



Voltamond SA Blockchain

A POWERFUL APPROACH TO ENERGY

Whitepaper

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IMPORTANT CONSIDERATIONS:

Purchaser Sophistication.

Our tokens are speculative and involve a high degree of risk and uncertainty. The sale of our tokens is aimed solely at persons who have sufficient knowledge and understanding of blockchain and cryptographic tokens and other digital assets, smart contracts, storage mechanisms (such as digital or token wallets), blockchain-based software systems, and blockchain or distributed ledger technology, to be able to evaluate the risks and merits of purchase of our tokens and are able to bear the risks thereof, including loss of all amounts paid and loss of our tokens purchased. Potential purchasers must further make their independent assessment, after making such investigations as they consider necessary, of the merits of, and their suitability for, purchasing any of our tokens and should consult their accounting, legal, and tax representatives and advisers in order to evaluate the economic, legal, and tax consequences of purchasing our tokens.

We encourage readers to seek appropriate and independent professional advice to inform themselves of the legal requirements and tax consequences of any purchase they make both within our token and within the blockchain industry as a whole.

Forward-Looking Statements.

Certain statements contained in this document may constitute forward-looking statements or speak to future events or plans. Such forward-looking statements or information involve known and unknown risks and uncertainties, which may cause actual events to differ materially. No reliance should be placed on any such forward-looking statements or information.

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Purchasers of our tokens, or any interest therein, from any person or entity other than the Issuer, are not entitled to rely upon this whitepaper or the Token Sale Terms and Conditions.

Risk Factors.

Purchasing our tokens entails risks, and purchasers could lose their entire purchase amount. Certain risks are described in the Token Sale Terms and Conditions. Only use funds you are willing to lose.

English Language Whitepaper.

This English-language whitepaper is the primary official source of information about our tokens. The information contained herein may be translated into other languages from time to time or may be used in the course of written or verbal communications with existing and prospective community members, partners, etc.

In the course of a translation or communication like this, some of the information contained in this paper may be lost, corrupted or misrepresented.

The accuracy of such alternative communications cannot be guaranteed. In the event of any conflicts or inconsistencies between such translations and communications and this official English-language whitepaper, the provisions of the original English-language document shall prevail.

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Abstract

The discovery and taming of fire as a primitive energy source led to an exponential advancement in our understanding and utilization of various energy sources. Since humankind has amassed the means to advance in every domain of this ecosystem, many of these domains have come at a high cost to our environment, with little incentive from major energy providers to change their practices for a more sustainable future.

We propose a new way to perceive and trade energy with your peers, personal devices, and utility providers by connecting the means of production, consumption, and payments through a blockchain tokenomics protocol. For the first time in history, we can utilize energy from devices in a novel way, free from the energy dependency that current battery technologies present. We recognize the disruptive nature of our technology and its impact on the energy industry while striving to adhere to our ideals and principles.

In this paper, we will explain how our tokenomics model presents modern and innovative solutions to energy production, consumption, and payment using NDB and Volt blockchain tokens.

The Company

Our company is developing new cutting-edge clean energy innovations, namely the novel NDB Cell, NDB Chantico, NDB Volt, advanced materials, and DEP.

Our solutions have a variety of applications in several fields, including space electronics, medical, IoT, automotive, aviation, consumer electronics, amongst many others.

By creating a circular economy, we are determined to commercialize our solutions in different forms and designs.

Our organizational structure is expertly geared towards continuous business growth and prosperity, with particular emphasis on communication. This allows us to work cohesively with different parts of the organization while maintaining managerial control over our ever-growing international operations.

The business development plan includes, among others, collaborations with world-top organizations and institutions.

We propose to reuse nuclear fuel by recycling it. Recycled nuclear waste releases a high level of energy particles that can be transformed into usable energy. This process allows for greater energy efficiency and more responsible energy production and consumption by offering innovative ways to accelerate future energy capacity production and development.

Our proposed solutions go beyond conventional energy management by adding blockchain token dynamics into the energy fold so that rewards across the lifecycle can be achieved.

Compounded by our innovative solutions existing with blockchain technology, the incentives for adopting our solutions are vast.

NDB Cell

The NDB Cell is a solution to the grid-free life of electrical products. The devices will be powered perpetually using Radioisotope Electricity Generator (REG) technology. This will reduce the time and money spent on recharging or replacing the battery. There are three major components of an NDB: source, transducer, and encapsulator.

The NDB Cell uses recycled nuclear waste materials to generate electricity. It is a clean and sustainable solution. The radioactive source will emit radiation due to nuclear decay. These radiations contain more energy than sunlight. The transducer is the component responsible for converting these radiations into usable electrical energy. The radiation hits the transducer materials, ionizes the atoms within them, and produces electron-hole pairs. The electron-hole pairs are proportional to the generated electricity. These components are made of materials that are sensitive to radiation but are resistant to radiation damage.

We have identified transducers that can theoretically exceed the efficiency of the previous generation of isotope batteries and operate at a wide power output range. This is an attractive

model for both energy producers and consumers who are looking to increase their efficiency and empower their energy consumption options.

The NDB Cell employs multiple strategies to make the cell safe for consumer use. The first strategy is using alpha and beta emitters as the source, which can be stopped readily. Secondly, the whole cell is enclosed in an encapsulator which is extremely strong and radiation hard. The NDB Cell can last a very long time depending on the half-life of the radioisotope, and more often, it can last the lifetime of the device itself.

We are one of the earliest adopters and developers of REG for mid and high-power applications. Isotope batteries have been around for some time, but the batteries are limited to low power applications due to their efficiency.

NDB Chantico

NDB Chantico is a high efficient radioisotope thermoelectric generator, within a power output from Watts to KWe. It functions using the heat generated by radioactive decay of the radioisotope and converts it into electricity using an Advanced Stirling Radioisotope Generator (ASRG). The power output depends on the initial amount of the radioisotopes used considering the thermoelectric converter efficiency. We optimize new design improvements and develop advanced material performances that stretch the efficiency boundaries.

NDB Volta

NDB Volta is a modular smart fission-based system that converts fission heat into electricity with a power output from KWe to above MWe. The heat source is a fissionable material in a very advanced matrix and structure. NDB Volta's core coolant system is a heat pipe cooling, where the fuel and heat pipes are contained in a steel monolith to form a solid-state compact core which is surrounded by a reflector. There is no need for forced circulation to remove heat from the active core region, thus eliminating the use of pumps, valves, and tube piping.

NDB Volta is best suited to serve as a smart fission generator rather than a centralized power source. Its components would be built in the factory, with no onsite construction, it is designed to operate smartly and safely supported by advanced AI/ML control algorithms working and using in-core and out-core self-powered sensors to monitor the core and reactor conditions. The reactor is intended to independently operate, predict, and handle any future failures during the operation without or with minimized human interactions. The production of green hydrogen would be the primary storage option for the NDB Volta. The inclusion of other storage options due to modular design is a possibility.

Advanced Materials

We have invested in innovation and constant improvements; thus, it is a no-brainer that we are heavily involved with advanced materials research.

We are developing new multiphase semiconductors, high-temperature resistant materials, and the ability to trap the noble gases by the transducer for our product lines.

All of these lead us to new technology capabilities and revenue from dependent and independent markets.

DEP

Decentralized energy transforms the distribution of the energy as we know it. It has the potential to cross the lines between supplier and consumer and establish solid and smart connections between supply and demand. Through a decentralized energy system, the energy is being generated where it is used rather than at the large-scale centralized facility leading us toward smart generation, storage, and consumption of energy.

We believe decentralized energy distribution is an up-and-coming model to bring sustainable energy to all since it delivers economic and practical benefits to both customers and producers. In the DEP ecosystem, everyone can solely or simultaneously be a supplier or a customer.

DEP is a decentralized energy platform incorporating several novel functionalities. DEP allows energy sharing and trading with Volt token, a live payment instrument for the energy produced by us or other utility providers.

DEP is a possibility for each global citizen to manage their energy use, generation, and active energy trade.

We fully foresee the current tendencies and potential benefits of energy for all. Thus, the DEP is the best marketplace for our power solutions alongside other individuals or organizations who generate grid or off-grid energy.

Simulation, design, and safety services

We have a broad level of expertise in simulation and design. With in-depth knowledge of state-of-the-art stochastic nuclear codes which utilize the Monte Carlo technique to predict real-life scenarios of nuclear particles and systems.

The simulation knowledge and access are crucial for designing any nuclear component and product. The electrical unit is equally important in any nuclear energy service. The scientific team with specialized energy engineering backgrounds has knowledge of the secondary unit of each of the product lines.

The design and simulation of complex nuclear systems, including advanced reactors, innovative nuclear fuels R&D along with their fuel cycle, nuclear safety simulations, and radiation damage modeling are some of the critical services provided by us.

Our competent compliance and R&D teams are offering nuclear safety and safeguards consultations. We have experience with national and international standards.

Nuclear Recycling Process

The utilization of radioactive waste is a subject which we are considering. We are entering discussions that aim to reuse nuclear fuel by reprocessing and recycling to enable sustainability and promote a clean energy source in a safe and secure environment. In doing so, we are able to reduce waste, increase secondary and tertiary energy production, and overall efficiency in the energy lifecycle.

Background

We are thrilled to partner with the community to share our vision for the future of the energy ecosystem for our upcoming blockchain development.

As you have already learned, we are on the cutting edge of an energy revolution both from a physical engineering perspective, as well as an information communications technology platform using the blockchain.

We recognize that in order to create a new model of energy production, it is necessary for it to be safe, clean, and efficient, as well as innovative with the latest technologies in the blockchain.

There is no doubt that the applications and solutions afforded by the blockchain, with its immutability and transparency, can be used to measure and track energy production and consumption, as well as provide payment and reward services for consumer and utility providers.

This game-changer is an attractive model for all within the industry and is an interesting topic for discussion and adaptation to existing systems.

Intro to our Blockchain ecosystem

Electricity Consumption

Nowadays, electricity is an essential part of life. With the development of technology, the electricity market is also changing every year. There are many factors that affect electricity demand and consumption such as environmental, economic, and social factors.

The world's demand for electricity is expected to grow 85 percent by 2040. This increase is more than today's total use of electricity in the USA, the European Union, China, Russia, Japan, Australia and India.

Electricity Prices

Energy prices represent a significant portion of our domestic expenditures, can determine industrial competitiveness and influence energy consumption.

End-use prices paid by final consumers are affected by movements in commodity markets, as well as by policy decisions.

Electricity prices vary from country to country, according to seasons, demands and many variables. The energy price is increasing as the electricity consumption increases and fossil fuel consumption decreases. In the first half of 2021 compared with the same period in 2020, prices were 54% higher.

NDB Blockchain ecosystem

Rapid technology advancements, shifting customer behavior, and continual regulatory changes are compelling businesses and organizations all over the world to reconsider their business structures and operations. Companies that need to accomplish this have a wonderful chance due to blockchain technology's unique qualities, such as decentralization, irreversibility, and smart contracts, which give significant assistance for this change.

We will use blockchain technologies to provide our solutions to a wide public, and make electricity available for everyone.

The advancement of DEP in power distribution networks will enable energy and data transfers. This allows traditional consumers to participate in energy trading also as providers. Such users may engage in transactive energy markets more effectively, automatically, and without the need for a central controlling authority with the advent of blockchain. As a result, transactive energy will be one of the most appealing blockchain applications.

Additionally within the ecosystem the surplus energy generated by NDB products may be converted into Volt tokens and then traded within our ecosystem. This self-executing blockchain technology has the potential to reduce the cost of electricity, and make it more available for everyone.

The decentralized market allows users to choose any electricity supplier they want, and trade energy, therefore making profit from their surplus. Users can produce and consume their own electricity, manage their loads using peer-to-peer trading, pay for utility bills with our tokens within the ecosystem and earn additional tokens by staking them to the Pools. In such a market, consumers have a possibility to respond to price changes and any events affect the energy market.

The purpose of our ecosystem is to match the relationship between supply and demand, which would help the distributed energy market. By using blockchain services, users can monitor and create their own supply of energy within our ecosystem. This system of interactions between the users is our blockchain ecosystem, and this white paper will provide you with all its features, and explain how it works.

Blockchain Token

We are proposing the development of two types of tokens: the NDB and Volt tokens. NDB token will interact with Volt as well as other currencies and coins on the open market through cryptocurrency exchanges.

NDB Hub is an institution governed by Voltamond SA based in Switzerland tasked with assessing and putting forward growth proposals related to energy applications. These applications are often tied directly to the Volt token, where tokens are used as part of an energy consumption tracking process so that both utility providers, and consumers, are able to monitor their consumption rates via a standardized token model.

NDB Hub is responsible for maintaining and safeguarding the best interests of this project through oversight on maintaining developers, seeking feedback from the community, and searching for product improvement where needed.

The inclusion of new proposals into our blockchain ecosystem enables people to stake their NDB token, supporting the project, company, or even individuals. This is a decentralized form of governance that allows community members and groups to participate in the development and governance of our business model.

By staking NDB tokens on the different categories of Pools, the purchasers can earn dividends as Volt tokens based on their staked value. There is an interest-earning protocol that is guided by a time series so that users can earn tokens based on the amount of tokens staked in relation to the amount of time they are staked for.

Our second token called Volt is scheduled to be deployed after the NDB token. This token is the driving force behind the applications. Volt tokens will be of variable supply, burnable and mintable (by NDB Hub only), and serve to power its applications. Through this token, the users will have the ability to lease and access the benefits from our products and services.

Another possible function of the Volt token is to monitor energy consumption and create a deployable application where energy consumed can be tracked using the Volt token. A certain amount of rewards can be earned in the form of tokens for participants, thus incentivizing utility providers and users to join in both using the NDB products, as well as the Volt tracking system.

In later stages, the Volt token may also be used as a form of payment for services on energy consumption with participating utility providers.

Objective

This document has the objective to introduce our new endeavors of utilizing blockchain technology for early adoption and increasing awareness of our physical and digital products.

Value Proposition

Here we discuss the use of blockchain to enable new value chain to deliver a value proposition, as well as understanding the other factors for commercial success within our ecosystem.

Multiple jurisdictions

NDB and Volt tokens are innovative utility tokens available for usage and possession in most countries. Our tokens provide unprecedented solutions for the energy sector, which will advance the world of electricity consumption and distribution.

Unique products

We offer you a unique opportunity to be a consumer and supplier of energy at the same time.

One peculiarity of NDB products is that the process of electricity generation runs continuously due to the nature of radioisotopes. Thus, users will have surplus electricity, which can be traded within the ecosystem.

NDB and Volt tokens give you the possibility to join this ecosystem and start using our decentralized platform.

Versatility

Our blockchain technology can be used in different ways. It can be used to track energy consumption, provide payments, rewards both consumer and utility providers, and act as an interaction tool for users of our blockchain ecosystem.

Dual token system

The dual-token model has the advantage of providing more incentives to token holders and potential purchasers than other projects in the industry. The interaction of NDB and Volt tokens will maintain the interest of users in the ecosystem, and create economic checks and balances to regulate the demand for tokens.

Environmental commitment

Our environmental commitment consists of fighting global climate change and reduction of CO₂ emission. We have joined the Climate Pledge in its challenge to reach net zero carbon by 2040.

NDB Hub

NDB Hub will assess and seek potential partners that support the growth of the ecosystem. It is the governing body that oversees the day-to-day operations and the development of programs. This initiative is the primary organization through which the NDB and Volt token operate.

NDB Hub has bases across the globe, acting as a decentralized innovation center. We are tackling difficult problems that society has yet failed to address with viable solutions in the energy industry by providing increased efficiency options and revolutionary energy tracking and payment services.

The Hub will strive to continue development in environments and territories that support mutual growth and are safe from predatory capital. The operation will support students, scientists, and entrepreneurs with the necessities to thrive and materialize their ideas. We hope that many of these ideas will result in positive world-changing technologies.

NDB Hub Governance

All the decisions and suggestions regarding the protocol and its integrity will be managed by the Hub. The Hub, its members, and its structures will be controlled by Voltamond SA, a company registered in Switzerland. The Hub has the responsibility to manage our blockchain project, allowing us to continue the roadmap for completing our energy mission successfully.

Business Model

The business model is developed from conducting energy consumption assessments with participating utility providers and developing a tracking mechanism that uses the Volt token to reward consumption and production.

Production incentives are further increased when energy is produced using our products, thus allowing for increased token rewards. Furthermore, participants within the ecosystem can also use Volt as a payment model for electricity whereby payments are conducted on the blockchain.

For example, if Switzerland uses 58.6 Billion kWh of electricity, then a total of 58.8 billion tokens are issued into the “Consumption Pool” - then they are distributed to participating users who consume energy directly through an application given/provided to the utility producers. This form of tracking will allow users to purchase these energy tokens and stake them back into the “Consumption Pool” where they can earn interest until their next utility bill is received, and then cash out the amount of tokens to cover their bill. The up-front costs of Volt will be 0.05% higher than the price of the energy itself to cover the costs of interest-earning tokens so that a profit can be made.

Each year, at the end of the annual billing cycle, a 10% redistribution of tokens is allocated back to each participating user into their Consumption Pool account, further incentivizing the use of the application.

By acquiring market share of the electricity generation and consumption, we are able to increase the influence and power to deploy our revolutionary products.

Furthermore, there are increased opportunities for tertiary financial services, consumer services, and applications that can be deployed to the users that will generate billions of dollars in revenue.

Responsibilities

The Hub is accountable for decisions pertaining to safeguard the network's best interests, responsible for the approval, the admittance of new participants, curating suggestions for improvement, performing Anti-Money Laundering (AML) and Know Your Client (KYC) procedures, and managing the conversation with the community.

We have no intention to interfere with token prices.

The Hub utilizes some mechanism to incentivize desirable outcomes to guarantee the longevity of the project and good health to all entities involved. The Hub will continue to study and improve with our current team of behavioral economists to nuclear scientists.

The Dynamic Reward Index

Overview

The Dynamic Reward Index (DRI) holds the responsibility to control where the new Volt-Utility tokens are going, who is being rewarded, and by how much. This allows us and the NDB Hub to incentivize behaviors on its behalf.

The mechanism

The Dynamic reward Index will be determined by the NDB Hub and can change in any periodicity and magnitude, as the NDB Hub and its team see best. The ecosystem is composed of three indexes. The sum of the three multipliers below must represent the 100% (one hundred percent) from Volt-Utility minting at any given time.

If $x < y$ then:

$$x + y + z = 1 \quad \text{Eq. 1}$$

Where;

x is the NDB Pool reward multiplier

y is the Stakeholder Pool reward multiplier

z is the NDB vault multiplier

Dual Token System

The Dual token environment is backed by the NDB token, a fixed supply token, and the Volt token, a variable supply token. Both of which price-wise, interact freely on the open market. The NDB token is a tool for demonstrating the buyer's interests in the partnership between companies inside our ecosystem.

Case Study

If CarX (an Electric Vehicle (EV) company) is part of the NDB ecosystem and has its own profile there, you as an NDB token holder can stake/park your NDB tokens onto the CarX profile on NDB's app.

Every time that CarX buys an NDB product, you will be rewarded with Volt tokens in your wallet with a percentage of this transaction. The amount is proportional to your size of staking compared to the size of that specific Pool, i.e., the CarX profile.

If the user does not have any preferable company or profile inside our environment that the user wishes to stake/park their NDB tokens, then they can also stake them on the NDB Pool. This Pool will reward your wallet with Volt tokens every time that a company transacts with us, therefore the users are receiving an average performance of the network, not from a specific profile.

By performing one of the two strategies above, the token holder is helping the whole ecosystem by removing tokens from circulation, be it temporarily or permanently, bearing in mind that this token has a limited supply, therefore, contributing to its scarcity.

We choose the dual token ecosystem to bring more value to the users and partners. With this method, we can provide our partners more accurate measurements of the interest in their company by utilizing our services and products from their customer's perspective. We achieve this by enabling companies to create profiles on our platform and then be granted with a dedicated Pool.

To achieve value stability of the token, it is favorable for the token supply to have sinks - places where tokens disappear and the total token quantity decreases over time. This way, there is a more transparent and explicit fee payment for the users, instead of the "de-facto fee" which is highly variable and difficult to calculate. It is also more viable to figure out what value the protocol tokens should have.

Any company that may commercialize a solution containing our products should be registered. This keeps owners accountable and mitigating environmental liability down the line. The procedure also enhances the user experience with the blockchain service. The user has their NDB products pre-registered and the respective address that corresponds to each one is present in their blockchain wallet.

Volt tokens earned through staking can then be used as a form of payment as part of the electricity payment tracking mechanism, further incentivizing buy-in from providers and

consumers. The model allows for a use case for both NDB parking/registration and the Volt token, which operates as part of a larger energy tracking and payment solution model.

By combining this dual system, the opportunity for our products is cemented into the development of new energy cycles because of the market share of participants using the energy tracking and payment system. Development of our product, allows greater exposure to the Volt network of users, creating a marketing strategy that is second to none.

NDB Token

Overview

The NDB Token is not a security token or representation by any means from Voltamond SA shares or rights of any kind. This token is a measuring and interaction tool for clients and users of our blockchain ecosystem and is paired with the Volt token.

We make the NDB token available to anyone willing to agree to our terms and conditions. But this contract does not exclude users from buying NDB tokens in the open market and speculating upon the price. The rejection of the terms will only exclude the holder from participating in staking Pools and interacting with our products and services.

The interaction with our products and services will be possible as Blockchain as a Service (BaaS) for clients and customers. The BaaS acts as a measuring, interactive and supportive instrument between participants of our ecosystem.

NDB Supply

The NDB token will have a supply cap defined as 1,000,000,000 (1 billion) tokens. There will be no more tokens added to the supply. This token amount is intended to reflect the interaction with our ecosystem between initiatives, users, and purchasers. The token will be divisible till the 12th decimal space and the minimal purchased amount of the NDB token will be USD 0.1. The token is created in the IBEP-20 protocol using the Binance Smart Chain network; however, plans for transfer to other blockchains remain possible.

The inclusion of new proposals into our blockchain ecosystem enables people to stake their NDB tokens and support the project, company, or individuals. By staking NDB tokens on different Pools, the purchasers can earn dividends as Volt tokens over their staked amount. These dividends are only a partial stake of the potential value generated by the Pool owner after consuming our products or services.

Features

Apart from the fundamentals of NDB token, this cutting-edge token incorporates the following features:

Auto Reward

Our automatically holding rewards is a strategy implemented to incentivize the holders of NDB tokens by providing them continuous profit more frequently and at a higher rate.

Inflation Control

To protect the NDB token from manipulation and keep the price at a favorable rate for holders, anti-whale and burning mechanics are implemented. The anti-whale feature includes a wallet's size limit to avoid someone hoarding all of the tokens and a maximum transaction limit to avoid

someone executing a large sell transaction, resulting in a dramatic drop in the prices of NDB tokens.

Whitelist and Blacklist

NDB token uses smart contracts to store security rules enforcement logic. The code of our smart contract and transfer logic follows and defines limitations by KYC/AML reducing the risks.

Automatic Liquidity Generation

Automatic liquidity generation aims to ensure long-term stability. Each transaction is subject to a small fee, which is used to increase liquidity on exchanges. This expands the liquidity pool, enhancing price stability and allowing the NDB token to trade at a higher volume.

Buyback

Buyback is the NDB token's hyper-deflation feature. When the market sees a spike in sell transactions, the token contract uses the transaction fees to repurchase and burn tokens. Not only do these purchasing transactions add additional value to the liquidity pool, but the burn also reduces the total circulating supply of tokens, rapidly increasing the price and avoiding large slumps.

Honeypot-free code

A large number of scam tokens act as honeypots, allowing investors to purchase but not sell tokens. All funds invested in such tokens are immediately rendered worthless. As a result, a clean BEP-20 specification is critical. The NDB token specifies these significantly complicated specifications and controls in the smart contract.

Staking

In the blockchain business, staking is the action of locking/parking up crypto holdings to obtain rewards or earn interest over the amount. Generally, it is followed by the world Pool, the place where all those staked investments are.

Before you stake NDB tokens into a Pool of any kind, you must submit the required documents for the KYC process from our App.

By staking NDB token onto a Pool, the user will contribute to the network and the entity who owns the Pool, thus demonstrating a willingness to access the future products or services that the entity may create with us.

Volt Token

Overview

The Volt token is not a security token or representation by any means from Voltamond SA shares or rights of any kind. This token is a measuring and interaction tool for clients and users of our blockchain ecosystem.

Volt tokens will be available for anyone willing to agree to our terms and conditions. This contract does not exclude users from buying Volt tokens in the open market and speculating upon the price. The rejection of the terms and conditions will only exclude the holder from staking Pools and interacting with our products and services.

Volt token is scheduled to deploy after the NDB token as the driving force of our applications. This token will be a variable supply, burnable, and mintable. Through Volt token, the users will have the possibility to lease and access benefits from our products. Furthermore, the token can be used as an energy tracker for utility providers and consumers to earn rewards and incentivize adoption of our products into the energy lifecycle. There are also plans for this token to be used as a form of energy payment in the future, thus incentivizing NDB staking so that users can earn Volt tokens which can be used towards paying their utility bill.

Volt Supply

The supply of 1,000,000,000,000 will be minted upon creation, for liquidity purposes and to strengthen the market until our products start rolling out of production lines.

We will work with utility providers to begin our energy consumption tracking program and start including the amount of Volt on consumer's bills, thereby providing an option to "opt-in" to using the Volt token rewards program and payment systems.

We will also work with energy providers to begin the deployment of our products and services. Volt tokens can be pre-purchased at 0.05% cent higher than the cost of a kWh, thus establishing a baseline price for both the project and the cost of energy and rewards from NDB staking.

Minting

In the blockchain business, minting means the creation of new tokens into the system. The process of minting new Volt tokens will be controlled and automated to integrate with the production line. Each Volt will be minted only when we conclude the production of a specific device.

Rolling out of the production line, each of our products will have a specific expected life cycle and power output which defines its power capacity. Similarly, the power capacity of any supplier joining our ecosystem is considered. Based on these characteristics, the NDB Hub will mint coins.

Economic Model Review

Objective

The main goal is to enhance and develop a robust econometric model for NDB's energy token mechanism. This section is a preliminary approach, it is expected to be improved in an iterative process jointly with the client.

Methodological review

The Dynamic reward Index will be determined by the NDB Hub and can change in any periodicity and magnitude, as the NDB Hub and its team see best. The ecosystem is composed of three indexes.

Cost of electricity: the LCOE approach

The Levelized Cost of Electricity (LCOE, commonly expressed in USD/kWh) represents the average revenue per unit of electricity generated that would be required to recover the costs of building and operating an energy source during an assumed financial life and duty cycle.

Key inputs to calculating the LCOE include capital costs, fuel, or material costs, fixed and variable operations and maintenance (O&M) costs, financing costs, and an assumed utilization rate for each plant type. The importance of each of these factors varies across technologies.

In this case, for now, all monetary values within the LCOE are expressed in FIAT currencies, so it is needed to explore a FIAT independence for those values.

According to the International Energy Agency (IEA), the LCOE is the principal tool for comparing the plant-level unit costs of different baseload technologies over their operating lifetimes. The LCOE indicates the economic costs of a generic technology, not the financial costs of a specific project in a specific market. Due to the equality between discounted average costs and the stable remuneration over lifetime electricity production, which is at its heart, LCOE is in spirit closer to the costs of electricity production in regulated electricity markets with stable tariffs, for which it was developed, than to the variable prices in deregulated markets. By adjusting the discount rate for the implicit cost of price volatility, the LCOE concept can, in principle, also be applied in the context of deregulated markets.

The real discount rate, r , used for discounting costs and benefits is stable, the same for all technologies and does not vary during the lifetime of the project under consideration. It could be used a 3% discount rate (corresponding approximately to the "social cost of capital"), a 7% discount rate (corresponding approximately to the cost of capital of a large utility in a deregulated or restructured market), and a 10% discount rate (corresponding approximately to cost of capital in an environment with relatively higher risks). Nominal discount rates would be higher, reflecting inflation. While in practice the cost of capital, and hence the relevant discount rate, may vary between different technologies, assuming an identical cost of capital for all technologies allows comparing the costs across technologies and across regions.

With annual discounting, the LCOE calculation begins with the following equation expressing the equality between the present value of the sum of discounted revenues and the present value of the sum of discounted costs, including payments to capital providers. The subscript, t , denotes the year in which the sale of production or the cost disbursement takes place. The summation extends from the start of construction preparation to the end of dismantling, which includes the discounted value at that time of future waste management costs. All variables are real, i.e., net of inflation. In the Eq. 2 on the left-hand side one finds the discounted sum of benefits and on the right-hand side the discounted sum of costs:

$$P_{MWh} MWh (1 + r)^{-t} = (Capital_t + O\&M_t + Fuel_t + Carbon_t + D_t)(1 + \quad \text{Eq. 2}$$

Where;

P_{MWh} is the constant lifetime remuneration to the supplier for electricity.

MWh is the amount of electricity produced annually in MWh.

$(1 + r)^{-t}$ is the real discount rate corresponding to the cost of capital.

$Capital_t$ is the total capital construction costs in year t .

$O\&M_t$ is the operation and maintenance costs in year t .

$Fuel_t$ is the Fuel costs in year t .

$Carbon_t$ is the Carbon costs in year t .

D_t is the decommissioning and waste management costs in year t .

Because P_{MWh} is a constant over time, it can be brought out of the summation, and that equation can be transformed into Eq. 3:

$$LCOE = P_{MWh} = \frac{(Capital_t + O\&M_t + Fuel_t + Carbon_t + D_t) * (1+r)^{-t}}{MWh (1+r)^{-t}} \quad \text{Eq. 3}$$

Where this constant P_{MWh} is defined as the levelized cost of electricity (LCOE).

Eq. 3 is the formula used to calculate average lifetime levelized costs on the basis of the costs for investment, operation and maintenance, fuel or material, carbon emissions and decommissioning and dismantling provided by OECD countries and selected non-member countries.

Some confusion could arise if Eq. 3 were taken out of context.

In Eq. 3, it looks as if $MWhs$ are being discounted. Because P_{MWh} is a constant, it can be taken out of the summation of revenues over the energy source's lifetime and both sides of the Eq. 2 can be divided by this summation. It is not the $MWhs$ that are being discounted; it is the revenue from those MWh that is being discounted. Revenue today has more value to the

purchaser/owner/operator than revenue tomorrow. It is not output per se that is discounted, but its economic value. This is standard procedure in cost benefit accounting.

According to the Open Energy Information (OEI), another approach to deal with the LCOE formula is the following:

$$LCOE = \frac{Capital\ Cost\ CRF\ (1-TD_{PV})}{8,760\ Capacity\ Factor\ (1-T)} + \frac{Fixed\ O\&M}{8760\ Capacity\ Factor} + \frac{Variable\ O\&M}{10^3\ \frac{kWh}{MWh}} + \frac{Fuel\ Price\ Heat\ Rate}{10^6\ \frac{BTU}{mmBTU}} \quad Eq. 4$$

Where;

Capital Cost (USD/kWh) is the cost of the energy source.

CRF is the capital expenditure.

T is the tax rate paid (applied after depreciation credits).

D_{PV} is the present value of depreciation.

8,760 is the hours in a year.

Capacity Factor (%) is the yearly average percentage of power as a fraction of capacity.

Fixed O&M (USD/kWh) is the fixed operations and maintenance cost of the plant per capacity in USD/kWh.

Variable O&M (USD/MWh) are the variable operations and maintenance cost of the source per capacity in USD/kW.

Fuel Price (USD/MMBtu) is the fuel cost of the plant.

Heat Rate (USD/MMBtu) is the efficiency of the power plant in converting fuel into electricity.

Having presented the 2 approaches above (*Eq. 3* and *Eq. 4*), it is important to mention that there are some technical limitations around the LCOE.

The LCOE analysis is not able to cover all considerations and losses due to its standardized nature. This means that since these projects operate over several decades, it is difficult to fully estimate the changes in variable costs such as the cost of fuel and the dramatic fluctuations in price. In less regulated markets with more dynamic pricing models the LCOE is not accurate. While maintenance costs are included, there are other considerations over the lifetime of an energy source which can affect the stability of the price of the generated output.

Overall, the LCOE is considered as a static analysis to measure the average cost to produce electricity or in other words the minimum price that an entity has to set up to recover its initial investment, this is relevant for the suppliers targeted by our blockchain. In other words, the LCOE does not account for externalities such as technological developments, raw materials/inputs, air pollution and climate change. Therefore, the recommendation is to estimate conservative values for the LCOE and develop periodic adjustments to gain accuracy over time, regarding the entity's production line performance. Commonly, that can be measured by

performing a “sensitive analysis” frequently to deal with unexpected events that could affect the production line.

Assuming that a LCOE formula could be used, however many authors support the use of the LCOE because they consider that it also shows that recent radical criticisms of the LCOE approach, denying credibility and usefulness rely on assumptions concerning technology costs and interest rates, which are practically irrelevant, and from a methodical perspective, on a misconception of the time value of electricity generation.

A mathematical approach for the LCOE formula

The idea of LCOE as the ‘price’ component of a constant minimum return of the project (constant in real terms) for the purchaser translates to the simple net present value calculation presented in Eq. 5:

$$NPV_{of\ project} = NPV_{of\ lifetime\ cost} + NPV_{of\ lifetime\ revenue} \quad \text{Eq. 5}$$

This could be better explained by Eq. 6:

$$NPV_{of\ project} = - \sum_{t=0}^N C_t(1+r)^{-t} + \sum_{t=0}^N \underline{p}M_t(1+r)^{-t} \quad \text{Eq. 6}$$

Where;

C_t is the cost of the project.

M_t is the electricity generation.

N is the lifetime of the project.

r is the discount rate

\underline{p} is the price of electricity (delivered).

Setting $NPV = 0$ leads to the solution of \underline{p} and the internal rate of return IRR that equals the discount rate for the chosen calculation. With C_t comprising initial investment cost I_0 , variable C_t^v , and fixed operation and maintenance (OM) costs C_t^f , with the simplifying assumptions of constant electricity generation $M_t = \underline{M}$ and constant variable and fixed OM cost $C_t^v + C_t^f = \underline{C}$, some simple mathematical transformations lead to the well-known LCOE formula Eq. 7:

$$\underline{p} = LCOE = \frac{I_0}{\underline{M}_{UPV}} + \frac{\underline{C}}{\underline{M}} \quad \text{Eq. 7}$$

The uniform present value factor UPV (or CRF capital recovery factor shown in a previous approach) presented in Eq. 8 results from the general solution of a geometric series of a constant flow and is widely used in life cycle cost analysis.

$$UPV = \frac{(1+r)^N - 1}{r(1+r)^N} \quad \text{Eq. 8}$$

The Eq. 6 corresponds to the simple levelized cost of energy indicator (sLCOE), according to the National Renewable Energy Laboratory¹.

It can be easily calculated that the higher the investment I_0 and OM cost \underline{C} , the higher the value of \underline{p} , and, conversely, the higher electricity generation \underline{M} , the lower the value of \underline{p} :

$$\frac{\underline{p}}{I_0} = \frac{1}{\underline{M} \times UPV} > 0 \quad \text{Eq. 9}$$

$$\frac{\underline{p}}{\underline{C}} = \frac{1}{\underline{M}} > 0 \quad \text{Eq. 10}$$

$$\frac{\underline{p}}{\underline{M}} = \frac{-(I_0 \times UPV + \underline{C})}{(\underline{M} \times UPV)^2} < 0 \quad \text{Eq. 11}$$

From an energy-economic perspective, based on the interpretation of LCOE as the constant price (in real terms) guaranteeing a minimum revenue for the purchaser to justify an investment, it should be intuitively clear that this price is higher than just the technology cost, ignoring the time value of electricity generation. This mathematical approach demonstrates the credibility and usefulness of the LCOE if used methodically correctly.

To summarize, the LCOE is an indicator widely used to compare the economics of energy technologies. It is also widely accepted that the use of the LCOE as an exclusive indicator for energy technologies is insufficient for a comprehensive assessment, let alone for an investment decision. Yet, it is accepted as an important indicator for energy technology assessment, which enables a transparent and easy-to-understand analysis not only used for academic purposes but also by international institutions such as IRENA, IEA, and others.

Supply-demand mechanism

From a basic economic perspective, the price $P(t)$ and the quantity $Q(t)$ are derived from supply $S(t)$ and demand $D(t)$. With the efficient market assumption, price can be set by relative strength between demand and supply (Eq. 12):

$$P(t) = \frac{D_m(t)}{S_m(t)} \quad \text{Eq. 12}$$

When demand is greater than supply, a higher price is expected and vice versa. This price model, despite being very simple, accurately captures this relationship. It can be further expanded to include momentum, user valuation, and other factors that will affect service price. Quantity of unit service traded on the network at time t is the minimum between net new demand and supply. After all, no transactions will take place with unmet demand or supply. This can be made more realistic with a slippage later since not all matching supply and demand can find each other

¹ National Renewable Energy Laboratory, 2021, *Simple Levelized Cost of Energy (LCOE) Calculator Documentation*, accessed 11/11/2021 (<https://bit.ly/3Ch9ZHg>)

in the market. Nonetheless, this has been taken care of by the efficient market assumption where supply always meets demand. As such we can write the quantity in Eq. 13 as:

$$Q(t) = [D_m(t), S_m(t)] \quad \text{Eq. 13}$$

Regarding to the target items mentioned in the background section, that ratio would be the given price for the consumers (price of electricity), and a market signal to measure suppliers' revenue ($P(t) \geq LCOE$).

Overall, this ratio is a reasonable metric that can be improved by using well-known formulas for both demand and supply curves, building a dynamic model based on a demand excess given that we are developing a highly speculative token blockchain model in which the token purchasers will contribute to its scarcity by removing them from circulation.

The following equations could represent that market mechanism:

$$D_m(t) = a - b \times p(t) \quad a, b > 0 \quad \text{Eq. 14}$$

$$S_m(t) = -c + d \times p(t) \quad c, d > 0 \quad \text{Eq. 15}$$

$$p'(t) = \alpha [D_m(t) - S_m(t)] \quad \alpha > 0 \quad \text{Eq. 16}$$

Eq. 14 tells us that at each instant the quantity demanded decreases linearly with the price $p = p(t)$. Similarly, the opposite effect can be observed in the Eq. 15.

Eq. 16 states that the instantaneous price change, represented by the derivative $p'(t)$, is directly proportional (where α is the constant of proportionality) to the excess demand.

From Eq. 16, note that it must be:

- If there is more demand than supply, that is, if $Dm(t) - Sm(t) > 0$, as $\alpha > 0$, the instantaneous price change will be positive: $p'(t) > 0$, which tells us, as is to be expected, prices will tend to grow.
- If there is more supply than demand, that is, if $Dm(t) - Sm(t) < 0$, as $\alpha > 0$, the instantaneous price change will be negative: $p'(t) < 0$, which tells us, as is to be expected, prices will tend to decrease.
- If supply meets demand, a dynamic equilibrium, that is, if $Dm(t) - Sm(t) = 0$, the instantaneous price change will be zero: $p'(t) = 0$, which indicates that prices will remain constant and equal to the current value.
- The coefficient, α , can be interpreted as the speed of the price adjustment depending on the excess demand or the supply scarcity. Thus, a large value of this constant indicates a greater instantaneous price variation, which translates into a faster price adjustment.

Purchaser and brokers mechanisms

First of all, the 0.05% commission defined by Voltamond SA should be applied per transaction to obtain the accurate value.

In relation with the stakeholders' market incentives, it is necessary to discuss some elements about their rewards metrics based on the supply-demand dynamic:

- *Consumers*: typically, they are price-takers.
- *Suppliers*: they need to set up a price that at least equals their LCOE ($p \geq LCOE$)
- *Purchasers*: They support NDB Hub projects by a staking mechanism.
- *Broker/Moderator*: 0.05% commission per transaction

A transaction within this ecosystem could be represented by the following:

Energy suppliers expect to set up a price, p , equal or above their LCOE per kWh, , hence this price will be given for the consumers, but they also can affect the price level, depending on their willingness to pay and the token scarcity fueled by the purchasers (staking mechanism) within the ecosystem as given by Eq. 17:

$$R_i(t) = \underline{c} [E_i(t) p_i(t)] \quad \text{Eq. 17}$$

Where;

$R_i(t)$ is our profits in moment t , which will represent both the final price per transaction for the consumers to pay their utility bills.

$E_i(t)$ is the energy generated by the supplier in moment t (it could be expressed in a certain conventional energy unit).

$p_i(t)$: price of electricity in moment t , the Volt tokens will be used as the coin of the system, and suppliers need that $p \geq LCOE$.

Therefore, $[E_i(t) p_i(t)]$ represents a transaction within the system fueled by supply-demand market forces defined previously.

\underline{c} : Volt fee, equal to 0.05% applied to each transaction.

In addition, the interest-earning protocol for the purchasers could be represented by Eq. 18:

$$D_i(t) = [T_i(t) p_i(t)] (1 + r)^t \quad \text{Eq. 18}$$

Where;

$Di(t)$ is the purchasers' dividends or in other words the future value of the staked NDB tokens. Dividends will be represented as Volt Tokens, the reward mechanism for purchasers.

$T_i(t)$ is the amount of staked NDB tokens.

r is the interest rate defined by the NDB Hub. This represents the time value of staked NDB tokens.

t is the number of years.

Another way to represent the formula described above is given by Eq. 19:

$$D_i(t) = T_i(t) \left(1 + \frac{r}{n} \right)^{nt} \quad \text{Eq. 19}$$

Where n is the number of compounding periods per year (quarterly, monthly, and daily).

Volt Index

To measure and track the energy consumption and the value of the electricity price, the Volt Index can be represented by a Paasche Price Index following the Eq. 20 as:

$$\text{Volt Index} = \frac{[E_i(t) p_i(t)]}{[E_i(t) p_i(0)]} \times 100 \quad \text{Eq. 20}$$

Where:

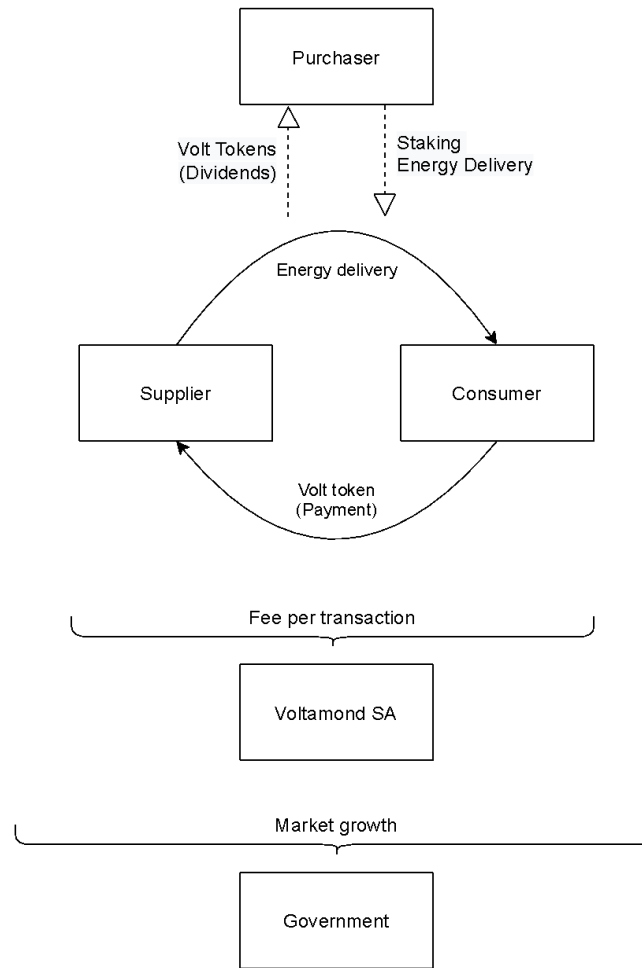
$Ei(t)$ acts as the quantity of energy traded at the observation period.

$p_i(t)$ is the price of the electricity at the observation period.

$p_i(0)$ is the price of the electricity at the base period.

This type of index commonly uses a base year of 100, with periods of higher price levels shown by an index greater than 100 and periods of lower price levels by indexes lower than 100. The numerator of the Volt Index is the total expenditures of energy traded at the observation period using the observation period price and quantities, while the denominator is the total expenditures of energy traded using base period prices and observation period quantities. Therefore, the Volt Index takes into consideration consumption patterns by using current quantities (current weightings).

Dual Token Ecosystem



Given the scheme showed above, and economic modeling assumptions describe over this assessment, it is reasonable to summarize the stakeholders' roles, incentives and formal equations that take place within the system as following:

Stakeholder	Role	Reward	Formal Specification	Additional information
Consumer	Electricity buyer	kWh usage	Consumer pay $\frac{USD}{kWh} = \frac{Volt\ tokens}{kWh}$	Supply demand mechanism $D_m(t) = a - b \times p(t); \quad a, b > 0$ $S_m(t) = -c + d \times p(t); \quad c, d > 0$ $p'(t) = \alpha [D_m(t) - S_m(t)]; \quad \alpha > 0$
Supplier	Electricity provider	Energy Delivery	$\underline{p} = LCOE = \frac{I_0}{M \cdot UPV} + \frac{C}{M}$	
Purchaser	Staking (Supply scarcity)	Volt tokens (dividends)	$D_i(t) = [T_i(t) p_i(t)] (1 + r)^t$	Speculative behavior
Broker	NDB Hub	Fixed fee per transaction	$R_i(t) = \underline{c} [E_i(t) p_i(t)]$	Trading behavior
Government	Policy maker	Market Growth	$\Delta [E_i(t) p_i(t)]$	Potential tax policy

Airdrop

Our Airdrop function is the initial incentive for people to stake their NDB tokens into the Pools. The Airdrop will come as a reward for the interaction between the Pool entity and our products

and services. As the ecosystem grows, more features will be announced, guaranteeing advantages on-chain and off-chain for the user's interaction with specific Pools.

Recharge/Leasing Cycles

The Volt token will act as a recharge function for our products and services. Since our products have a defined lifetime, the amount of Volt tokens required to reach the total capacity in each case is pre-determined.

VoltShare

Bear in mind that you have a device containing our products, you can earn Volt tokens for the unused energy sent to the grid when the device is inactive. This is due to the fact that our products are constantly generating energy. For other devices meeting the characteristics described earlier, we will provide leasing offers within our blockchain.

Recycle

We have extensive attention to detail, and upfront, we are designing the incentive blockchain mechanism, anticipating the discard procedure for products.

The Retirement of the tokens

When the user retires a device, the tokens powering it are retired at the time of the lease renewal.

The amount minted when the device was conceived will be in circulation until the owner decommissions the device using the safety procedures. Then they will receive the remaining charge, in an equivalent Volt token, at the current kWh price, in their Wallet.

Burn/Retire

Burning or retiring tokens is the action of concluding the token life purpose. This action will be executed in certain situations:

Recharge/Leasing Cycles: when the device is approaching the end of a leasing cycle or recharging, the device owner will have to submit Volt tokens from their Wallet in the App with the function "Recharge", selecting the period, amount of energy, or time they want to keep their device cycle. This function could also be automatic.

Decommission: When the device is retired, the Volt tokens that were minted upon its creation will be removed from the circulating supply, guaranteeing that every token in circulation has a purpose.

If the action does not respect any of the two situations described above, the token shall continue to be in circulation.

Token Pools

Pools are the mechanism used for the token to gather and measure intention from purchasers and organizations for us and our partners. The Pools will act as quantifiers for value and will play an essential role in the early stages.

NDB Pool

The Pool will work similarly to S&P 500 for this ecosystem. It will reflect the performance of all Pools, being rewarded every time a Pool is rewarded accordingly with the DRI at a given moment.

Enterprise Users

The companies that have access to our products will have production preferences and accessibility assessment preferences by the size of the NDB token stacked in the enterprise Pool. The enterprise Pools can be private or public depending on their preference.

Also, as a privacy feature, despite being a blockchain, the Pools have a mechanism to safeguard companies' trade secrets, including client profiles.

The enterprise' Pools become prominent on our blockchain by having many NDB tokens and purchasers who have staked their money in the Pool. The Hub will develop tailor-made programs and features for specific cases.

The Pools will not only be an exclusive feature for enterprises. In the next update, we will introduce some of the features below:

- Academic research partners
- Enterprise users
- Business and technical partners
- Community contributors
- Blockchain developers
- Local initiative

Consumption Pool

The Consumption Pool is the total Pool of Volt that is allocated to a particular utility company's energy production that is consumed. This is used as an account tracking pool where consumers can purchase Volt 0.05% above the kWh price, and can use these tokens as a form of payment.

They can also earn variable interest on their tokens in this Pool so that interest can also be paid to cover the costs of their utility bill. Annually, participating users are granted 10% of their total utility bill for that year in Volt tokens back to the Consumption Pool.

The Consumption Pool is managed in partnership with the NDB Hub and participating utility providers. This appeals to utility providers because it offers them an incentive for drawing consumers into their service network through the Volt rewards program and allows them access to NDB products.

Functions

The App

The App will be the point of interaction for activities within the ecosystem. The App will act as a portal for registering new devices, transferring device properties, buying and burning Volt tokens, tracking energy consumption, staking NDB tokens in the Pools, and having access to various services and reward programs by us and the partners. The App is accountable for personal devices, contracts, transactions, and tokens.

Wallet

The wallet is the base of all services that allow users to store and manage their assets safely. Users can connect their wallets to a service to use it, such as paying subscriptions or utility bills.

Trading

One of the preliminary trading options allows marginal trading without any fee. In this case, the price of the target token will be presented by NDB tokens, and the user will receive a reward as NDB tokens. We also have plans for the inclusion of arbitrage trading as a future function.

Auction

The auction app consists of different rounds where tokens will be available for purchase at a reserved price. The auction also allows users to select and customize their avatars. Users' avatars and accessories are provided as NFTs. These NFTs have positive effects during an auction or towards our other services, which will be revealed later.

Direct Sale

In addition to the auction sale, users can purchase tokens directly from the company at a fixed price. The number of tokens and price for a deal will be specified for each case separately. The direct sale is an exclusive opportunity that is only available for a limited time on short notices.

NFT Marketplace

We plan to release other tokens for NFT marketing using our auction, direct sale, and wallet services. This allows users to buy and sell NFT by utilization of the wallet. In this case, the seller will pay the marketplace fee, and the buyer will be subject to no cost. Please note both parties will still be subject to the smart contract fee.

Blockchain as a Service (BaaS)

Our ecosystem has an integrated system where we know when the device is ready for transfer after being sold.

The buyer must verify their identity. The App will have a KYC procedure for members. Therefore, the transferring process and further action will be executed through the Application. Each device will have an address directly from the production line, a Hash just like a Bitcoin address, and until someone buys or claims their property, the address will be under the Wallet. The Wallet is a collection of addresses.

Due to the sensitive nature of radioactive material and regulatory frameworks, a license is required to hold radioactive products above a certain weight according to each country's respective authority, i.e., NRC in the USA. To streamline this process for our customers, upon registration of any of our products fitting the above parameters, the customer will be automatically enrolled for receiving a license. To ensure maximum security, blockchain technology is used to process this registration and allow anonymous tracking of the radioactive products to prevent misuse for nefarious actions.

We anticipate that large corporations with existing market-dominant positions and ecosystem resources can influence the adoption of blockchain technology, especially when this technology is tied to physical products that will proportionate competitive advantage for the earlier adopters.

Thanks to the economic model design, many developers and enterprise users in our ecosystem can purchase NDB tokens on the open market to generate Volt tokens for their applications or directly purchase Volt tokens on the market. However, due to the ambiguity of the cryptocurrency regulations and standards, some enterprises will still opt to pay for our products directly in FIAT.

Token Sale

The Summary below describes the principal terms of the token sale. Certain terms and conditions described below are subject to important limitations and exceptions. Prospective purchasers should review the entire Token Sale Terms and Conditions, available from the Issuer, including the risk factors stated therein.

As described, our dual token ecosystem will be the primary method for the Hub to finance this endeavor.

The supply of **one billion NDB tokens** will have an initial deduction of 35% for Voltamond SA and 15% for ecosystem and consultants.

The token sale is provided by the Company in a form of auction sale. All the users participating in the auction sale are subject to the Token Sale Terms and Conditions, and should be aware of, and undertake any risks and consequences prescribed in such terms and conditions, but not limited to them, and related to the token sale. We will ensure a fair, detailed and transparent way for the community to acquire NDB tokens.

The sale will last for a set period of time, where bidders will be able to bid for NDB tokens at or above a reserved price. The start of pre-sale will be announced by the Company and will be composed of different rounds. Each round will have an allocated set number of tokens at a reserved price which will be announced before the round opens. The minimum price of the token increases in each round. Also, the amount of offered tokens varies in each round.

It is important to note that any bid to buy our tokens at the set price or above will be held until the end of each round.

The remaining percentage is proposed to be offered but not limited to our whitelists, current purchasers that have demonstrated interest in the technologies over the years through close connection and newsletters.

After the pre-sale auction, the remaining percentage of the tokens will be available by us through crypto exchanges for the public at the pace that best suits the operation and the interest of the organizations involved.

Upon completion of each round of pre-sale auctions, the tokens will become available to the bidder(s) with the winning bid, and the losing bids on hold will be released. The Company will have no obligation to deliver, and a bidder(s) will have no right to receive any tokens, unless a bidder(s) is recognised by the Company as a winner of an auction. You should continuously keep track of the threshold price and make sure your bid is consistently above the highest bid(s). The balance and transaction history will be accessible via the NDB App. The user will choose to stack the tokens in the wallet that is implemented inside the App or move them to an external wallet.

Token sale model

Issuer	Voltamond SA
Token	NDB
Token Symbol	NDB
Total NDB Token Amount	1,000,000,000
Token distribution	Determined by the Issuer in its sole discretion
Emission Rate	New NDB tokens will never be minted
Terms	Conditions set forth in Token Sale Terms and Conditions

Token allocation

Private placement	50%
Voltamond SA	35%
Ecosystem and consultants	15%

Incentivization for Participants or Token Holders

The NDB token ecosystem has several participants ranging from consumers, stakeholders, users, and eventually suppliers.

The companies that will utilize our technologies for their products in the future are benefiting from the whole ecosystem, where the users of its products will be able to have several interactions within the ecosystem, such as:

- Recharge the products with Volt.
- Access several financing options for the cost-intensive products.
- Lease higher output products and solutions.
- Interact with clients through several marketing channels, exclusive reward programs, promotions, and campaigns that the ecosystem will enable.
- Access the analytics from users and other data analytics depending on the contract with us and the product type.
- Track energy consumption and earn rewards.
- Pay utility bills using the Volt token.
- Stake NDB and earn Volt.

Purchasers

Purchasers can collaborate with NDB token appreciation by holding them out of circulation. This contributes to scarcity.

There are two ways of holding tokens out of circulation. The first method is purchasers placing their tokens into any private wallet (for example Metamask or Trezor) or in custodian parties like crypto exchanges. The second method is by staking the NDB token into any project within our ecosystem, allowing the possibility to earn Volt.

Future Developments

We have as our current priority the development and successful deployment of all existing features. We will be determined to develop further and include new technologies as we proceed.

Platforms

The platforms for buying and selling both tokens include: centralized and decentralized cryptocurrency exchanges and the App once launched. More platforms and traditional markets will become available as the project is further developed and receives wider accessibility.

In addition, the constant availability of Volt in the App is guaranteed by the Hub. To utilize the benefits of Volt, the user does not necessarily need to access a crypto exchange. The App will provide conventional methods for purchasing Volt, including credit and debit card transactions, cryptocurrencies, and NDB tokens at a specific discount which will be determined in future.

To safeguard a healthy financial status for Voltamond SA, the Hub, and the whole ecosystem, all funds received in cryptocurrency will be liquidated into FIAT. Voltamond SA and the Hub may have the funds in external parties as crypto. Other volatile assets will also be liquidated.

Disclaimer

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