a new consensus method (PoS2) and establishing specific hardware requirements.

Proof of Stake2 method improves decentralization and security, while also improving the financial sustainability of the blockchain (READ MORE BELOW). GRN Grid's hardware requirements make the network maintain the target transaction speeds even when the system is overloaded with activity. The GRN nodes run by the community worldwide will help stabilize the Grid even further.

The project partner's GRN Nodes will be powered by renewable mining operations located across the globe. As a result of these nodes, GRN Grid will always have enough validators

equipped with high-speed internet connections and rugged hardware. This increases the network's reliability and eliminates the primary disadvantage of blockchain.

Grid's Lightning Trail Verification (LTV) is the key component of Grid's performance. LTV is based on the approach discussed in the paper of Boneh et al. (2018)⁸ and will utilize the same principles of the VDF.

GRID network can be summarised by these five pillars: Security, Sustainability, Speed, Scalability & Stability.

GRID builds on these pillars by adding customer usability. From the first to the third generation, current blockchains are built with an extremely basic structure. However, GRN Grid will provide companies and consumers with several critical decentralized functionalities. These include the capacity to transmit encrypted notes between parties, the ability to submit invoice requests, and an integrated exchanging system (DEX / P2P). These are open-source features that any developer may enhance or build upon.

8. Proof of Stake v2

8.1 a fair stake

Proof of Stake is hailed for effectively reducing the energy consumption needed to keep the blockchain running. Unfortunately, Proof of Stake introduces two major problems:

First, those with a higher stake get the majority of the rewards. Eventually, lower staking validators are driven away as it becomes less profitable to run a validation node. This means fewer and fewer validators on the network and will cause accumulation of wealth by the top validators (Alex de Vries, 2021⁴).

Secondly, project owners often have the highest stake, especially at the starting phase, in the circulating supply, rendering them the de facto chain owner.

These problems make the PoS consensus method resemble a centralized system. Furthermore, the chances for a 51 attack still remain.

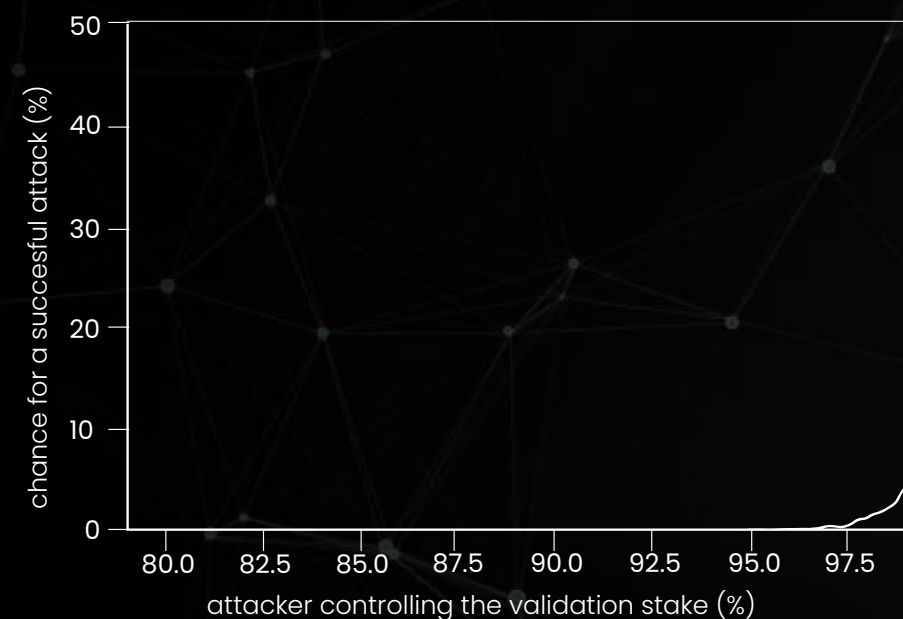


Figure 4: Simulation of an attack on the GRN Grid Blockchain. X axis corresponds to the amount of stake the attacker holds and Y denotes the chance an attacker holds more than 51% of a given Security Pool

To address these issues and protect the network against the 51 attack, the GRN Grid implements a brand-new consensus technique called Proof of Stake V2.

This consensus works in two steps.

To begin, it generates a random selection of validations for a security pool. The selection criterion for a particular security pool is a decreasing concave function on the validator's staked quantity.

Thus, the security pool reduces the likelihood of whales being grouped in a single security pool. This is an additional safeguard to protect the GRN Grid from whale validators attempting to control the system and prevent validator cartels from forming.

More significantly, this strategy promotes the involvement of other validators. In comparison to a linear approach, validators with a lower stake are more likely to be picked to join in a security pool, hence boosting their pay out.

Secondly, a decreasing concave function assigns a voting right for validator j in the security pool i.

The consensus method is evaluated using three different settings:

- 1 attacker holding 80% of the stake (verwijzing)
- 5 attackers holding a combined 90% of the stake (verwijzing)
- 1 attacker holding the minimum required stake but has 51% of the total GRN validators (N@S attack) (verwijzing)

The Proof of Stake V2 showed a 0.0000% chance of a successful attack in all these scenarios. Details of the simulations are listed below.

4. Environmental Challenges



4.1 challenge: energy usage

The blockchain industry has evolved over the past decade to become one of the primary energy and bandwidth consumers of the world.

Over the past decade, the blockchain industry has developed into one of the greatest consumers of energy capacity on the planet. One recent study conducted by Sadlmeir et al. (2020) has explored how decentralized blockchain technology inherently consumes more than non-blockchain based centralized systems, owing to the redundancy in data.

Just powering the current Bitcoin network consumes 0.5% of all electricity used globally. That is 7 times more than the entirety of the power used by Google (Businessinsider, 2021¹). Only 28% of that energy sourced globally came from renewable sources.

The rising energy usage of Bitcoin has sparked a fierce discussion regarding the long-term viability of the digital currency. The prohibition on cryptocurrency mining in China was imposed primarily to reduce the country's energy usage. Overall, 60% of China's energy is generated from coal, which yields astounding pollution levels. This is one of the first steps taken in a string of initiatives to achieve China's pledge to go carbon neutral by 2060, and more countries will follow (SCMP, 2021²).

Some companies have already rejected the idea of accepting cryptocurrencies due to the detrimental environmental effects (BBC News, 2021³).



4.2 challenge: e-waste and silicon shortage

Experts estimate that Bitcoin's e-waste alone adds up to 30.7 metric kilotons annually in May 2021. This is comparable to that of a small IT country such as the Netherlands, [Alex de Vries, 2021⁴]. While these estimations are deemed to be exaggerated by many, there is an undisputable hardware need in blockchain mining. This is particularly apparent in light of the present silicon scarcity.

Blockchain miners continuously cycle through short-lived hardware, which greatly impacts the growth in global e-waste. E-waste contains many toxic chemicals and heavy metals that end up in our air due to incorrect equipment disposal.

The amount of e-waste produced, in conjunction with the shortage in silicon metals, further underscores the critical need for a sustainable blockchain solution.

8.2 the formula

In the equations below P_i stands for Pool $i \in [1, N]$. SV_j stands for staked value of validator $j \in [1, m]$ and w_{ij} for voting right of validator j in pool i .

$$P_i = \sum_{j=0}^m w_{ij}$$

$$w_{ij} < 0.5, \forall i, j$$

$$\sum_{j=1}^m w_{ij} = 1, \forall i$$

$$\sum_{i=1}^n w_{ij} \leq SV_j / \sum_{l=1}^l SV_l, \forall j \quad \text{where:} \quad SV_j / \sum_{l=1}^l SV_l > C$$

$$\sum_{i=1}^n w_{ij} \geq SV_j / \sum_{l=1}^l SV_l, \forall j \quad \text{where:} \quad SV_j / \sum_{l=1}^l SV_l < C$$

To comply with these equations, we decide the w_{ij} by the following method:

$$LVS_j = \log(SV + 1)^2 / \sum_{j=1}^m \log(SV_j + 1)^2$$

$$\text{PoolSize}_i \sim \text{Bernoulli}([10, 15])$$

$$\text{Selection}_{ij} \sim \text{Bernoulli}(SV, n = \text{PoolSize}_i, p = LVS)$$

$$w_{ij} = \log(\text{Selection}_{ij} + 1)^2 / \sum_{j=1}^m \log(\text{Selection}_{ij} + 1)^2$$

8.2.1 Single entity attack (51 attack)

The selection criteria and security pooling guarantee that the GRN Grid is immune to the infamous 51 attack.

Simulation has shown that a bad actor with even 90% of the total stake power has 0.0036% chance of successfully attacking Grid. If the hostile actor controls

90% of the overall stake power, then that probability drops to 0.0000%.

Figure 1 shows the chances for a successful attack versus the amount of validation power an attacker must control.

8.2.2 Whales pooling an attack (51 attack)

A simulation of 5 whale validators holding 90% of the validation power shows that two whale validators' chances in the same security pool are 65.8334%. However, the chances of those whale

validators holding combined more than 51% of a single security pool are 0.0000%. Overall, this means that even if whale validators would merge to attack, it would not be possible to accomplish this.

8.2.3 N@S attack

A simulation of an attack using the lowest possible stake but a high number of validator nodes (51% of the total validators and 6.2154% of the stake) shows that even in this case the system has a 0.0000% chance of falling in the hands of the attacker.

An attacker who controls 75% of the

total validators has less than 1% chance of success (0.57%). However, an attack of this calibre would be practically impossible. The attacker would need an enormous quantity of gear and staked GRN, which is monetarily and logistically unattainable, particularly considering the hardware constraints for GRN nodes.

8.2.4 Verification method

The technical paper will detail the exact implementation of the verifying method per the PoS2. In addition, the technical

paper will also provide a comprehensive explanation of the chain time and other technicalities of Grid.

9. GRN Grid

Grid represents a novel blockchain solution with an emphasis on a sustainable first approach. Grid is widely interoperable with existing libraries in the blockchain industry, while also implementing key features for easier transition from other (de) centralized technologies. Included among these features are an integrated payment and escrow system, exchanging pools, and encrypted communications.

9.2 GRN Decentralized Governance

All functionalities and Grid validator nodes are permissionless, decentralized, and open source, which enables developers to create applications on top of them.

Significant protocol upgrades are distributed using specialized security pools (more participants than normal pools). These specialized pools are assigned with

the responsibility of approving protocol updates. Each special pool member is compensated for voting and is punished for failing to vote by a certain date. In general, the consensus procedure for these special pools is identical to the ordinary consensus mechanism described on [page 22].

9.2 Off\Grid and Power

GRN Grid features an IDE, named Power, which enables developers to quickly develop and deploy on Grid.

Off\Grid, Grid's compressive testnet, is designed to let developers to swiftly validate their Dapps or smart contracts without risking their assets. Additionally, code deployment from OffGrid to the mainnet is streamlined. Anything deployed on the Grid will automatically be deployed on the Off\Grid too.

Grid's block explorer will also display the Off\Grid version of a smart contract. This manner, users may assess the exact same smart contract on Off\Grid before engaging with it and placing actual assets at risk.

Moreover, users will have access to EVM libraries for developing and testing Dapps on the main Grid and Off\Grid.

9.3 GRN Wallet

GRN Wallet is being deployed concurrently with the GRN Grid to immediately improve the usability of the Grid smart chain. The wallet application will be cross-platform and compatible with all major browsers.

Furthermore, the GRN Wallet will be open source, and members of the GRN community will be allowed to develop their own wallets for the GRN Grid.



9.4 Grid features



EnScript

EnScript will allow users to send encrypted messages up to 120 characters attached to a transaction or as standalone messages. These messages can be an invoice number, payment reference code or just a friendly note.



ExNode

ExNode represents the first integrated DEX based exchange on the blockchain. Grid users can stake or swap their tokens to any (stable) currency on Grid, without ever requiring making a transaction to any exchange. This integrated swapping also makes it possible to easily stake any token running on the Grid from the GRN wallet app. EXNode is supported through the GRN Wallet app or any other third-party wallet app connecting to the EXNode contract addresses.



GRNPay

With GRNPay you can send and receive payment requests over Grid, which can be accompanied by EnScript messages. Paying for the requests can be easily done with the wallet app and the recipient will immediately be notified once its payment request is fulfilled. The payment requests can be set in any currency and be paid in a whole different currency, as EXNode will manage the conversion to match the recipient's currency.

GRNPay can also be used as an Escrow service between businesses. GRNPay can reserve the currency on the sender's address until a pre-set condition is satisfied. GRNPay will automatically credit the recipient.

In line with the technicalities of the platform, GRNPay services are hosted decentralized and permissionless on the GRN Grid and are based on automatically issued smart contracts.



10. tokenomics

10.1 GRN (\$G)

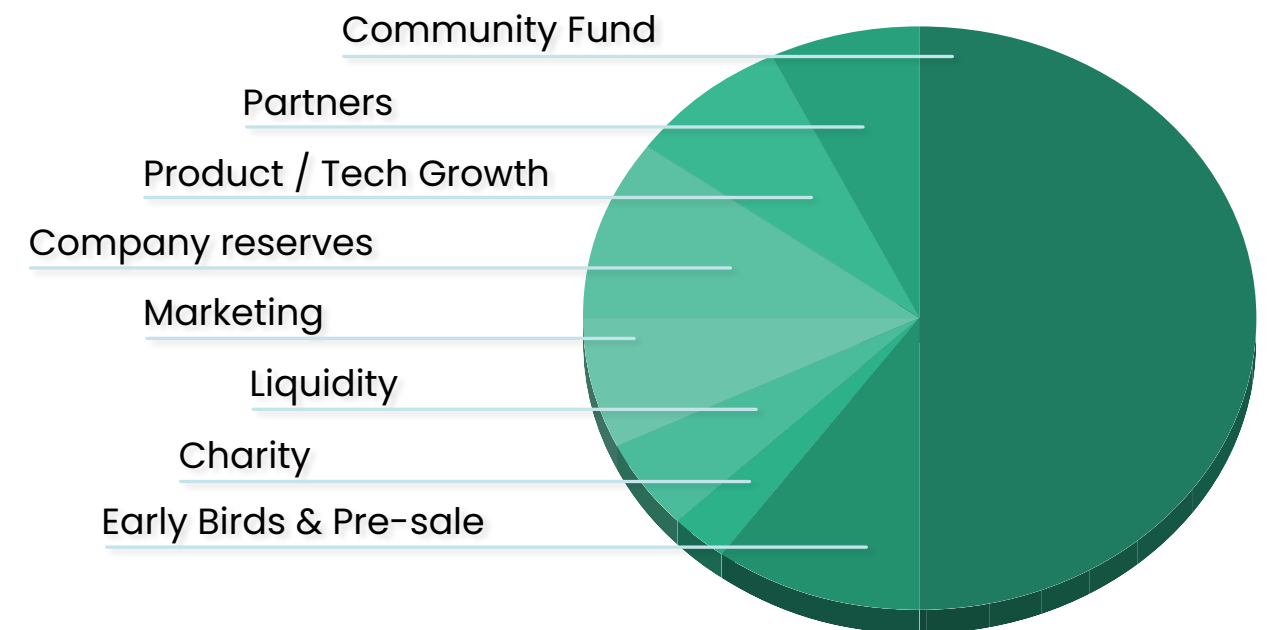
Green will serve as the native token on Grid and will primarily be used for:

Paying for transaction and computing fees

- Validation and staking rewards
- Voting for features
- Shopping on the Grid (NFTs)

Every prospective validator must also stake a specified amount in Grid's security pool to qualify as a validator. GRN is the primary currency used in Grid-based smart contracts and will serve as the primary pool token in EXNode.

In addition, GRN is a utility token that can be used for payment to access corporate services of GRN Energy and some of their partners in the renewable mining sector, after it has become tradeable. This use case provides GRN with a stable and considerable demand, ensuring safety from heavy price fluctuations from day one.



10.2 distribution

Table 1 below shows the token distribution and the associated vesting plan. A total of 1B GRN tokens will ever exist, however, only 130M (13%) will be directly available.

10.2.1 Community fund (rewards)

500M (50%) tokens are locked and will be released as an incentive for validating and staking on the Grid. The vesting uses an asymptotic exponential decline function. This indicates that the proportion of unlocked devices will continue to decline year after year. It will take nearly a hundred years for vesting to reach 1B asymptotically. Following the completion of the first full year of deployment, roughly 15 million (1.5 %) tokens will be issued as an incentive. Within five years, this figure will decline to fewer than 9.5 million (0.95 %).

10.2.2 Charity

Charity funds are reserved for the GRN organization's Giving Back operation and other charity organizations with similar visions. Metabolic and the GRN community serve as a watchdog to ensure that these charity funds are used correctly. Charity funds are fully locked for the next two years, with the purpose of ensuring that the GRN organization has enough time to carefully examine how to implement the allocation of the

funds and how to maintain this procedure decentralized.

The GRN organization is especially interested in instituting a voting system based on the possession of \$G. In addition, we will institute a suggestion and feedback process accordingly.

10.2.3 Liquidity

Liquidity funds will be provided to the market only upon the listing of GRN on a new centralized exchange. New exchange listings generate a surge in demand from new users, resulting in inefficient market pricing and increased volatility. Hence, GRN tokens will be deliberately released at these events to encourage healthy GRN market cap and liquidity development.

10.2.4 Company reserves

Company reserves will mainly be used to establish a delegate program to support independent validators by staking on their behalf. In order to achieve this, application requirements will include that an applicant must prove that they are solely reliant on renewable energy sources.

10.2.5 Marketing

Marketing funds are leveraged as an incentive to attract more ambassadors and to promote the usage of blockchain/ Grid by hosting tech events/hackathons and community conventions.

10.2.6 Product / Tech growth

Product and tech growth funds are reserved to further develop Grid and expand the available decentralized tools on Grid.

Category	Allocation (%)	Unlocked (%)	Vesting
Community fund	500M (50.0%)	0M (0.0%)	Unlocked exponentially
Early Birds and Pre-sale	100M (10.0%)	70M (7.0%)	100% of unsold tokens will be moved to company reserve
Charity	30M (3.0%)	0M (0.0%)	2 year initial lock. After 2 years: 10 % of the lock is unlocked every 6 months
Liquidity	50M (5.0%)	10M (1.0%)	1 year initial lock. After 1 year: 10 % of the lock is unlocked every 6 months
Marketing	70M (7.0%)	5M (0.5%)	1 year initial lock. After 1 year: 10 % of the lock is unlocked every 6 months
Company reserves	100M (10.0%)	20M (2.0%)	1 year initial lock. After 1 year: 10 % of the lock is unlocked every 6 months
Product / Tech growth	80M (8.0%)	5M (0.5%)	10 % of the lock is unlocked every 6 months
Partners	70M (7.0%)	20M (2.0%)	10 % of the lock is unlocked every 6 months
Total	1000M	130M	

Table 1: Tokenomics

**The Delegate program is NOT the GRN Certificate program. The delegate program is hosted by the GRN organization to help new validators with achieving their minimum stake. The delegate program uses the Circuit functionality in the GRN Grid. The GRN organization thoroughly reviews each Delegate application.*

4. Environmental Challenges



4.1 challenge: energy usage

The blockchain industry has evolved over the past decade to become one of the primary energy and bandwidth consumers of the world.

Over the past decade, the blockchain industry has developed into one of the greatest consumers of energy capacity on the planet. One recent study conducted by Sadlmeir et al. (2020) has explored how decentralized blockchain technology inherently consumes more than non-blockchain based centralized systems, owing to the redundancy in data.

Just powering the current Bitcoin network consumes 0.5% of all electricity used globally. That is 7 times more than the entirety of the power used by Google (Businessinsider, 2021¹). Only 28% of that energy sourced globally came from renewable sources.

The rising energy usage of Bitcoin has sparked a fierce discussion regarding the long-term viability of the digital currency. The prohibition on cryptocurrency mining in China was imposed primarily to reduce the country's energy usage. Overall, 60% of China's energy is generated from coal, which yields astounding pollution levels. This is one of the first steps taken in a string of initiatives to achieve China's pledge to go carbon neutral by 2060, and more countries will follow (SCMP, 2021²).

Some companies have already rejected the idea of accepting cryptocurrencies due to the detrimental environmental effects (BBC News, 2021³).



4.2 challenge: e-waste and silicon shortage

Experts estimate that Bitcoin's e-waste alone adds up to 30.7 metric kilotons annually in May 2021. This is comparable to that of a small IT country such as the Netherlands, [Alex de Vries, 2021⁴]. While these estimations are deemed to be exaggerated by many, there is an undisputable hardware need in blockchain mining. This is particularly apparent in light of the present silicon scarcity.

Blockchain miners continuously cycle through short-lived hardware, which greatly impacts the growth in global e-waste. E-waste contains many toxic chemicals and heavy metals that end up in our air due to incorrect equipment disposal.

The amount of e-waste produced, in conjunction with the shortage in silicon metals, further underscores the critical need for a sustainable blockchain solution.

11. roadmap

GRN is launched as a token running on the ERC20 network and is available to be freely traded on centralized and decentralized exchanges from Q2 of 2022.

Off\Grid will be offered to developers and insiders in Q4 of 2022. Additionally, this network will serve as a beta test for Grid.

Next, Grid is planned for a launch in Q1 of 2023. The bridge between Grid and ERC20 will facilitate a seamless transaction. Likewise, GRN will continue to be cross chain between ERC20 and Grid.

Grid is being developed in collaboration with the GRN organization and Barrage. Furthermore, Grid's hardware is provided by BITMAIN, a GRN Energy partner.

11.1 ICO

GRN will be introduced to the masses in multiple stages. On January 18th, the Founders hosted an event to share their vision for GRN. Following this event, an Early Birds sale will be held exclusively for our whitelisted community members and venture capital investors.

Early Birds buyers enjoy a discount on their purchases. Since the spots are limited, each investor needs to apply through our website to be eligible for purchase at this stage. Knaken, the partner broker, facilitates this stage, making it possible to buy our token through Visa, MasterCard, GiroPay, iDEAL, Bancontact, EPS and Online Überweisen.

The first stage of the open presale period starts from the 1st of March and will be exclusively through Knaken. The remaining three stages are hosted through different brokers to maximize the reach of GRN and will be communicated at the end of each period.

Q1 of 2022	Q2 of 2022	Q4 of 2022	Q1 of 2023	Q3 of 2022
Early Birds stage & pre sales	Listing CEX and DEX Establish GRN Association	Launch off\grid	Launch Grid	Expanding GRN team & partners



12. partners



With a strong belief that renewable energy sources can be applied to blockchain technology, GRN Energy is one of the leading players in the area of renewable energy and mining solutions. So far, GRN Energy has had tremendous success and has expanded rapidly, as it currently operates in 11 countries and 28 destinations. In its operations, GRN Energy has the pleasure to partner with some well-known industry leaders such as BITMAIN.

GRN Energy has realized that the present top blockchain solutions do not suit contemporary ecosystem maintenance. Thus, in Q2 2022, GRN Energy establishes the GRN organization and roadmap outlined above to pave the way towards sustainable innovation in this industry.



Barrage will advise and assist with developing and testing Grid and the GRN Wallet. Barrage is highly experienced in on and off chain software solutions. Barrage has worked on projects such as Stealth Protocol and Travelspot. They will provide valuable input in creating the visual identity, branding, user experience, interface design and web app development of Grid and GRN wallet.



13. Founding members



Frederik Vyncke

“Infrastructure and innovation should go hand in hand to ensure that they both interact with the surroundings and the community they are built-in. The digital infrastructure will be the underlying factor to ensure the success of this ecosystem”

Frederik commenced his professional career in procurement and project management for large international OEMs. For the last 7 years he has been involved in building and operating data centres, both enterprise-scale and crypto mining on a senior management level. Throughout his career, he has built a vast global network in the entire blockchain space with exposure to many use cases. Moreover, he holds an executive MBA from AVT Business School, Copenhagen, and an MSc in International Marketing/BSc in Computer Programming. Frederik has both Belgian and Swedish nationality plus lived and worked in seven countries.

Frederik is assisting with the worldwide deployment of GRN nodes because he is a firm believer that blockchain as a technology for humankind must be built on renewable energy.



John de Vroede

“It’s my goal to make the digital world a better and circular environment for the future of our planet and our children “



John’s entrepreneurial background includes founding and managing multiple diverse global companies such as Solve Marketing (strategy, production, and media), Catany World (production of CBDA products) and Solve Tech (crypto and blockchain-related projects). Earlier in his career, he functioned as marketing- and sales director at multinationals like Viacom and France Telecom (Orange/Wanadoo). This diverse experience has taught John that finding the balance between corporate, and entrepreneurship is important to let start-ups professionally grow.

His global marketing and PR network is leveraged to brand the GRN and GRN Grid on the international stage. As an active participant in the crypto community, John feels a sense of responsibility for blockchain’s carbon footprint and thinks that GRN will bring about much-needed change. In essence, John aims to help make this (digital) world a better place for the coming generations, with one block at a time.





Charles Ruffolo

"You were born with a network and it's based on building trust and earning respect while giving back to your network"

Charles, known under his alias Ruf, is a professional networker who pioneered the development of networking as a new science via his NetworkKing B.V.

The Dutch company NetworkKing BV and the associated The Network Club credits its success to its fundamental ideals of trust and respect, along with a commitment to give back to others! Charles is also the Founder of the international Giving Back Foundation.

Charles acquired his MPA/MBA degree in his spare time while serving in the military, honing his innate ability for converging shared interests. He is a distinguished US Army veteran with more than two decades of service. He served as a Battalion Sergeant Major and acquired the ability to communicate in Dutch.

For our initiative, Charles taps into his professional network to attract professionally qualified advisors, ambassadors and entities into the project. Charles believes that there cannot be widespread adoption of blockchain without creating a sustainable alternative to the current industry and believes that GNR Grid is the green alternative the blockchain industry desperately needs.



Harvey Blom



"I believe that digital economy can unleash a tremendous amount of opportunities for people from all over the world to participate and prosper. To help create a more transparent and equal society for generations to come"

Harvey is a former professional athlete and has always been an active serial entrepreneur. This has been visible through the establishment of Cryptly Media, GRN Energy, Duurzaam media, and his own digital coaching enterprise. Through the latter, he has inspired many people across the globe and continues to strive for collective success. As managing partner for GRNBi, Harvey aims to be a voice for the company but at the same time safeguarding its vision for a sustainable future where everyone will benefit from.



14. references

- 1 [Bitcoin mining consumes 0.5% of all electricity used globally and 7 times Google's total usage, new report says. \(2021\). Business insider.](#)
- 2 [China's bitcoin mines could derail carbon neutrality goals, study says. \(2021\). SCMP.](#)
- 3 [Tesla will no longer accept Bitcoin over climate concerns, says Musk. \(2021\). BBC News](#)
- 4 Alex de Vries, Christian Stoll, Bitcoin's growing e-waste problem, Resources, Conservation and Recycling, Vol.175, 2021, ISSN: 0921-3449, Resources, Conservation and Recycling.
- 5 Knirsch, Fabian & Brunner, Clemens & Unterweger, Andreas & Engel, Dominik, Decentralised and permission-less green energy certificates with GECKO, Vol. 3, 2020, ISSN: 10.1186/s42162-020-0104-0, Energy Informatics.
- 6 [Why Proof of stake, Vitalik.](#)
- 7 [Scalability Over Stability? Solana Experiences Third Network Outage in Six Months](#)
- 8 Boneh D., Boneau J., Bünz B., Fisch B. (2018) , Verifiable Delay Functions, Vol. 10991, 2018, ISBN: 978-3-319-96884-1, Advances in Cryptology.
- 9 [Resources, CompTia](#)



15. terminology⁹

51% Attack

When more than 50% of the miners/validators in a blockchain launch an attack on the rest of the nodes/users to attempt to steal assets or double spend.

Address

Much like a URL, a blockchain address is the location to or from which transactions occur on the blockchain.

Bitcoin

The first and most popular cryptocurrency based on DLT technology developed from a whitepaper written by Satoshi Nakamoto in 2008.

Block

A group of transactions entered into a blockchain; analogous to a page of a ledger or record book.

Blockchain

A mathematical structure for storing digital transactions or data in an immutable, distributed, decentralised digital ledger consisting of blocks that are linked via cryptographic signature that is nearly impossible to fake, hack or disrupt

Decentralised Blockchain - (Public a.k.a. Permissionless)

A blockchain that resides on a network of computers around the world that is accessible to everyone.

Centralized

A system or process for which there is a singular (i.e., central) source of authority, control and/or truth.

Consensus Mechanism -

Proof of Stake (PoS)

In PoS, miners put up(i.e., "stake") some

of the blockchain's cryptocurrency (e.g., ether for the Ethereum blockchain) in order to increase their chances of being selected to validate a block. The stake is locked up as a deposit to ensure the miner validates the block according to the rules. If the miner violates the rules, the deposit will be "burned" or destroyed. PoS is less resource intensive than PoW since fewer miners are racing to solve the mathematical formula.

Consensus Mechanism - Proof of Work (PoW)

In PoW, transaction data (block) + a random strings of digits (nonce of block) are repeatedly applied to a (hashing) mathematical formula by miners, until a desirable outcome is found (the proof of work). Other miners then verify the proof of work by taking the alleged input string and applying it to the same formula to see if the outcome is indeed that what was presented. If the results are the same, the transaction is verified and added to the blockchain. As many miners are racing to solve the formula which requires a great deal of computing power, PoW is resource intensive.

Consensus Mechanism - (a.k.a. Consensus Protocol)

The process used to validate a transaction across a distributed blockchain network designed to achieve Byzantine Fault Tolerance. Cryptocurrency Digital money which uses encryption and consensus algorithms to regulate the generation of coins/tokens and transfer of funds. Cryptocurrencies are generally decentralised, operating independently of central authorities.



Cryptography

The science of securing communication using individualized codes so only the participating parties can read the messages.

DAO (Decentralised Autonomous Organization)

A governance structure without a central authority which rewards good behavior and penalizes bad behavior by a set of pre-defined rules which can only be changes by a vote, which typically requires a stake, adding risk to the process to discourage bad actors, amongst the participants

Ethereum

A public blockchain that supports smart contracts.

Fiat

Legal tender the value for which is backed by a government or governmental body (e.g., US dollars, Euros).

Fork

A collectively agreed upon software update by all nodes in a distributed network. Sometimes, the previous version continues in parallel with the new version.

Fungible

The property of an item being exchangeable with other like items. For example, USD and Euros are fungible. The value of USD can be expressed in Euros.

Gas

A fee charged to write a transaction to a public blockchain. The gas is used to reward the miner which validates the transaction.

Governance

Establishment of policies and continuous monitoring of their proper implementation of an organization or system.

Hash Function

A function that receives an input of any size and returns a unique string of a uniform length.

Identity

The information on an entity used by computer systems to uniquely represent a person, organization, application, or device.

Immutable/Immutability

The property of being unchangeable. Once a transaction has been added to a block and written to a blockchain, it cannot be changed and therefore is immutable.

Initial Coin Offering (ICO)

The first sale of a blockchain coin or token.

Interoperability

The ability of two or more systems to communicate and exchange data. Due to various design decisions (e.g., consensus protocol) most blockchains are not interoperable, however there are many projects that are working to connect various blockchains.

Know Your Customer (KYC)

The legal process of a business identifying and verifying the identity of its clients. KYC requirements vary from jurisdiction to jurisdiction.

Liquidity

The ease of converting an asset (or, in this case, cryptocurrency) to cash (fiat).

Mainnet

The production version of a blockchain

Mining

In a public blockchain, the process of verifying a transaction and writing it to the blockchain for which the successful miner is rewarded in the cryptocurrency of the blockchain.

N@S Attack

When an attacker does not experience a negative impact from a successful attack on a blockchain.

Node

A computer which holds a copy of the blockchain ledger.

Non-Fungible

The property an item of not being exchangeable with other like items. For example, USD and Euros are fungible. For example, a Stratovarius violin is non-fungible because the value of it cannot be expressed in a number of other violins.

Off-chain

Data stored external to the blockchain. On-chain Data stored within the blockchain.

Open Source

Software products that include permission to use, enhance, reuse or modify the source code, design documents, or content of the product.

Peer-to-Peer (P2P)

A direct connection between two participants in a system - can be computer to computer or person to person.

Public/Private

Key A public key is a unique string of characters derived from a private key which is used to encrypt a message or data. The private key is used to decrypt the message or data.

Satoshi Nakamoto

The name used by the person or entity

who developed bitcoin, authored the bitcoin white paper, and created and deployed bitcoin's original reference implementation. As part of the implementation, Nakamoto also devised the first blockchain database.

Sidechain

A discrete blockchain that is linked to a main blockchain via two-way pegs which enable assets to be interchanged between the main blockchain and the sidechain. Sidechains are a method to enable scaling and increase transaction speed by only performing necessary transactions on the main blockchain.

Smart Contract

Self-executing computer code deployed on a blockchain to perform a function, often, but not always, the exchange of value between a buyer and a seller.

Solidity

A JavaScript-like object-oriented programming language for Ethereum for implementing smart contracts on the Ethereum blockchain.

Stablecoin

A cryptocurrency which is underwritten by an asset or assets (e.g., fiat currency, commodities, etc.) designed to minimize the volatility of the price of the coin/token.

Testnet

A staging blockchain environment for testing application before being put into production (or onto the mainnet)

Token

Cryptographic tokens represent programmable assets or access rights, managed by a smart contract and an underlying distributed ledger. They are accessible only by the person who has the private key for that address and

can only be signed using this private key.

Token/Coin Exchange

An application to buy, sell and trade cryptocurrencies.

Tokenomics

The study, design and implementation of monetary management and distribution based on blockchain technology.

Transactions Per Second (TPS)

A measurement of the speed of a blockchain. The low TPS of most blockchains is a significant barrier to using blockchain for business, especially financial, applications.

Transparency

A primary property of public blockchains whereby any participant in a system or transaction can view the transactions on the blockchain.

Trustless

The elimination of trust from a transaction. Blockchain is called a trustless system because the two entities performing a transaction do not need to trust one another. The properties of blockchain – digital signatures, cryptography, etc. – provide the trust.

Wallet

A digital file that holds coins and tokens held by the owner. The wallet also has a blockchain address to which transactions can be sent.



You made it to the end!

Thank you for reading the Greenpaper.

If you have any questions,
don't hesitate to contact us at:

ask@grngrid.com



APPENDIX №5



Legal Kornet

To whom it may concern

The Statements of Facts

May 20, 2022

GRNBI B. V. (hereinafter the "Project") represented by J.E. de Vroede provide the following statements of facts in relation to the Project and the token of the Project (hereinafter the "Token/Tokens").

As at the date hereof:

- The Company has started selling Tokens.
- The Project is still under development.
- The Company will use the funds from the sale of Tokens for the development of the Project.
- The Token holders cannot exercise real and significant control over the Project via voting.
- The Company does not promise any ownership or equity interest in a legal entity, including a general partnership.
- The Project Founders do not retain any ownership interest in the Project.
- Tokens are not sold to a certain group of potential users of the Project.
- It is assumed that the Tokens are primarily held in amounts needed for expected use.
- The Tokens can be practically used in the Project.
- The Company does not promise any passive income or dividend distribution.
- The Project does not have built-in incentives that encourage the rapid use of Tokens in the Project, such as declining value over time.
- The Company will sell the Tokens to general public, not to sophisticated investors.
- The marketing materials distributed do not contain any information about how the Tokens can be used for profit.
- The amount of benefits, which can be obtained by the users of the Project, depends on their own actions/amount of spending.
- The Community does not play a central role in the development and growth of the Project.
- The Project is sufficiently decentralized so the Token holders would no longer reasonably expect the founders of the Project to carry out essential managerial efforts.
- The Company does not plan to support the secondary market for the Tokens.


(signature)

J.E. de Vroede

APPENDIX №6



Legal Kornet

Please, reply "Yes" or "No" to the following questions. We will appreciate if you provide comments in support of your position.

Website: grngrid.com

White paper of the project: grngrid.com/greenpaper

Questions of the elements of the Howey Test		Yes or No	Comments
Element 1: Investment of Money			
1	Is there a crowdsale or tokens are given away for free, or are earned through mining?		Primary through an offering on an broker and airdrops (bounty program, randomized and donations)
2	Did you start the sale of tokens?	Yes	
3	How and where are the funds from token sale used/allocated?		GRNBI B.V. will transfer the funds from the token sale into the GRN association (NPO) and are designated for the development of the GRN Grid Blockchain.
4.	When and how is the token transferred to the token holders?		The tokens are instantly transferred through a crypto broker to the accounts of the buyers.
Element 2: Common Enterprise			
3	Is the live platform (network) operational already? If not, please comment why.	No	The development of the project has yet to finish
4	<p>Will the token holders always receive the same returns (benefits) regardless of their own actions or efforts on the platform (network)?</p> <p><i>For example, tokens are used as internal currency within the platform (network) and the token holders may sell services or goods on the platform (network). In this scenario, success and benefits of the token holders depend only/mainly on themselves.</i></p> <p><i>For example, the platform (network) automatically distributes to the token holders equal amount of rewards and forms passive income for the users of the</i></p>	No	<p>For example, tokens are used as internal currency within the platform (network) and the token holders may sell services or goods on the platform (network). In this scenario, success and benefits of the token holders depend only/mainly on themselves.</p> <p>The validators success and APY depends heavily on their ability to provide a working and stable device and vote on the consensus.</p>



Please, reply "Yes" or "No" to the following questions. We will appreciate if you provide comments in support of your position.

Website: grngrid.com

White paper of the project: grngrid.com/greenpaper

	<i>Platform. In this scenario, token holders will receive the same returns.</i>		
5	Do you retain a stake or other interest in the platform (network) such that you would be motivated to expend efforts to cause an increase in value of the platform (network)? Would the token holders reasonably believe that such efforts would be undertaken?	No	
Element 3: Expectation of Profit			
6	Do you promise any ownership or equity interest in a legal entity, including a general partnership? <i>For example, token holders are granted a share in a company or project.</i>	No	We do not grant owners any rights in any legal entity. (See legal disclaimer on grngrid.com/greenpaper)
7	Do you promise any passive income or dividend distribution? <i>For example, token holders receive monthly rewards for subscription to the platform (network).</i>	No	Holding GRN does not provide any promise or income to the holders of GRN at all
8	Are the tokens marketed to specific group of potential users of your platform (network)? <i>For example, you tune your marketing campaign to those who are interested in the data security.</i>	No	The GRN tokens provide an service for anyone using the GRN Grid Blockchain network. This network is decentralized and open for all
9	Are you planning to support the secondary market for the tokens? <i>For example, you have a Telegram channel where every day you encourage your subscribers to trade actively on the exchanges.</i>	No	We do not provide any encouragement to trade actively on exchanges or to invest in GRN. We only promote sustainability within 'blockchain' technology



Please, reply “Yes” or “No” to the following questions. We will appreciate if you provide comments in support of your position.

Website: grngrid.com

White paper of the project: grngrid.com/greenpaper

10	<p>Is it true that tokens are primarily held in amounts needed for expected use?</p> <p><i>For example, token holders use tokens as an access to network cloud storage of the data and keep only those amount of tokens that can be used to rent server capacities on the platform. In this scenario, tokens are used in amounts needed for expected use.</i></p> <p><i>For example, token holders primarily buy tokens in great volumes to trade on the secondary market. In this scenario, tokens actual functional and practical use is not an intention.</i></p>	Yes	The tokens are to be used as payment for services on the GRN Grid Blockchain
11	<p>Do you intend to raise an amount of funds in excess of what may be reasonably needed to establish a functional platform (network), and, if so, is it indicated?</p>	No	The funds are solely for allocation on the GRN Grid Blockchain
12	<p>Are there built-in incentives that stimulate using the tokens promptly on the platform (network), such as having the tokens degrade in value over time, or can the tokens be held for extended periods?</p> <p><i>For example, a token has an expiration date, after which it cannot be used, which makes it difficult to use it for investment purposes.</i></p>	No	The tokens can be held for an extended period of time.
13	<p>Do the marketing materials distributed contain information about how the tokens can be used for profit?</p> <p><i>For example, in marketing materials, you state that after the successful launch of the platform (network), the value of tokens will</i></p>	No	



Please, reply “Yes” or “No” to the following questions. We will appreciate if you provide comments in support of your position.

Website: grngrid.com

White paper of the project: grngrid.com/greenpaper

	<i>increase and they can be sold at a profit on the secondary market.</i>		
14	Do you think that your token can be practically used on the platform (network)? <i>For example, your token has provided its users with the several practical use cases.</i>	Yes	The token is the only method to use the GRN Grid Blockchain (Network)
Element 4: From the Efforts of Others			
15	Does the community take a central role in making decisions on development and growth of the platform (network)?	No	The community does not have any power regarding any decision made on the development of the GRN Grid Blockchain
16	Is the platform (network) sufficiently decentralized so the token holders would no longer reasonably expect you or another leading group to carry out essential managerial efforts?	Yes	The network managed entirely decentralized by community provided consensus. (see: Proof of Stake v2 at grngrid.com)
17	Can the token holders exercise real and significant control via voting?	No	
18	Does the purchase of the tokens grant the holders with rights to manage the project? Please, comment in which way?	No	
19	Are the tokens sold to general public or concentrated in the hands of few major stake holders? <i>For example, more than 50% of the tokens are concentrated in the group of founders of the project.</i>		Majority of the tokens are designated for the general public.
20	How and where do you market your token sale?		Social media channels and advertisements on crypto related platforms.



Please, reply "Yes" or "No" to the following questions. We will appreciate if you provide comments in support of your position.

Website: grngrid.com

White paper of the project: grngrid.com/greenpaper

	<i>For example, Telegram, YouTube, LinkedIn</i>		
--	---	--	--

By: GRNBI B.V.

Name: J.E. de Vroede

Title: Director

