



Limited edition 2023

WHITE PAPER

Published on November 29, 2023

We Empower people and believe in energy for the people! ©PowerGold UAB

TABLE OF CONTENTS

I. DISCLAIMER AND RESERVES	3
II. SUMMARY.....	6
III. ABSTRACT.....	8
IV. INTRODUCTION.....	9
IV.1. Context.....	9
IV.2. Blockchain technology and the energy sector	11
V. WHY ENP TOKEN?	15
V.1. Identifying challenges	15
V.2. Issuer.....	17
V.3. Leadership.....	18
V.4. Aurora Labs Team	21
V.5. The PowerGold Chain.....	23
VI. ENP TOKEN ECONOMICS.....	25
VI.1 ENP Token economics overview	25
VI.2. Bridging the gap	26
VI.3. Environmental, social and governance (ESG) compliance.....	33
VI.4. Regulatory aspects.....	35
VI.5. ENP Token background	38
VI.6. ENP Token distribution and the allocation of funds	39
VI.7. Building ENP Token trust and credibility.....	44
VI.8. ENP Token price stability considerations.....	47
VI.9. PowerGold governance.....	48
VII. POWERGOLD ENVIRONMENT	49
VII.1. The planned investments and their directions	49
VII.2. Investment rentability considerations.....	50
VII.3. Costs and time-to-market aspects	59

VII.4.	Acquisitions road map	61
VIII.	THE EU AND ROMANIAN ENERGY MARKETS	63
VIII.1.	Considerations on the energy markets of several EU member states	63
VIII.2.	The Romanian energy market.....	65
VIII.3.	Considerations on the EU regulatory framework	73
IX.	STATEMENTS AND RISKS.....	75
IX.1.	Statements.....	75
IX.2.	Risks	76

WHITE PAPER OF ENP TOKEN - THE REPLICATIVE AND SCALABLE

GREEN ENERGY TOKENIZED PROJECT

(Release 1, Version 1)

November 29, 2023 / The Power Gold ENP UAB Team

Available at www.powergold.tech

I. DISCLAIMER AND RESERVES

This white paper was drafted by Power Gold ENP UAB., a limited liability company duly incorporated under the laws of Republic of Lithuania, having its headquarters at 56 Architektų g., Vilnius, Republic of Lithuania, duly registered with the Register of Legal Entities under no. 306332592 (hereinafter referred to as "**PowerGold**").

This white paper is designed to offer the needed information to the potential investors who may contemplate purchasing PowerGold asset-referenced tokens and to invite them to make their own assessment and judgment before investing in the said tokens (hereinafter referred to as "**ENP Token**").

Though the information herein is divulged transparently, genuinely and in fairness, yet PowerGold, recommends the potential investors not to unduly rely upon it as the same will confer no rights or remedies to the prospective holders of ENP Token(s) against PowerGold, unless explicitly stated otherwise.

The assets which ENP Tokens are referenced to do not exist as of the date of the first version of this white paper; these assets remain to be acquired, constructed, operated and maintained in accordance with the business model and principles laid down hereinbelow. PowerGold undertakes no warranties or representations as to the successful acquisition, construction, commercial operation and exploitation of the underlying assets backing up the ENP Tokens, or the achievement of any other forecasted milestones, projections, etc., outlined in this white paper. Accordingly, no investor may unduly and unreasonably rely on the contents of this white paper or any findings or opinions stemming from it, including, without being limited to, the following:

- (i) PowerGold blockchain technology;
- (ii) business architecture and economic principles behind the ENP Tokens;
- (iii) the successful acquisition, construction, commercial operation and exploitation of the referenced assets;

- (iv) the potential profitability, intrinsic value, liquidity and transferability of the ENP Tokens, whether foreseeable or not;
- (v) the successful placement of the ENP Token offering(s).

PowerGold accepts no liability for any losses or damages claimed by any potential investor wishing to acquire ENP Tokens based on the information disclosed herein or any supplementary information made available following any restated versions of this white paper or any further inquiries during the investment process.

PowerGold states clearly that all projections, forecasts, prospects, expressions of intent, and any other subjective opinions outlined herein are based on reasonable assumptions that must not be interpreted as being certain of their materialization. All projections, representations, forecasts or predictions outlined in this white paper may not occur as they depend on multiple business factors, technology features, regulatory matters, market dynamics, tariffs volatility, macro-economic indicators, geo-political developments, etc.

Certain statements in this white paper are “forward-looking statements”, which can be identified by use of forward-looking terminology such as “believes”, “may”, “will”, “should”, or the negative thereof or other variations thereon or comparable terminology, or by assessing aspects that involve risks and uncertainties. Such statements are subject to certain risks and uncertainties, which could cause actual results to differ materially from those forecasted. All potential investors are eagerly cautioned not to place undue reliance on these forward-looking statements. Each potential investor is advised to rely solely on its own assessment and decisions taken based upon the information disclosed herein or which is further made available in connection with any inquiries during the investment process.

The drafting of this white paper as of the date hereof does not imply that the contents, representations and findings therein shall preserve their accuracy and availability after such date and all prospective investors are strongly advised to seek further clarifications and updates before investing in the ENP Tokens as the same may change from time to time. PowerGold will amend, modify, update or restate this white paper from time to time and will publish it on its website or disclose it as required by the applicable legal framework.

PowerGold may provide links to several websites with relevant information regarding the ENP Tokens and the investment process; however, reference to such links does not represent that PowerGold approves or endorses the contents of such links. The potential investors should consider accessing these websites for information purposes only, while PowerGold does not accept any liability or responsibility for any of the contents thereof or anything that derives from the same.

This white paper and the ENP Tokens are not directed to, or intended for distribution to or use by, any person or entity which is located in or is a citizen or resident of the following countries or regions: Afghanistan, Belarus; Central African Republic; Democratic Republic of Congo; Cuba;

Eritrea; Guinea-Bissau; Republic of Haiti; Iran; Iraq; Lebanon; Libya; Mali; Myanmar – Burma, Republic of Niger; Republic of Liban; North Korea; Russia, Somalia; South Sudan; Sudan; Syria; Yemen; Ukraine regions of Crimea, Donetsk, Kerch, Luhansk and Sevastopol.

This list may be updated from time to time.

This white paper and the ENP Token are neither directed to, or intended for distribution to or use by, any person or entity which is located in or is a citizen or resident of the United States of America or other country, region or jurisdiction where such distribution, publication, availability or use would be contrary to the applicable laws.

All the intellectual property rights in relation to and deriving from this white paper shall be vested upon and shall belong exclusively to PowerGold for the entire duration of their protection and under all jurisdictions, irrespective of their exploitation and use.

II. SUMMARY

ENP Token represents a forward-thinking blockchain-based token enabling virtually anyone to transparently invest in green energy capacities.

ENP Token is an innovative symbiotic architecture combining the infrastructure of a specifically designed blockchain meant to channel the investments from the potential token holders to real renewable energy capacities in a decentralized, democratic, transparent, less costly, more efficient, ESG-compliant, replicative, potentially rewarding and stable manner for a long period.

ENP Token utilizes a custom-built Aurora's blockchain (hereinafter referred to as "**PowerGold Chain**"), a robust network characterized by continuous token circulation and unwavering security.

ENP Token blockchain utilizes specific protocols to maintain a controlled supply of tokens. By imposing limits, ENP Token preserves its intrinsic value, generating a perception of scarcity among the potential investors. Additionally, a built-in burning mechanism ensures that inflationary events do not impact ENP Token's value.

A vital component of ENP Token functionality involves the initial presale to raise funds for the project, whilst the remaining amount of the tokens part of the investment plan (60% out of the total number of tokens to be issued) will be deployed based on milestones.

ENP Token is designed to maintain reserves of coins to balance supply levels, while implementing a continuous token buy-back mechanism, a liquidity pool and a longstanding and fair investment plan in green energy capacities.

Upon raising funds and reaching specific milestones, the renewable energy-generating capacities will be either purchased or constructed. From the energy produced and sold at the market price or under power purchase agreements, completely transparently, part of the proceeds will be reinvested to increase the number of assets and grow the project's value, part will be injected in the liquidity pool, while the other part will be used to buy back available ENP Tokens from the market and burn them. This reinvestment and ENP Token purchase and burning model is continuous throughout the lifespan of the renewable capacities, approximately 25 years.

To scale up the protection of the potential ENP Token holders and bolster the transparency of the business model, PowerGold will have in place several important policies such as business continuity and wind down, corporate governance, complaints handling procedure, conflict of interest, risk assessment, KYC/AML, etc. There will be no preferred treatment among the potential ENP Token holders and financial audits will be performed on a yearly basis. At the level of PowerGold will be implemented the "*no dividends*" policy to ensure the intrinsic value of the ENP Token.

The PowerGold business plan is modelled for approximately 25 years and consists mainly of the following:

- (i) two years for initial project start-up investments (Year 1-2);
- (ii) five years for “slices” of ENP Token releases for future investments in new capacity, as well as repurchasing tokens with money earned from electricity sales (Year 1-5); and
- (iii) +17 years with a free market, and nearly complete token release cycles;
- (iv) lock-up periods from 1 to 10 years will be in place for the founders and various categories of ENP Token holders;
- (v) monthly ENP Token vesting from 2 to 10 years will also be implemented.

III. ABSTRACT

There is no doubt that we are living in times of profound paradigm shifts concerning the responsibilities we have towards energy resources and ultimately their generational effects on the environment.

ENP Token is designed to address part of these responsibilities by employing disruptive technology to yield potential financial gains for the prospective investors and allowing them to benefit from the far positive effects of clean energy on their and their next generations lives.

Trading simulations of green energy capacities output in a European Union decentralized market along with preliminary financial forecasts based upon educated and documented estimated price per megawatt (~MW~) showed a potential superior and steadier return on investment as compared to other industries (real estate, bank deposits, sovereign bonds, etc.) for rather a long period (from 15 to 25 years).

In this context, ENP Token is positioning itself as a token that intends to foster the potential gain of the token holders at an even superior level considering the replicative investment model and continuous profit reinvestment principle whereby all the net proceeds stemming from the commercialization of the green energy output are channeled for the acquisition and/or construction of further green energy capacities and increasing the ENP Token intrinsic value through unique token economics features (lockup periods and volumes, burning plan, no dividends policy, reserves, etc.)

IV. INTRODUCTION

IV.1. Context

Currently, the European Union is the first regional economic integration organization that has in place a forward-thinking, well-designed and comprehensive set of climate and energy legislation aimed at allowing its member states to cut down greenhouse gas emissions and bolster the development of clean energy to achieve climate-neutrality by 2050¹.

The European Union's legislative call for attaining climate neutrality, energy security and economic stability encroaches on several sensitive social, economical and geopolitical aspects such as the high energy prices driven by the abrupt replacement of fossil fuels with clean energy sources, the lack of proper infrastructure and modern technology in various sector of industry meant to allow the use of clean energy on a large scale, as well the strategic vulnerability triggered by the use of fossil fuels whose overwhelming production lies with a handful of countries².

It is expected that this pragmatic legislative package will upgrade the economies and the welfare of the member states and prepare the same for a socially fair and less painful transition while fostering innovation and embracing the technological competitiveness of the relevant industries, including the green energy sector which is essential for implementing the efficient use of the natural resources and turning the fossil-powered economies into green, digital and resilient ones³.

Besides the regulatory framework, a pivotal importance in this transition is played by the investments much needed to be engaged by businesses, the public sector and, why not, by individuals who for the first time, thanks to access to the blockchain technology, may play a major role in the financing of the energy sector.

Not surprisingly, the sharply increasing use of electric vehicles, smart appliances, and household solar panels is fed also by various business models that allow and foster individuals to pool their financial resources which might be seen as a precursor for the use "*...of Blockchain technology in the energy sector. As a result, Blockchain's market value in the sector is set to grow past \$25 billion over the next five years (by 2024 – our note) as the world becomes increasingly interconnected and digitized*"⁴.

It is our belief that blockchain technology will substantially help businesses and equally allow individual investors to significantly increase the share of renewable energy sources over fossil fuels until 2030 while benefiting from the upside thereof seeing, amongst others, the following⁵:

- (i) it decentralizes the old-fashioned investment model by allowing access of individuals to invest directly, transparently, flexibly, swiftly and less costly in renewable energy capacities and projects; currently, such investment is accessible mostly to strategic companies, investment funds, large investment entities, qualified investors, governments, etc.⁶;

- (ii) it represents an innovative and viable financing model by concentrating the large market liquidity from the individual investors to the acquisition and construction of renewable energy capacities;
- (iii) it realizes vertical and horizontal integration and added value chain: blockchain technology is largely used "*...across the energy value chain, from generation to distribution and trading to payments...*" and "*...is also being deployed for incentivizing renewable energy generation, grid management, and other such critical operations.*"⁷;
- (iv) it offers enhanced security meant to prevent attacks due to decentralization, verification, multilayer validation and cryptography features⁸;
- (v) it provides disintermediation, namely peer-to-peer and peer-to-business transactions without the mitigation of the financial institutions, thus enhancing competition and eliminating the obsolete trust model along with its costs and systemic weaknesses⁹;
- (vi) it accommodates smart contracts that have the ability to transparently and safely channel the individuals market liquidity in the renewables projects while reducing transaction costs and automatically enforcing the rights and obligations of the parties; it thus, ensures trust between the involved parties, fairness and visibility on the upside of the investment¹⁰, as well as peer-to-peer trading of power based on smart contracts¹¹, an unimaginable process until few years ago;
- (vii) it allows cost- and time-effective transactions by removing the related heavy negotiations and the inertial decision-making process, as well as eliminating intermediaries, commissions, financing-related expenses, bank commissions and levies.

IV.2. Blockchain technology and the energy sector

In the beginning, even the creator of blockchain technology would have had real challenges in understanding the numerous fields in which it is applied today, let alone what the future reserves for this disruptive technology.

Currently, we know that there are many blockchain technology use cases in the energy sector that *"...can deliver billions of dollars in global value annually through cost reductions - driven by greater automation and disintermediation - and revenue growth."*¹² Amongst the use cases that might be considered innovative and with added value across the energy sector one may find the following¹³:

- (i) utility enrolment and billing – application for client switching, metering payment settlement, rate structure implementation, etc.;
- (ii) certificates of origin – application meant to provide automated transparency and documented traceability to prove that the electricity has been produced from renewable sources;
- (iii) transactive energy – application designed to automatically coordinate and streamline the energy generation, distribution, supply, consumption, system imbalances, price negotiations considering users' options and grid features; see OLI and Stock energy blockchain platforms¹⁴;
- (iv) demand response program – enables aggregators to unfold automated and real-time measurements, validation, settlement and trading aimed at achieving energy efficiency;
- (v) electric vehicle charging grids – a cryptographic application that manages vehicles, clients and charging network; see Oxygen Initiative, Share & Charge, Car eWallet, Everyt, etc.¹⁵;
- (vi) financing energy sector – blockchain technology may be employed to channel the individual market liquidity and maximize private return while contributing to decarbonization; see ImpactPPA, an Ethereum blockchain cryptocurrency designed to raise money for installing solar plants around the globe, theSunExchange, Solar Dao another Ethereum blockchain platform created to invest in solar plants¹⁶, MyBit, a blockchain-based financing platform for solar plants¹⁷;
- (vii) decentralized energy trading - a blockchain-based trading platform for the over-the-counter wholesale energy market; an illustrative example is Enerchain, the first real peer-to-peer trading of energy without the supervision of the regulatory authority endorsed, amongst others, by ENEL, RWE, Vattenfall, EON, Uniper, EnBW, EDFT, Engie, CEZ, Iberdrola, Endessa, EDP, OMV, Verbund, Wien Energie, Energie AG, Salzburg AG, ENI, Centrica,

Orsted, Statkraft, Alpiq, BKW, Axpo, Gen-I, etc.; see also Grid+, Volt Markets, Power Peers and Energo Labs¹⁸;

- (viii) prosumers peer-to-peer trading platform – a blockchain platform for prosumers helping them to directly trade particularly the excess of solar energy to the other members of the community; for more details see the Brooklyn Microgrid project developed together with Siemens, as well as the Power Ledger and Energy Bazaar similar projects¹⁹.

Bottom line, blockchain technology is versatile having numerous utilizations in multiple *“... segments of the energy sector, including peer-to-peer energy trading, energy access, grid management, financing renewable energy, electric vehicles, and renewable energy certificates”*²⁰.

This white paper focuses on financing renewable energy through blockchain technology. There is a huge need for renewable energy to significantly diminish the use of fossil fuels from the energy sector and for achieving that billions of fiat currency must be invested rather soon, by both the public and private sectors. An important slice of these financial resources may be secured by employing blockchain technology to finance the deployment of new and clean renewable capacities that represent the future of the energy demand and supply in all their forms. Blockchain technology is well-positioned and designed to transparently intermediate the transfer in a decentralized and democratic manner of financial resources from a large pool of investors to actual renewable energy projects.

Through ENP Token we aim to create an organic marketplace - via blockchain technology - where the financing needs for the acquisition and construction of new green energy capacities meet the flexible mechanics, dynamic supply, and straightforward deployment of individuals' liquidity. The ENP Token key benefits by using such technology features the following:

- (i) decentralization and democratization of financing by opening the investment avenues to unqualified individual investors too²¹;
- (ii) inclusive financing by pooling and directing the liquidity market of unqualified individual investors into the construction and/or acquisition of renewable capacities with an aim to trade the output for a potential return via the relevant tokenized market;
- (iii) less complicated, fast and straightforward financing: as opposed to the old fashion way of financing renewable capacities which implies lengthy assessments, heavy drafting and negotiations by multiple teams of professionals, as well as a multilayer decision-making process; financing these projects via ENP Token should be rather simple, rapid and easy to grasp thanks to the unique characteristics of the PowerGold Chain embedded smart contract²²;

- (iv) transparency and traceability of financial resources – the information registered in the blockchain platform is at the fingertips of all the involved parties; that is supposed to ensure truth and validation of the information regarding the financial resources, the involved parties, the assets and benefits generated by such investments, etc.;
- (v) low financing costs and time efficiency: being less complicated, unbureaucratic, straightforward and disintermediated, the financing process via ENP Token will “...allow for low transaction costs, which can reduce the cost of capital for renewable energy project deployment”²³; that saves time and resources and maximizes the investment;
- (vi) safe and secure due to the enshrined efficient and automated smart contracts that have a much higher degree of security, fragmentation, fraud and cyber-attacks;
- (vii) versatility by being capable of accommodating various use cases with potential for added value; the multitude and innovative blockchain-based cryptocurrencies projects available nowadays bear witness to the value of the tokenized markets which continue to increase and diversify;
- (viii) creating markets with added value; ENP Tokens when issued and changing hands may create numerous dealings thus allowing virtually anyone to potentially yield potential gain; furthermore, the long-term net profit obtained by the renewable capacities also adds extra value to the ENP Tokens held by the prospective investors.

The ENP Token is not an insulated project. These remarkable and innovative advantages of blockchain technology were swiftly understood and valued by several other trailblazers which attracted financing from the liquid market of individuals and developed new and attractive investment-wise renewable blockchain-based projects of which we would like to mention the following:

- (i) Impact PPA - <https://www.impactppa.com/> - a mobile application allowing regulatory-challenged consumers to purchase electricity from renewable energy projects;
- (ii) WePower - <https://www.eu-startups.com/directory/wepower/> - a blockchain-based platform for funding renewable energy projects by selling the tokenized energy generated by the very renewable energy plant²⁴; “Tokenisation [...] is also relevant in renewable energy financing. For example, WePower issues tokens that represent future energy generation, which enables the financing of the corresponding plant.”²⁵;
- (iii) Direct Energy - <https://www.greentechmedia.com/articles/read/direct-energy-uses-lo3s-blockchain-to-offer-micro-energy-hedging> - a platform for energy hedging for commercial and industrial users;

- (iv) Enercity - <https://www.enercity.de/> - a blockchain platform that allows the customers to pay with cryptocurrency (BTC) the energy they consume;
- (v) The Sun Exchange - <https://thesunexchange.com/> - a blockchain project financed by investors that own part of the solar plant equipment while benefiting from returns distributed monthly and pro rata with the actual holdings;
- (vi) MyBit - <https://mybit.io/> - a blockchain crowdfunding platform for deploying solar panels in poorly served areas; the model is based on equipment co-ownership and returns.

All these successful projects represent only the tip of the iceberg when comes to the financing of renewable energy using the driving force of blockchain²⁶. The actual distributed ledger technology marks the beginning of a new era of asset-referenced tokens that *"...can be freely traded by the general public or used as tokens to purchase goods and services on a specific network."*²⁷

Asset-referenced tokens have a twofold economic beneficial effect: first, they are a decentralized, fast, efficient and low-cost-driven financing model; and second, they gain value over time while they are traded and fed with the intrinsic increased value of the assets which they are referenced to: *"Crowd financing using blockchain works by allowing the initiator of a project to create its own digital and fungible tokens (also referred to as "crypto-coins" or "utility tokens"). These tokens often do not represent more than the promise of a "still-to-be-developed" asset. However, the new and innovative aspect is that digital tokens enable project initiators to acquire funding from early investors, while early investors may also benefit, for example, if the digital token is listed on a trading platform and increases in value. In addition, the purchase and sale of tokens is fully transparent; donors have full read access to all token transactions"*²⁸

V. WHY ENP TOKEN?

V.1. Identifying challenges

Even though these blockchain-driven innovative features - transparency, trust, simplicity, decentralization, etc. - represent a major step forward in the industry, yet one should admit that this technological leap is at its inception; this is why, in our opinion, these improvements may not solve by default all the inherent challenges posed by tokenized projects.

We have identified several challenges properly dealt with herein to argue the technological and operational viability of ENP Token, its innovativeness, scalability, benefits and stability of the proposed business model, as follows:

- (i) **technological obstacles:** first, demonstrating the capability of the PowerGold Chain to interconnect organically with the practical business model of the renewable energy capacities and yield potential upside to the benefit of the token holders; and second, preventing the risk of fraud and building robust operational security, validation and trust at the crossroads of the real world and the digitalization stemming from the blockchain processes;
- (ii) **operational capabilities:** deploying the human level of expertise, reputation and experience needed to acquire, construct and operate the underlying renewable energy capacities to increase the value of the ENP Tokens and yield potential gain;
- (iii) **ESG compliance:** ensuring environmental, social and governance compliance of the business model and organization;
- (iv) **decentralization:** proving that the PowerGold Chain may practically bridge digitalization with the decentralization of financial resources and create a new and reliable business model²⁹;
- (v) **regulatory hurdles:** implementing fair, transparent, balanced and protective caveats in line with the regulatory framework in place;
- (vi) **transparency:** implementing rules for transparency, tracking, reporting and auditability throughout the whole business model chain (financial flows, reserves, liquidity, renewable energy capacities operation, output, revenues, Opex, investments, burning plan, lock-up periods, vesting periods, corporate governance, etc.);
- (vii) **financial scalability and investment efficiency:** enabling the engagement of the investors throughout the lifespan of the renewable energy capacities to boost the scalability of the financial resources required for the acquisition and construction of the renewable energy

capacities, and equally ensure the steady increase of the ENP Token intrinsic value by creating a proper market for the ENP Token holders where to trade them.

With these challenges in mind, we thought of making a step forward in the crypto blockchain-driven market and creating the ENP Token. This token is designed to be self-sustainable and self-increasing in its intrinsic value since it will be backed up by green energy-producing assets whose net proceeds will be fully employed:

- (i) to bolster and increase the value of the issued tokens, on one hand; and
- (ii) buy and build new green energy capacities, on the other hand.

Every new green energy plants – either built or acquired – will at their turn have the following two-fold effect: firstly, it will increase the value of the ENP Token; and secondly, it will attract new financial resources for the acquisition and commissioning of further green energy capacities; this incremental domino effect may be fed as long as we invest in new green energy capacities, nowadays the potential of investment in this sector of the industry is rather substantial considering that *“...Blockchain funding ecosystems might enable smaller investors and individuals to invest in projects to which they otherwise would lack access, but the societal benefits of doing so are not obvious”*³⁰.

V.2. Issuer

Power Gold ENP UAB., is a limited liability company duly incorporated under the laws of Republic of Lithuania, having its headquarters at 56 Architektų g., Vilnius, Republic of Lithuania, duly registered with the Register of Legal Entities under no. 306332592 of June 5, 2023, having a registered share capital of EUR 13,000 and a number of 13,000 of ordinary shares with a nominal value of EUR 10 each.

PowerGold website is www.powergold.tech

V.3. Leadership

Laurențiu Udrescu – Co-founder and Chief Executive Officer

Possessing an academic foundation anchored by an economics degree and a master's in marketing, Laurențiu is a seasoned expert in the Romanian electricity market, with a distinctive specialization in renewable energy. His professional journey began in 2006, accumulating over the years an unparalleled proficiency in various fields: management, energy profiling for industrial clients, electricity trading, the handling of CO2 and green certificates, energy commodities, electricity supply activities, and the nuanced art of market balancing.

Laurențiu's expertise extends beyond strategic management to encompass technical consulting, particularly tailored to M&A transactions within the renewable energy sector. His consultative acumen has proven to be an invaluable asset in this evolving field.

Since 2010, Laurențiu has orchestrated and led multifaceted teams to develop three wind projects, delivering an aggregate capacity of 322 MW to an international strategic investor. These projects, now operational, bear testament to his ability to transform ambitious visions into tangible realities.

His current pipeline includes an impressive 1.5 GW of wind projects and 1 GW of photovoltaic (PV) projects under development, catered to the needs of a diverse portfolio of international investors. These ventures not only underscore Laurențiu's pioneering approach to renewable energy but also exemplify his commitment to driving the green energy revolution in Romania and beyond.

Laurențiu is the majority shareholder and director of PowerGold.

For more information regarding his profile and professional achievements see www.enpower.ro.

Florin Danilov – Co-founder and Chief Technology Officer

With a solid foundation in Information Technology upon graduating, Florin embarked on his professional journey in the year 2000, joining the innovative tech firm Rokura as a software engineer. Demonstrating an active interest in the burgeoning field of renewable energy, Florin pivoted his career in 2007 as he became a part of the first wave of sustainable initiatives at Eolica Dobrogea for Iberdrola Renewables, deftly overseeing the developmental phases of ambitious wind projects, some operational from 2010. Florin's renewable energy expertise expanded in 2011 with Elcomex, as he skillfully supervised the evolution of three substantial wind projects for Enel Green Power, along with two photovoltaic projects. This experience proved instrumental in shaping his career trajectory.

In 2015, another shift occurred as Florin guided his entrepreneurial spirit to establish his own venture, a multimedia production and visual effects company. This venture, however, was impacted by the onset of the Covid-19 pandemic and had to cease operations. Amidst this global

crisis, Florin lent his technical prowess to Ericsson, serving as a trusted technical expert during challenging times.

As the world emerged from the pandemic, renewable energy experienced a significant resurgence. Coinciding with this second wave, Florin made an impactful re-entry as a CTO into the renewable energy sector at Enpower Energy Srl³¹, a firm dedicated to the development of renewable energy projects. Under his watchful eye, the company is presently supervising the creation of an impressive portfolio of renewable energy projects. The projects, which combine wind and solar power, are expected to generate approximately 2.5 gigawatts of power, marking a substantial contribution to the sustainable energy sector.

Florin is a significant shareholder of PowerGold.

For more information regarding his profile and professional achievements see www.enpower.ro.

Gelu Maravela – Co-founder

Gelu has over 25 years' experience in the legal profession during which he headed several practice groups, as well as secondary offices of the relevant law firm.

Gelu has been a judge with one of the Bucharest courts, lawyer with Linklaters' London office and equity partner with another reputed Romanian law firm. He holds an LL.M awarded with merits by Warwick University, the UK and is a constant contributor to international legal publications. Gelu is particularly experienced in mergers & acquisition and energy, including the related regulatory matters, the relevant contractual framework, structuring, restructuring of energy businesses and negotiation with various public and private parties.

Gelu has a broad expertise in the energy sector, having assisted the most important stakeholders of the Romanian energy market. Throughout his career, he has coordinated complex investment projects and mergers & acquisitions in the renewable energy field.

For his impressive track record, Chambers Europe, The Client's Guide 2007 highly recommended Gelu as a leading lawyer in Energy & Natural Resources, whilst the Best Lawyers International has named Gelu 2014 – 2015 Energy Law "*Lawyer of the Year*".

Gelu is a significant shareholder of PoweGold.

For more information regarding his profile and professional achievements see www.mprpartners.com / www.mprpartners.uk

Stelios Savva – Chief Financial Officer

Stelios is an alumnus of Lancaster University, United Kingdom and a seasoned businessman holding 30 years of professional experience in general management and financial sectors. As a member of

the Association of Chartered Certified Accountants and of the European Association of Certified Turnaround Professionals, Stelios has been, throughout his career, at the forefront of major developments and growth of companies active in a variety of sectors, such as audit and financial services, shipping and international trade and others. Prior to founding his own group of companies in 2010 (active in the fields of food production and international trading, renewable energy projects, construction and development, management services and general non-banking investment services), Stelios was Manager in the audit department of PwC Cyprus and held a key position in a global corporation. Stelios is a very well-known professional, both in Romania and at an international level, with a wealth of experience in various sectors of industry, including renewable energy and related financing.

Alexandra Rîmbu – Legal Counsel

Alexandra has over 12 years of legal experience and in-depth knowledge of regulatory matters. She has represented global corporations, leading Romanian companies as well as local and foreign executives in a substantial number of highly intricate regulatory matters and day-to-day work.

Alexandra is a graduate of the top Romanian law school (Universitatea București, Facultatea de Drept), a member of the Bucharest Bar and frequent author of international publications concerning various law matters.

For more information regarding his profile and professional achievements see www.mprpartners.com

V.4. Aurora Labs Team

Alex Shevchenko - Chief Executive Officer and Co-founder of Aurora Labs

Alex has more than a decade of experience in IT, specializing in blockchain and high-performance computing. Prior to founding Aurora, Alex worked with two significant crypto projects and played an instrumental role in developing Bitfury's first Layer-1 enterprise blockchain platform, a notable European blockchain unicorn. He also led the product team at NEAR Protocol, further cementing his reputation as a leading expert in the field. He has a proven track record of developing and implementing software solutions that have helped companies achieve their business goals.

Matt Henderson - Chief Strategy Officer of Aurora Labs

Matt is an experienced entrepreneur and technology leader with over 20 years of working in the tech industry. He has a strong background in product development and business strategy and has successfully led multiple startups to success.

Jonathan Logan - Infrastructure expert of Aurora Labs

Jonathan has over 20 years of experience in building and managing complex systems. He is passionate about automation and continuous improvement, and has a proven track record of delivering highly available and scalable systems.

Alexy Ulazousky - Financial expert of Aurora Labs

Alexy (member of the ACCA) has over 15 years of experience in audit, assurance, and accounting services, working with international clients across various industries at a Big4 audit company. He has supported IPO transactions on the Irish (ISE) and London (LSE) Stock Exchanges. His accounting advisory expertise includes IFRS, local GAAPs, financial reporting regulations, revenue recognition, lease agreements, and purchase accounting. Additionally, Alexy has experience in establishing financial department functions for blockchain-enabled IT startups.

Armand Didier – Team Lead

Armand has 10 years of experience in supporting early-stage companies. With two master degrees in materials and manufacturing engineering, Armand extended his interest to the digital space where he worked across diverse industries such as market research, education, virtual reality or fintech.

Nastya Richter - Product designer

A product designer with a decade of experience, specializing in early-stage startups, and driven by an unwavering commitment to exceptional user experiences.

Santeri Sarle - UX lead

With five years of experience in software development, Santeri brings a unique blend of technical expertise and design sensibility. He specializes in crafting pixel-perfect, user-centric interfaces for various industries. Not only can Santeri engineer robust and scalable applications, but his keen eye for UX/UI ensures the end product is both functional and visually appealing.

Igor Kazakov - Frontend developer

Front End developer with more than 5 years of software engineering experience.

Pierre-Alain Ouvrard – Web3 Engineer

Pierre-Alain has 7 years of experience building on Ethereum technology including smart-contracts, dApps, bridges, wallets and L2 research. He holds a Masters degree in Electrical Engineering.

Pavel Pustovalov - Smart contract developer

Holding a Master's degree in Computer Software Engineering, Pavel boasts over a decade of proficiency in developing robust and responsive web applications. Throughout his career, he has consistently demonstrated a commitment to clean code and has contributed significantly to the open-source community with over 100 contributions.

For more information regarding their profiles and professional achievements see - <https://auroralabs.dev/>

V.5. The PowerGold Chain

V.5.1. About Aurora Labs

Aurora Labs is the development company behind Aurora—the EVM blockchain that runs on the NEAR Protocol. Aurora Labs is also the team of developers behind Aurora Cloud—a suite of products that provides businesses with the necessary infrastructure to launch their web3 initiative.

V.5.2. About Aurora

Aurora is Ethereum Layer-2 built on top of NEAR Protocol. Aurora delivers x1000 lower transaction fees compared to Ethereum, 1-2 seconds transaction finalization time. Aurora is fully interoperable with Ethereum and all existing Ethereum tools being able to work out of the box.

Thanks to Aurora’s EVM (Ethereum Virtual Machine), Ethereum native applications can seamlessly be ported to Aurora that is built as a smart contract on NEAR. Developers may enjoy familiar Ethereum tooling when working with their Solidity smart contracts on Aurora. The base fee of Aurora is ETH, which provides a smooth experience for dapps’ users.

V.5.3. About NEAR Protocol

NEAR Protocol is a blockchain-based, ultra-scalable, developer-friendly platform for decentralized applications. NEAR’s platform provides decentralized storage and compute that is secure enough to manage high value assets like money or identity and performant enough to make them useful for everyday people, putting the power of the Open Web in their hands.

NEAR Protocol uses a technique called “sharding” which splits the network into multiple pieces so that the computation is done in parallel. Parallelism radically increases throughput and allows the network to scale up as the number of nodes on it increases. With NEAR, there is not a theoretical limit on the network’s capacity.

V.5.4. Consensus mechanism

Aurora uses the NEAR’s inherited proof-of-stake consensus mechanism. In this system, validators are chosen based on their ownership of NEAR tokens. The more tokens a validator has, the greater their chances of being selected to validate transactions.

Validators are responsible for creating new blocks and verifying the transactions contained within them. They do this by running a node that maintains a copy of the blockchain and participating in consensus rounds to determine the next block in the chain.

V.5.5. Aurora DAO

The AuroraDAO is a decentralized autonomous organization that governs the Aurora protocol.

The AuroraDAO functions similar to a traditional Board of Directors, in that there is a "Council" of seats, the holders of which vote on high-level protocol matters, authorize and direct subordinate organizations to achieve those objectives.

The bootstrap Council consists of Aurora Labs—i.e., the entity that developed and maintain the Aurora protocol—along with a diverse set of early investors and ecosystem partners.

V.5.6. Aurora Cloud

Aurora Cloud is the business suite from Aurora Labs. Similarly to platforms like Amazon AWS and Microsoft Azure who unleashed the potential of Web2 by democratizing the building blocks of the internet, Aurora Cloud eliminates the technical and user experience barriers that keep Web2 businesses from capturing the full value of Web3.

Aurora Cloud's flagship feature consists of its silos which are dedicated Aurora Chains.

Aurora Silos go beyond Ethereum compatibility, allowing customers to design and implement their own custom tokens, tokenomics and even transaction fee mechanics, to support any imaginable blockchain business model. As a dedicated blockchain, Aurora Silo customers can implement multiple-levels of access control, perfect for KYC/AML-restricted "permissioned" environments, members-only access to games, or any context requiring the management of network access and activity — and without closing the door to interoperability and cross-network composability with public protocols like Ethereum, Aurora or NEAR.

V.5.7. Aurora Cloud and PowerGold

PowerGold chose to have their own Aurora Chain and gate its access by KYC. Each chain has two levels of permissions: transaction permission and contract deployment permission.

The PowerGold Chain only allows verified users to interact with the chain, but not to deploy contracts. This enables PowerGold to select which jurisdiction they will allow customers from, ensuring full compliance with relevant regulations.

Besides, not enabling contract deployment adds an additional layer of security for customers interacting with the chain, ensuring that only PowerGold's approved contracts are available for the purpose of their business model.

VI. ENP TOKEN ECONOMICS

VI.1 ENP Token economics overview

A thorough understanding of the ENP Token requires examining its functionality and goals, which stem from the founders' extensive experience in the field of renewable assets and long-term vision on decarbonation and reaching climate neutrality.

Since 2007, the founding team has been developing, implementing, and operating renewable assets, being involved as well in privatization, restructuring, merger, demerger, regulatory, trading matters, as well as day-to-day operational and legal aspects of their clients - energy suppliers, distributors and producers from green energy and conventional sources.

The combined expertise of almost 50 years of the founding team allowed them to fully understand how to bridge the gap between the blockchain technology and the real world of renewable energy assets and make them work symbiotically to create added value for the potential investors, founders and the community. From the junction of the two worlds was born the ENP Token that relies, amongst others, on the founders expertise and capabilities to integrate the tokenized realm with real-world assets, thereby creating tangible potential added value for all the parties involved, including the community.

VI.2. Bridging the gap

Among the first challenges identified in the development of the ENP Token were, on the one hand, validating and materializing the expertise and capabilities of the founders to channel investor resources to renewable energy assets by acquiring, developing, operating these assets and achieving potential added value for investors and, on the other hand, demonstrating the reliability and viability of the PowerGold Chain.

The founding team has demonstrated throughout their consistent and reputed professional career that it possesses the expertise, know-how, skills and professional network of collaborators required to acquire, restructure, develop, maintain and operate renewable energy assets, as well as to trade their production for profit on the electricity markets (spot, intraday, for the next day, wholesale, market for imbalances, power purchase agreements, etc.).

Laurențiu Udrescu

Laurențiu's background in economics and marketing skills enabled him to start his professional career in the Romanian electricity market and reach the pinnacle of specialization in renewable energy. Starting with 2006, Laurențiu amassed years an unparalleled proficiency in various areas of the energy field, amongst which:

- (i) energy profiling for industrial clients acting in various sectors of the economy;
- (ii) managing the electricity basket contracts and consumption for its portfolio of industrial clients;
- (iii) electricity trading on the relevant energy markets;
- (iv) handling CO₂ and green certificates standing alone or bundled into packages with electricity;
- (v) electricity supply activities and the nuanced art of market balancing;
- (vi) developing for international clients - strategic or financial - wind and photovoltaic projects with or without battery energy storage systems (green or brown field projects - securing the land and identifying the grid connection solution to obtaining the grid connection contract, obtaining the construction permit and commercial commissioning, etc.);
- (vii) leading teams of specialists to achieve commercial commissioning stage such as architects, land surveyors, topographers, structural engineers, environmental specialists, niche specialists (pedologists, archaeologists, hydro-engineers, public health, etc.), electrical installation and systems engineers, road engineers and surveyors, economists, etc.;

- (viii) dealing with the energy regulatory authority, the transmission system operator (TSO) and the distribution system operator (DSO);
- (ix) handling power purchase agreements (PPA) and dealing with the Centralized Market for Bilateral Contracts and the Market for Bilateral Green Certificate Contracts;
- (x) advisory work in connection with all the above.

Furthermore, Laurențiu's expertise extends beyond those mentioned above to strategic management also and encompasses technical consulting, particularly tailored to M&A transactions within the renewable energy sector. His consultative acumen has proven to be an invaluable asset in this evolving field.

His proven expertise and skills validated Laurențiu as one of the most reputed, trusted and sought-after specialists by investors in the renewable energy industry; the following achievements bear witness to his professional activity:

- since 2010, Laurențiu has orchestrated and led multifaceted teams to develop three wind projects, delivering an aggregate capacity of 322 MWh to an international strategic investor; these projects, now operational, bear testament to his ability to transform ambitious visions into tangible realities;
- his current pipeline includes an impressive 1.5 GWh of wind projects and 1 GWh of photovoltaic (PV) projects with battery energy storage systems at various stages of development (technical agreement for connection to the network, contract for connection to the network, technical documentation for obtaining building permission, etc.), catered to the needs of a diverse portfolio of international investors;
- advisory work for large multinational companies regarding the authorization and deployment of rooftop photovoltaic projects;
- advisory work concerning the technical intricacies related to the development of the hydrogen plants;
- advisory work regarding the e-mobility sector of industry, namely the deployment of a national electric charging station network;
- technical advisory work during the M&A transactions involving renewable capacities.

For more information regarding his profile and professional achievements see www.enpower.ro

Florin Danilov

Florin showed an early and active interest in the field of renewable energy when back in 2007 became a part of the first wave of renewable investments, deftly overseeing the developmental phases of ambitious wind projects, some operational from 2010.

Florin's renewable energy expertise further expanded in 2011 as he skillfully and astutely supervised the evolution of three substantial wind projects for a major strategic energy company, along with two photovoltaic projects. This experience proved instrumental in shaping his career trajectory.

As the world emerged from the pandemic, renewable energy experienced a significant resurgence. Coinciding with this second wave, Florin made an impactful re-entry as a CTO into the renewable energy sector at Enpower Energy Srl, a firm dedicated to the development of renewable energy projects. Under his watchful eye, Enpower Energy Srl is presently supervising the creation of an impressive portfolio of renewable energy projects.

Florin's expertise and skills in the renewable energy sector of industry cover the following main areas of specialization:

- (i) preliminary wind and sunshine/shading studies, as well as identification of optimal layouts for photovoltaic equipment and wind turbines;
- (ii) preliminary yield studies of various investments in wind farms and/or photovoltaic systems;
- (iii) identification of suitable land and power lines for the development and construction of renewable capacities;
- (iv) preparation of technical documentation for obtaining urban planning certificates, site permits, technical agreements for connection to the network, as well as network connection contracts;
- (v) liaison, discussions and negotiations with companies specialized in preliminary and final studies for connection to the electricity grid;
- (vi) analyses and studies of the technical and legal constraints that may occur during the development and construction of renewable capacities, as well as the smooth and constructive management for solving the same;
- (vii) developing for international clients - strategic or financial - wind and photovoltaic projects with or without battery energy storage systems (green or brown field projects - securing

the land and identifying the grid connection solution to obtaining the grid connection contract, obtaining the construction permit and commercial commissioning, etc.);

- (viii) leading teams of specialists to achieve commercial commissioning status such as architects, land surveyors, topographers, structural engineers, environmental specialists, niche specialists (pedologists, archaeologists, hydro-engineers, public health, etc.), electrical installation and systems engineers, road engineers and surveyors, economists, etc.;
- (ix) dealing with local authorities and their urbanism departments, the energy regulatory authority, the transmission system operator (TSO) and the distribution system operator (DSO);
- (x) handling power purchase agreements (PPA) and dealing with the Centralized Market for Bilateral Contracts and the Market for Bilateral Green Certificate Contracts;
- (xi) advisory work in connection with all the above.

The above expertise and skills brought Florin genuine professional recognition from his peers and enabled the same to currently oversee wind plants, solar plants and mixed renewables capacities – with or without battery energy storage systems -, that are expected to generate approximately 2.5 GWh of power, marking a substantial contribution to the sustainable energy sector.

Florin professional career also features the following as well:

- since 2007, Florin contributed consistently to the development and commissioning of several wind and solar power plants totaling an aggregate capacity of 322MWh for two international strategic investors; these projects, now operational, testify for his professional achievements;
- advisory work for large multinational companies regarding the authorization and deployment of rooftop photovoltaic projects;
- advisory work concerning the technical intricacies related to the development of the hydrogen plants;
- advisory work regarding the e-mobility sector of industry, namely the deployment of a national electric charging station network;
- technical advisory work during the M&A transactions involving renewable capacities.

For more information regarding his profile and professional achievements see www.enpower.ro

Gelu Maravela

Gelu has over 25 years' experience in the legal profession and is alumnus of Warwick University, the United Kingdom where he graduated with merits the LL.M program called Law in Development.

Gelu is particularly experienced in mergers & acquisition and energy, including the related regulatory matters, and is a constant contributor to international legal publications, including surveys and questionnaires unfolded under the auspices of the World Bank.

Gelu has assisted the most important stakeholders of the Romanian energy market (producers, distributors, traders, suppliers, brokers, investments funds, investment banks, manufacturers, large consumers, industry associations, regulators and other authorities), and coordinated complex investment projects and transactions in the renewable energy field, part of which have been a national premiere.

For his impressive track record, Chambers Europe, The Client's Guide 2007 highly recommended Gelu as a leading lawyer in Energy & Natural Resources, whilst the Best Lawyers International has named Gelu 2014 – 2015 Energy Law "*Lawyer of the Year*". Through the law firm which he co-founded and which is an active member of AmCham – Energy Committee (American Chamber of Commerce in Romania), the European Solar PV Industry Alliance (ESPIA) and the Romanian Wind Energy Association (RWEA), Gelu advocates the renewable energy sector of industry interests before various stakeholders.

Some recent highlights of Gelu's career in the law firm he co-founded with relevance to the energy sector are outlined below:

- *"The firm advises on substantial M&A deals in the energy, transport, subsoil and medical sectors, and is noted for its ability to develop 'very close and efficient working relationships'. With Gelu Maravela, 'the communication is easy and the results are excellent'",* declared a client quoted by The Legal 500 international directory for legal professionals;
- *"The 'highly recommended' team at this firm 'possesses a wealth of knowledge' and provides 'prompt and to-the-point, valuable advice'. Gelu Titus Maravela and Alina Popescu are the names to note and are praised as 'great leaders' who ensure 'any assignment is smoothly completed in due time with excellent results'. Sectors of expertise include real estate, energy and natural resources as well as pharmaceuticals and healthcare."*, declared another client quoted by The Legal 500.

Gelu consistent and multifaceted expertise in the energy sector of industry shows a great deal of versatility and pragmatic approach and covers, amongst others, the following relevant matters:

- (i) regulatory matters;

- (ii) privatization of large energy producers, distributors and suppliers;
- (iii) mergers & acquisitions including project structuring, restructuring and/or insolvency;
- (iv) the specific various contracts relevant to the energy sector, including power purchase agreements, green certificates purchase agreements, contracts for difference, balancing services agreements, dispatching services agreements, etc.;
- (v) negotiation with various public authorities, institutions and regulators;
- (vi) permitting of green energy projects (town planning certificate, site planning authorization, solution studies, pedological and topographical studies, geo studies, environmental studies, zoning plan, technical grid connection authorization, grid connection contract, building permit, commissioning authorization, production license, etc.);
- (vii) comprehensive due diligence and related transactional documents;
- (viii) corporate-related matters (incorporation documentation, trade registry formalities, shareholders agreements, opening the operational bank account, corporate secretarial and company law and statutory compliance);
- (ix) project and acquisition financing matters;
- (x) energy international investment disputes stemming from the alleged legislative change concerning the green certificates support scheme (part of the USA – Romanian consortia representing Romania in two international investment arbitration unfolding under ICSID rules);
- (xi) author of various articles and contributions in the energy field and part of an academic team tasked to draft a white paper in the renewable energy sector of industry designed to improve safety in the exploitation of photovoltaic equipment.

For more information regarding his profile and professional achievements see – www.mprpartners.com / www.mprpartners.uk

Laurentiu, Florin and Gelu's expertise, capabilities and professional skills have enabled them to oversee the development, build, manage and acquire approximately 3 GWh of renewable energy projects for their clients over the years. In this context, the paradigm shift came naturally, as the three thought of offering such projects to the community they belong to.

The only missing link in the functionality of the architecture designed by Laurentiu, Florin and Gelu was their ability to "pour" their professional expertise into ENP Token driven project.

To achieve that, the team has developed its own innovative and symbiotic architecture combining the infrastructure of the PowerGold Chain meant to channel the investments from the potential token holders to real renewable energy capacities in a decentralized, democratic, transparent, less costly, efficient, ESG-compliant, replicative, potentially rewarding and stable manner for a long period.

As detailed above at Section 5.2., the PowerGold Chain was developed to (i) interconnect organically with the business model of the renewable energy capacities developed by PowerGold; (ii) and preventing the risk of fraud by building robust operational security, validation and trust at the crossroads between the real world and blockchain processes.

VI.3. Environmental, social and governance (ESG) compliance

ENP Token is a token that by definition is ESG compliant. PowerGold, its affiliates, ENP Token and the renewable energy capacities to be acquired or developed will contribute to the decarbonization process to achieve climate neutrality by 2050 in the European Union. The megawatts produced by green energy capacities powered by ENP Token will replace the equivalent number of megawatts produced by fossil fuel electricity producers, pushing the latter out from the market, on the one hand, and on the other hand, each megawatt produced from renewable energy sources via ENP Token will remove about 1,250 tonnes of CO₂ per year from the atmosphere: *"1 MW solar cell electricity generates enough electricity to offset the carbon emissions of about 1,250 tonnes of CO₂ per year. This is equivalent to planting about 38,750 to 57,500 trees per year. The amount of CO₂ emissions that can be reduced by using solar power depends on a number of factors, including the efficiency of the solar panels, the amount of sunlight available, and the location of the solar power plant. However, in general, solar power is a very effective way to reduce CO₂ emissions...Overall, solar power is a very effective way to reduce CO₂ emissions. It is a clean, renewable source of energy that can help to combat climate change."*³² At the same time, modern solar panels *"...offset the CO₂ used to create the panel in less than 2 years, and in some cases, less than one year. And, the solar panels are designed to produce energy for 25 years, so they save about 10–20X the CO₂ used to produce them"*.³³

At the same time, *"wind energy has the lowest carbon footprint of all energy types. On a life-cycle basis, onshore wind emits 11 and offshore wind emits 12 grams of CO₂ equivalent per kWh of electricity produced."* while *"Throughout its life cycle, wind energy produces 0.02% of the CO₂ emissions per unit of electricity than coal produces. And after 3 to 6 months of operation, a wind turbine has effectively offset all emissions from its construction, which means it can operate virtually carbon-free for the rest of its lifetime."*³⁴

Equally, *"wind turbines can be operated as small community facilities or as large wind farms. The electricity produced by wind energy is a very clean alternative to power generation from fossil fuels. Wind turbines protect the climate in the long term."* and *"Even a plant with a capacity of about 1.5 MW avoids about 64,000 tons of CO₂ emissions over a service life of 20 years. In order to produce 1.5 MW in conventional power plants, about 80,000 tons of brown coal have to be burned."*³⁵

As regards hydrogen, studies show that *"...a hydrogen-based economy could reduce carbon emissions by up to 99%"*³⁶, an impressive figure by all means. Supplying hydrogen in line with the actual markets needs will be a major line of business at a global scale. As we speak, demand for hydrogen is constantly rising, whilst demand for hydrogen in its pure form is around 70 million tonnes per year³⁷. By way of ENP Token we aim at acquiring and/or developing hydrogen projects to help to achieve a clean, secure and affordable energy future.

It is not a secret anymore that minting coins requires large amounts of energy whose production inexorably generates significant amounts of CO2: *"The Texas grid operator ERCOT estimates that crypto miners may increase energy demand by up to 6 gigawatts by mid-2023, roughly the equivalent of adding another Houston to the grid."*³⁸

ENP Token business model features a limited number of tokens that will be minted based on the POS (proof of stake) principle so that the CO2 footprint is rather inexistent and any offset thereof requires a short period of time after which ENP Token will stay clean and green.

These findings demonstrate that ENP Token's impact on the environment is a paradigm shift as has a significantly low carbon footprint and contributes to massive CO2 emissions elimination.

Governance plays a significant role in the ENP Token architecture and is meant to bolster the transparency of the business model, as well as to strengthen the friendly, ethical, transparent, inclusive, and non-discriminatory features of the same. PowerGold and its affiliates will have in place several important policies such as business continuity, wind down, corporate governance, complaints handling procedure, conflict of interest, KYC / AML, risk assessment. All these procedures are available at www.powergold.tech

VI.4. Regulatory aspects

VI.4.1. General aspects

The whole architecture of ENP Token is based on business model principles that were carefully assessed and checked by several teams of international consultants – IT, tax, legal, etc. - to ensure their compliance with the applicable national and European Union regulatory framework.

PowerGold incorporation and authorisation have been supervised by a team of Lithuanian tax and legal consultants which provided their underlying opinions and guidance on the corporate structure, the organisational chart, required authorisations for proper operation, qualification and issuance of ENP Token, tax reporting obligations and liabilities, KYC / AML prerequisites, market reporting and compliance requirements, etc. These opinions and guidance were implemented accordingly to make sure that PowerGold incorporation and operation, as well as the ENP Token business model are in line with the applicable legal framework.

Pursuant to the Lithuanian legal requirements, PowerGold has the obligation to employ, based on an official labour agreement, a compliance officer who must be a Lithuanian citizen. PowerGold complied with this mandatory requirement and hired a local compliance officer who is in charge, amongst others, with the company compliance with the KYC / AML requirements, informing and updating the PowerGold director and shareholders with the evolution of the local legal requirements, as well as liaising with the Lithuanian Financial Crimes Investigation Service for various reporting and compliance requirements.

At the same time, PowerGold has contracted SYNAPS - <https://www.synaps.io/solutions/kyc> - a top international KYC and KYB service provider meant to implement *"a secure and intuitive onboarding experience on Web3 while complying with market regulations"*, as well as helping us with detecting *"...users' perceived affiliation with money laundering and other malicious activities"*. SYNAPS covers *"...over 195 countries and analyzes 3000 document types in 36 different languages"*.

Furthermore, compliance with the laws regulating the financial and capital markets, on the one hand, and the REGULATION (EU) 2023/1114 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 May 2023 on markets in crypto-assets, and amending Regulations (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937, on the other hand, is also closely scrutinized.

The IT, technical, operational, legal and tax teams contributing to the development and deployment of the ENP Token business model are committed to monitor the implementation of the same closely and constantly throughout its lifespan to keep this business model attuned to the applicable legislation and this white paper. Adjustments and fine tuning will be adopted transparently whenever necessary.

VI.4.2. Regulatory compliance

The REGULATION (EU) 2023/1114 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 May 2023 on markets in crypto-assets, and amending Regulations (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937 (hereinafter referred to as the "MiCAR") was published on June 9, 2023 in the Official Journal of the European Union³⁹. Pursuant to Article 149 – Entry into force and application therefrom, MiCAR entered into force on June 29, 2023 and will apply starting with December 30, 2024, save for Title III – Asset – referenced tokens and Title IV – E-money tokens that will apply as of June 30, 2024.

In drafting this white paper and building the ENP Token business model, the applicable provisions of MiCAR and other relevant legal provisions have been considered, and by the date(s) of application of this regulation the ENP Token architecture and whitepaper will be fully aligned with the underlying regulations.

In this respect, we have commissioned a legal opinion to Lithuanian legal experts on ENP Token who stated, amongst others, the following⁴⁰:

- (i) tokens, cryptocurrency, and other digital assets, according to the legislation of Lithuania, are called "virtual currency" and represents a digital representation of value that does not possess a legal status of currency or money, that is not issued or guaranteed by a central bank or any other public authority, is not necessarily attached to a currency, but is accepted by natural or legal persons as a means of exchange and which can be transferred, stored and traded electronically;
- (ii) the Bank of Lithuania has defined "token" as a digital asset that are recorded / distributed / acted upon or trigger other associated activity on a distributed ledger (via smart contracts);
- (iii) ENP Token, as valuable virtual asset, it is a virtual currency according to the Lithuanian legislation⁴¹;
- (iv) companies providing services in the cryptocurrency sector must comply with the main following requirements: identification procedures and identity checks must be conducted for all clients; regulators should have access to customer data; an internal control system and a risk assessment procedure should be in place at the company; compliance with KYC / AML requires a compliance officer; the Financial Crimes Investigation Service must be notified (also known as FCIS, the regulatory and supervisory authority for crypto businesses in Lithuania); the members of the board of directors as well as the owners of the company must have impeccable reputations and no criminal records;

- (v) there are no special requirements for cryptocurrency companies in terms of reporting to tax authorities, Lithuanian companies must provide accounting in the same way as other companies;
- (vi) crypto companies do not need to report to regulators, but FCIS is always able to make prescriptions and requests about their activities; essentially, the FCIS requires that crypto projects comply with AML / KYC requirements, such as collecting client data from crypto projects and making it available to the regulator upon request;
- (vii) taxation of cryptocurrency exchange and wallet services is regulated by the State Tax Inspectorate which considers the following activities taxable: mining, initial offering, buying, selling, mediation, settlement in such currencies for purchased or sold goods or services;
- (viii) if PowerGold trades, exchanges, buys, sells crypto currency and store it somehow, then the crypto currency license needs to be obtained, which indeed we have obtained; and considering the ENP Token design no other licenses are needed finance sector, to manage and follow the business model under this white paper.

Based on the same legal opinion, as it stands ENP Token does not qualify and it is not considered as transferable securities. The Bank of Lithuania opines that there is no "one size fits all" solution when it comes to legal qualification of tokens. Circumstances must be considered holistically in each individual case. The Bank of Lithuania states that to qualify as a transferable security within the meaning of Article 3(52) of the Law on Markets in Financial Instruments, the token should qualify as: (i) circulating in the capital market shares in companies and other securities equivalent to shares in companies, partnerships, and other entities, as well as depository receipts representing shares; (ii) circulating in the capital market bonds and other forms of non-equity securities, including depository receipts in respect of non-equity securities; and (iii) circulating in the capital market other securities conferring the right to acquire or transfer the transferable securities or underlying the cash-settlements determined having regard to the transferable securities, currencies or exchange rates, interest rates, yield of securities, stock exchange commodities, or other indices or instruments⁴².

However, irrespective of whether the provisions of MiCAR or those of the specific Lithuanian legislation will not consider ENP Token as a security, in the next several years PowerGold will consider and decide on the listing of the company before a reputed stock exchange to ensure a higher level of transparency, compliance, business model viability, corporate governance, as well as to strengthen the bond between investors and issuer.

VI.5. ENP Token background

Before delving into the specifics of ENP Token's mechanics, let's first establish a foundational understanding. Token economics is predicated on a system that fosters increased value to encourage favourable behaviour within the ecosystem. By incentivizing potential investors to engage with a particular token, the token's value can be established and reinforced.

Token value is a crucial aspect of token economics, as it motivates users to invest in a crypto project. The PowerGold Chain utilizes specific protocols to regulate the creation of new units and, consequently, the total amount of currency within the system. This maintains a controlled supply of tokens. By imposing limits and lockup periods, the PowerGold Chain helps preserve the value of the ENP Token, generating a perception of scarcity among potential investors. On the other hand, the transparent investment architecture and the "*no dividends policy*" for PowerGold shareholders are equally designed to increase the intrinsic value of the ENP Token. Additionally, a built-in burning mechanism ensures that inflationary events do not impact the ENP Token's value.

ENP Token is designed to maintain reserves of coins to balance supply levels, while implementing a continuous token buy-back mechanism and a longstanding and fair investment plan in green energy capacities. ENP Token business architecture does not allow the founders of PowerGold nor the shareholders of the investment companies to sell any renewable assets so as to preserve and bolster the intrinsic value of the said token.

VI.6. ENP Token distribution and the allocation of funds

A vital component of the ENP Token functionality involves its deployment to raise funds for the acquisition and/or construction of the underlying renewables projects. To achieve that, through Aurora Silo the whole amount of ENP Token will be allotted and released under specific conditions as shown in the below tabular chart and graphic representation.

Category	Year	Percentage	ENP Tokens	Lockup & vesting periods
Founders	2023	24.0%	28,800,000.00	2-year lockup / vesting over 10 years
Blockchain team	2023	7.5%	9,000,000.00	2-year lockup / vesting over 7 years
Marketing & advisors	2023 / 2024	3.0%	3,600,000.00	Up to 2-year lockup / vesting from zero to 5 years – depending on the category of the advisors
Future blockchain tech development	2024	2.0%	2,400,000.00	No lockup or vesting
Liquidity & AMM	2024	3.5%	4,200,000.00	No lockup or vesting
Public sale	2024	5.0%	6,000,000.00	1- to 4-year lockup / no vesting
Private sale	2024	5.0%	6,000,000.00	2-year lockup / no vesting
Investment plan	2024	50.0%	60,000,000.00	1- to 4-year lockup / no vesting

The ENP Token distribution and release described above have been designed to ensure the viability of the business model, the use of funds only for the acquisition or construction of green energy capacity, the purchase of ENP Tokens and their burning as well as for the consistency of the liquidity pool.

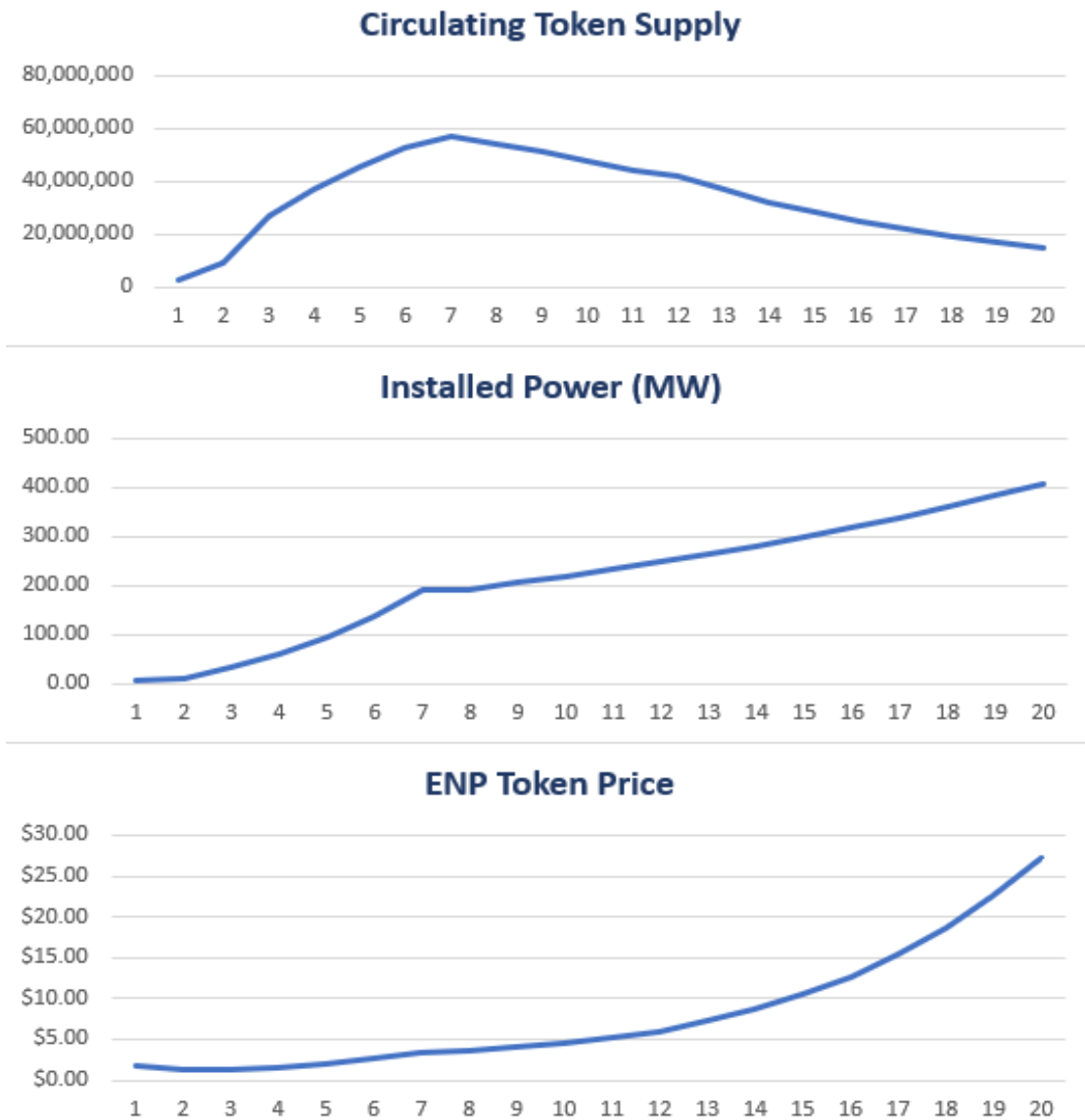
The business model is straightforward at its core and investors oriented. Upon raising funds and reaching specific milestones, PowerGold will use the funds in three directions only, namely to acquire or construct green energy capacities, to create a sound liquidity pool and to feed the buy-and-burn ENP Token scheme. The net proceeds obtained from the energy produced – by the acquired or built renewable energy-generating parks - and sold at the market price, completely transparently, between 10% to 35% will be continuously reinvested to increase the number of renewable assets and grow the project's value. PowerGold will use the remaining 90% to 65% to purchase the ENP Token from the market, investors or early supporters of the business, to burn them so as to create scarcity of ENP Token and bolster its intrinsic value. This reinvestment and

ENP Token purchase and burning model is quasi-perpetual and continuous. It is essential to consider that a renewable energy-producing asset (solar, wind or hydro) has a lifespan of over approximately 25 years. Throughout the lifespan of these renewable capacities, there will be revenue for decades to come designed to fuel the ENP Token business model described herein. Given that electricity demand will persist as long as humans inhabit this planet, the ENP Token project can be considered a future-proof and consistent endeavour.

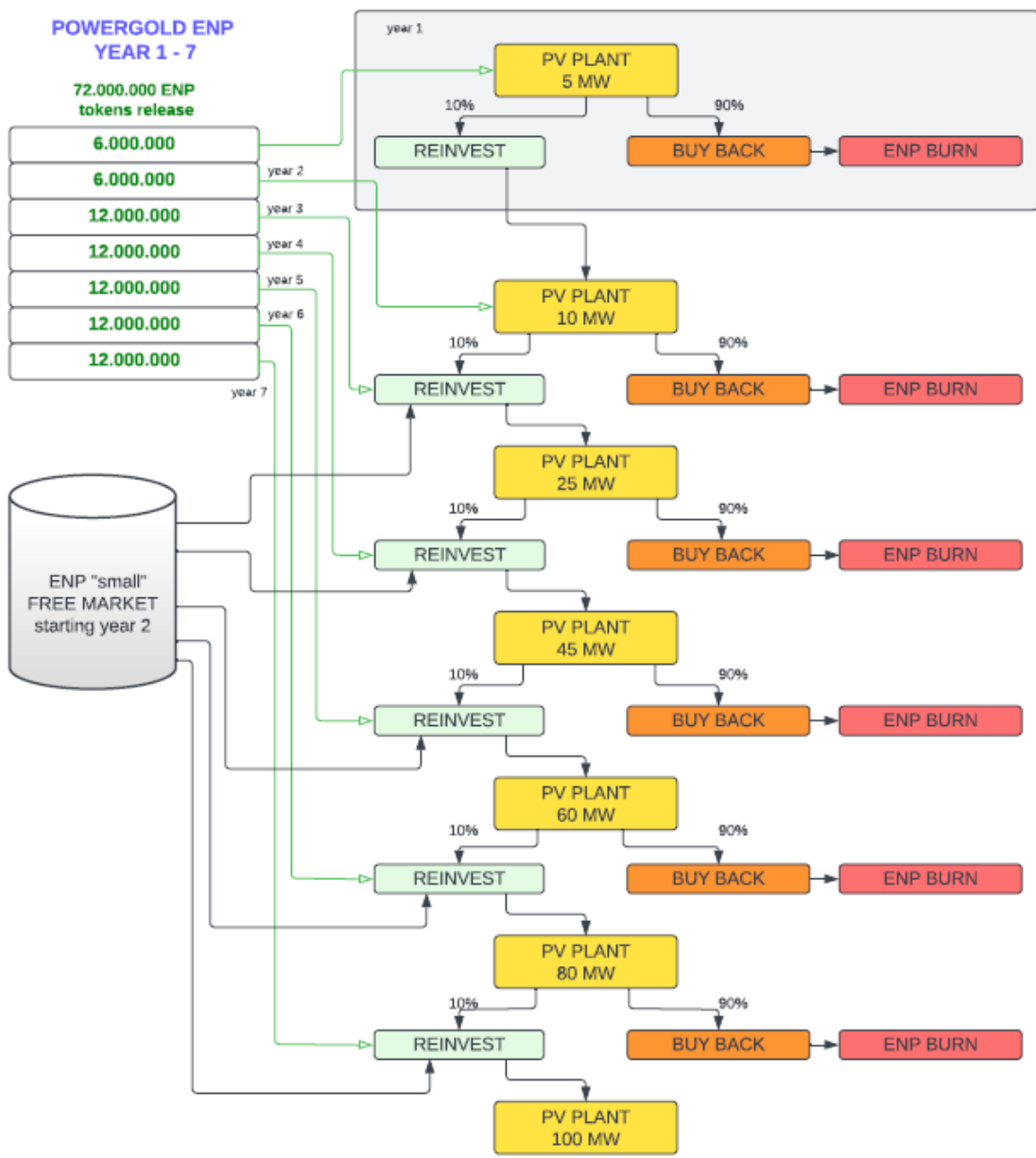
Accordingly, the issuer business plan spans over 10 years and consists mainly of the following:

- (i) two years for initial investments (Year 1-2);
- (ii) five years for “slices” of ENP Token releases for future investments in new capacity, as well as feeding the liquidity pool and purchasing and burning ENP Tokens with money earned from green energy sales (Year 1-5); and
- (iii) +13 years with a free market, and nearly complete ENP Token release cycles;
- (iv) lock-up periods from 1 to 10 years will be in place for various categories of ENP Token holders;
- (v) monthly ENP Token vesting from 2 to 10 years will also be implemented.

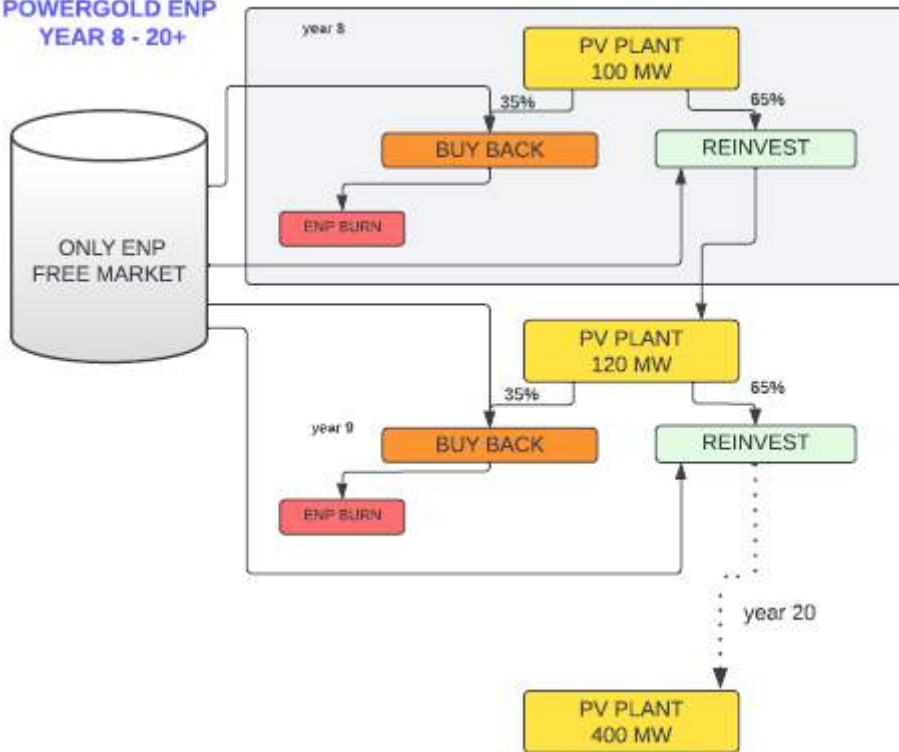
As shown in the below graphs, ENP Token architecture was developed so it remains adaptable and open to change to maintain its relevance and continue to thrive in an ever-evolving landscape:



An example of the ENP Token business model cash flow is provided below. The specific figures are presented for exemplification purposes only and no ENP Token potential buyer should rely on the same.



POWERGOLD ENP
YEAR 8 - 20+



VI.7. Building ENP Token trust and credibility

Traditional finance has built a systemic trust and earned the same from its clients and partners over hundreds of years. During this time, as trust accumulated and matured, traditional finance - known also as centralized finance - lost most of its decentralization, accessibility, flexibility, dynamism, and transparency features.

Crypto businesses are from conception designed to be decentralized, accessible, flexible, dynamic, versatile and transparent⁴³. It is equally true that these businesses have a major setback as they lack the systemic trust which characterizes traditional finance and from this angle, they are at a disadvantage in terms of investor confidence. And there is no magic stick to pull out from a chit hat the trust that such crypto businesses need to thrive.

On the other hand, some crypto businesses enthusiasts said "*...that, by design, crypto and the blockchain are sort of "trustless" technologies that don't operate under a centralized authority — not in the traditional sense of the word, but trustless in that consumers don't need to trust it because they can verify ownership and transactions themselves. Many crypto enthusiasts ascribe to this notion. Exchange platform Coinbase, for example, says that because the technology that underlies crypto transactions encrypts and anonymizes payments while cutting out middlemen like banks, people don't have to trust the recipient — or typical financial institutions at all — for a transaction to safely go through*"⁴⁴.

We believe that any crypto business should base its foundation on the educated and conditional trust of investors and that is what ENP Token seeks to achieve and consolidate through its business architecture⁴⁵.

ENP Token matrix has been carefully tailored to manage the investors' funds and expectations in a transparent and trustworthy environment. ENP Token features parameters and frameworks necessary to create standards and protocols meant to inspire trust and credibility in the proposed business model. While these tools are rather valuable in the whole economy of the business architecture, their ability to validate the causal path of the ENP Token distribution and the allocation of funds described above is rather ineffective and limited in lack of transparency. The organizational pattern and management of the ENP Token recurrently emphasize throughout this document the importance of transparency. Transparency feeds and strengthens the trust of the potential investors and is the driving force behind the reconceptualization of the business partnership proposed by ENP Token.

Corporate-wise, PowerGold articles of association will contain, amongst others, the following main provisions meant to bolster the transparency of the ENP Token business model:

- (i) no renewable energy capacities will be sold unless all ENP Tokens are purchased from the market and burned, which is mathematically unattainable; this measure will ensure the continuous, replicative and constant flow of funds throughout the lifespan of these capacities needed to implement the investment mechanism described above;
- (ii) all resolutions and minutes of board of directors meetings will be published on PowerGold website in both the local language and English (certified translation);
- (iii) all resolutions and minutes of the general meetings of shareholders will be also published on PowerGold website in both the local language and English (certified translation);
- (iv) all amendments to the articles of incorporation will be published on PowerGold website in both the local language and English (certified translation);
- (v) all net profit at the level of PowerGold will be reinvested as described above, and no dividends will be distributed unless all ENP Tokens are purchased from the market and burned, which is virtually impossible.

These documents and information will be available on the PowerGold website, namely www.powergold.tech

In terms of the business model, PowerGold will regularly and transparently publish on its website the following documents and information meant to contribute to the strengthening of the investors' confidence in ENP Token:

- (i) all changes in the control of PowerGold and/or its governing bodies;
- (ii) the change of auditors and the reasons for such replacement;
- (iii) pending litigations against PowerGold and/or its affiliates;
- (iv) all acquisitions of green energy capacities either operational or green/brownfield projects;
- (v) accessing financing or constituting any liens on the underlying assets;
- (vi) accessing non-refundable funds;
- (vii) the development of a new product, service or process that would affect the financial resources of PowerGold and/or its affiliates;
- (viii) the occurrence of any financial, organisational, legal, environmental or any other factor that could significantly affect the business;
- (ix) any change in the business objectives or strategy, investment plans or development objectives that could materially affect the operation or business;

- (x) any investigation from the regulatory authorities along with their findings;
- (xi) cancellation of credit lines and/or initiation of insolvency proceedings of major debtors;
- (xii) obtaining new licenses, trademarks and patents;
- (xiii) related party transactions;
- (xiv) quarterly report on green energy production (MWh) and the proceeds obtained after trading such production on the energy markets and/or under the power purchase agreements⁴⁶;
- (xv) quarterly financial statements;
- (xvi) semi-annually accounting report;
- (xvii) annual audited financial statements;
- (xviii) director(s)' annual report;
- (xix) annual financial auditor's report.

These documents and information will be also available on the PowerGold website, namely www.powergold.tech

This transparency toolkit is intended to foster enhanced loyalty and enable prospective and actual ENP Token holders to have access to the vital information of this business model so as to understand to what extent it meets their expectations and to allow the same to make an informed decision before investing or divesting ENP Token.

Transparency is a critical component of ENP Token business model as it underpins both the economic and social angles of this project. This is particularly important in an era when tokens can represent virtually any real-world asset, such as precious metals, real estate, artwork, and collectibles. PowerGold.'s project takes a step closer to this approach.

Ultimately, ENP Token's motto encapsulates its mission: "Energy for the people."

VI.8. ENP Token price stability considerations

Token economics emphasizes the importance of addressing price stability concerns. Cryptocurrencies are often known for their volatility, which is generally perceived as a negative attribute. This volatility contributes to price fluctuations that can deter potential investors. Moreover, such fluctuations can enable speculators to disrupt the network's proper functioning through the mass buying and selling of tokens known as “whales”.

ENP Token design tackles this challenge by maintaining an ample reserve of tokens (liquidity pool) to balance supply levels, while implementing a continuous ENP Token purchase and burn mechanism in conjunction with a longstanding and fair investment plan in green energy capacities. This mechanism's role is to try and stabilize ENP Token intrinsic value by establishing equilibrium and ensuring liquidity. Consequently, ENP Token's intrinsic value may be stabilized or even increased, thereby motivating potential investors to purchase and utilize ENP Token for their intended purposes. Furthermore, ENP Token burning mechanism may contribute to a rise in token prices through increased demand as the supply of tokens diminishes.

VI.9. PowerGold governance

The core team behind the ENP Token project is responsible for establishing policies that govern token creation, deployment, purchase and burn plan, as well as the use of the funds following the sale of the same to the prospective investors. The primary purpose of these policies is to create around ENP Token a legal, transparent, ethical, prudent, trustworthy, and sound business environment, as well as healthy and beneficial relationship with potential investors. The same is also aimed at scaling up to the protection of the ENP Token holders, bolster the transparency of the business model and contributing to the increase of the intrinsic value of such token.

Accordingly, the following policies are in place at the level of PowerGold and/or its affiliates:

- know your counterparty, prevention of money laundering and terrorism financing;
- conflict of interest;
- handling complaints;
- business continuity and wind down;
- risk assessment policy;
- corporate governance.

VII. POWERGOLD ENVIRONMENT

VII.1. The planned investments and their directions

Within the framework of the investment program, PowerGold envisages to invest in several categories of renewable energy assets such as onshore and offshore solar and wind plants, energy storage systems, green hydrogen plants, hydro, geothermal, carbon capture solution, alternative green energy trading products, energy supply activities, renewables equipment dedicated recycling plants, etc. In the first phase, PowerGold intends to acquire operational solar plants with solid trading track records and totaling roughly 50 MWh so that the investors potential investments can be materialized into operational assets that produce revenues in a short period of time. As the MW portfolio of solar farms reaches the 50 MWh threshold, PowerGold will consider moving into a second phase of acquiring operational wind farms and building renewable energy capacities, such as solar, wind, hydrogen, energy storage systems, etc. Furthermore, as the business model matures, PowerGold will focus on developing alternative products for the supply and trading of green energy, as well as dedicated recycling plants.

In terms of timing, the first phase is designed to span over a period of two to three years, whilst the second phase is expected to kick in starting with the fourth year. In parallel with the second phase, PowerGold will also start developing alternative products for trading and supply of green energy.

VII.2. Investment rentability considerations

For a better understanding of the investment rentability, we present attached hereto as Appendix 1 a PVsyst – Simulation report of a 10 MWp photovoltaic park aimed at allowing the prospective investors to get a clear picture of the investment costs, operational expenditure, tariffs, payback time, depreciation, etc. For the accuracy of the approach and the results presented in the attached simulation report we employed PVsyst⁴⁷ that was populated with real market data and official OPCOM⁴⁸ tariffs.

*PVsyst represents "...a software tool designed for the solar energy industry. PVsyst creates, simulates, and analyzes solar energy systems of all types. PVsyst is famous for its accuracy and flexibility for two reasons: 1) PVsyst allows users to input specific data about their solar systems. Ex. data on the solar PV modules and inverters. 2). PVsyst can simulate the performance of an energy system under various conditions. Ex. The solar panels' orientation, the site's location and climate, the electrical load and consumption patterns, etc. Additionally, PVsyst offers a range of advanced customization options for PV system design. This includes modeling different panel technologies, incorporating shading and other site-specific factors, and optimizing system performance based on various criteria. Ex. Energy production, cost, or CO2 emissions."*⁴⁹

One may easily extrapolate the data and findings for simulations corresponding to photovoltaic parks of 5MWp, 50MWp, 100MWp or 500MWp. Simulations were conducted under a conservative approach of 1400 hours of solar energy per year. However, if we consider photovoltaic parks with trackers on two axes then the number of hours of solar energy may be as high as approximately 1850 hours per year, and the simulation results will show a greater rentability of the actual investment.

For the purposes of this section we have selected from the attached simulation report certain illustrative and relevant charts containing useful information for potential investors, as shown below.

Economic evaluation

System summary

Project: **Buzau_PowerGold**
 PV Array, Pnom = **10002 kWp** **Grid-Connected System**
 Produced Energy **18547 MWh/year**

Financial summary

Installation costs **10071660.00** EUR
 Total yearly cost **653335.96** EUR/year
 LCOE **0.050** EUR/kWh
 Payback period **5.0** years

Investment and charges Financial parameters Tariffs Financial results Carbon balance

Values

Global by Wp by m²

Currency

EUR - Euro

Rates

Installation costs

Description	Quantity	Unit price	Total	
⊕ PV modules			9816660.00	EUR
⊕ Inverters			45000.00	EUR
⊕ Other components			10000.00	EUR
⊕ Studies and analysis			200000.00	EUR
⊕ Installation			0.00	EUR
⊕ Insurance			0.00	EUR
⊕ Land costs			0.00	EUR
Loan bank charges	<input type="text" value="0.00"/>	<input type="text" value="0.00"/>	<input type="text" value="0.00"/>	EUR
⊕ Taxes			0.00	EUR
Total installation cost			10071660.00	EUR
Depreciable asset			9864160.00	EUR

Operating costs (yearly)

Description	Yearly cost	
⊕ Maintenance	70000.00	EUR
Land rent	<input type="text" value="22500.00"/>	EUR
⊕ Insurance	30000.00	EUR
Bank charges	<input type="text" value="0.00"/>	EUR
Administrative, accounting	<input type="text" value="0.00"/>	EUR
⊕ Taxes	0.00	EUR
Subsidies	<input type="text" value="0.00"/>	EUR
Operating costs (OPEX)		122500.00 EUR/year

Cancel
 OK

Legend: this chart outlines the economic evaluation of the investment

Economic evaluation

System summary

Project: Buzau_PowerGold
 PV Array, P_{nom} = 10002 kWp Grid-Connected System
 Produced Energy **18547 MWh/year**

Financial summary

Installation costs **10071660.00 EUR**
 Total yearly cost **653335.96 EUR/year**
 LCOE **0.050 EUR/kWh**
 Payback period **5.0 years**

Investment and charges Financial parameters Tariffs Financial results Carbon balance

Simulation period

Project lifetime years Start year

Projected variations

Inflation %/year Discount rate %/year

Production variation (aging)

Linear %/year Aging tool results

Income dependent expenses

Income tax %/year Dividends %/year

Other income tax %/year

Tax depreciation

None Straight-line Declining balance

Depreciable assets 9864160.00 EUR

Salvage value EUR

Total redeemable 9864160.00 EUR

Depreciation period years

Financing

Investment 10071660.00 EUR

Own funds EUR

Subsidies EUR

Loans EUR

Funds in excess 0.00 EUR

■ Own funds 100 %

■ Funds in excess 0 %

Legend: the chart outlines the financial parameters of the investment

Economic evaluation

System summary

Project: Buzau_PowerGold
 PV Array, P_{nom} = 10002 kWp Grid-Connected System
 Produced Energy **18547 MWh/year**

Financial summary

Installation costs **10071660.00 EUR**
 Total yearly cost **653335.96 EUR/year**
 LCOE **0.050 EUR/kWh**
 Payback period **5.0 years**

Investment and charges Financial parameters **Tariffs** Financial results Carbon balance

Pricing strategy

Fixed tariff Variable tariff

Hourly peak/off-peak tariff

Seasonal tariff

Tariff from CSV file Import ?

Feed-in tariff

Fixed feed-in tariff EUR/kWh

Other general parameters ?

Annual connection tax EUR/year

Annual tariff variation %/year

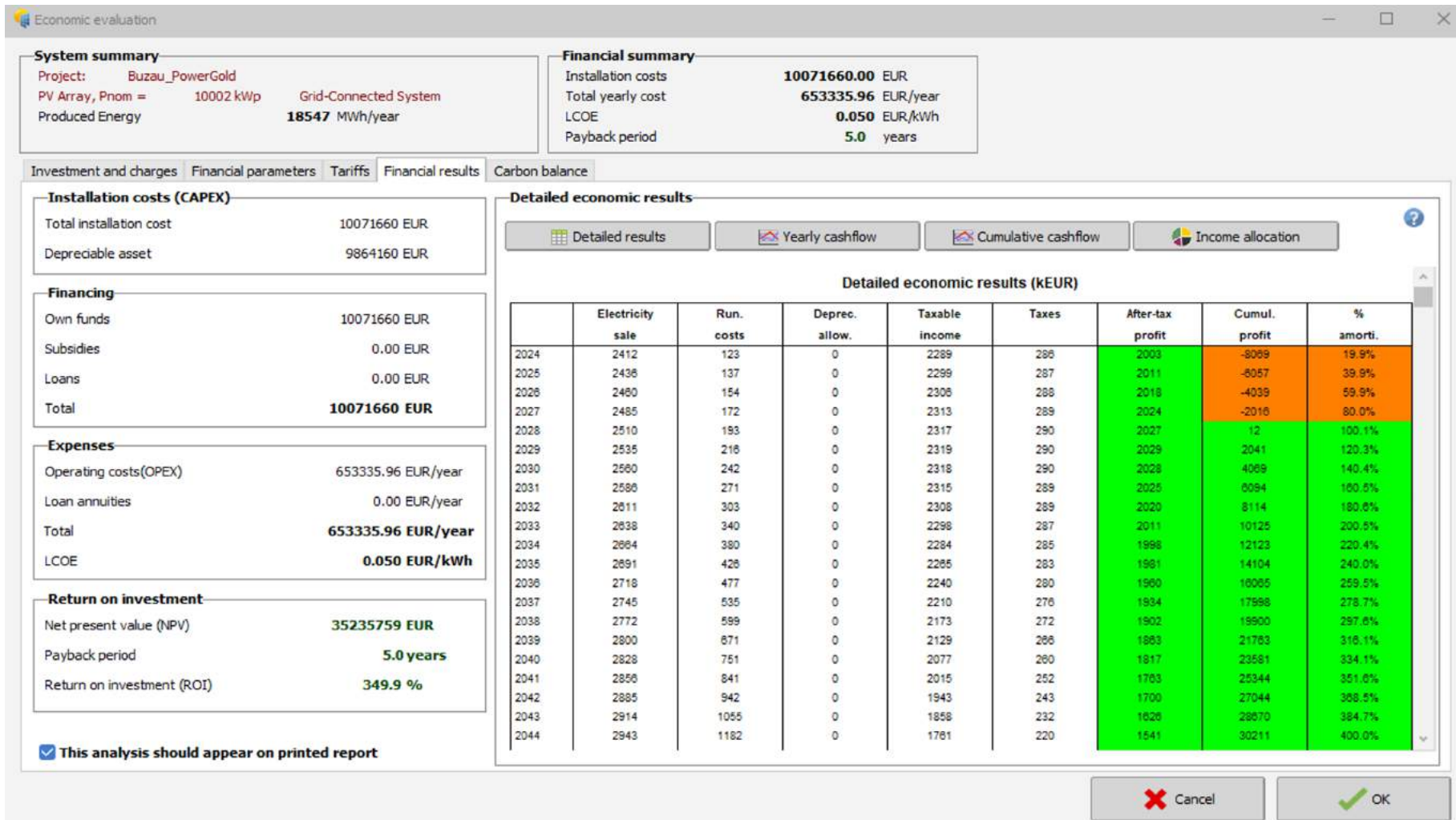
Duration of tariff warranty years

Feed-in tariff decrease after warranty %

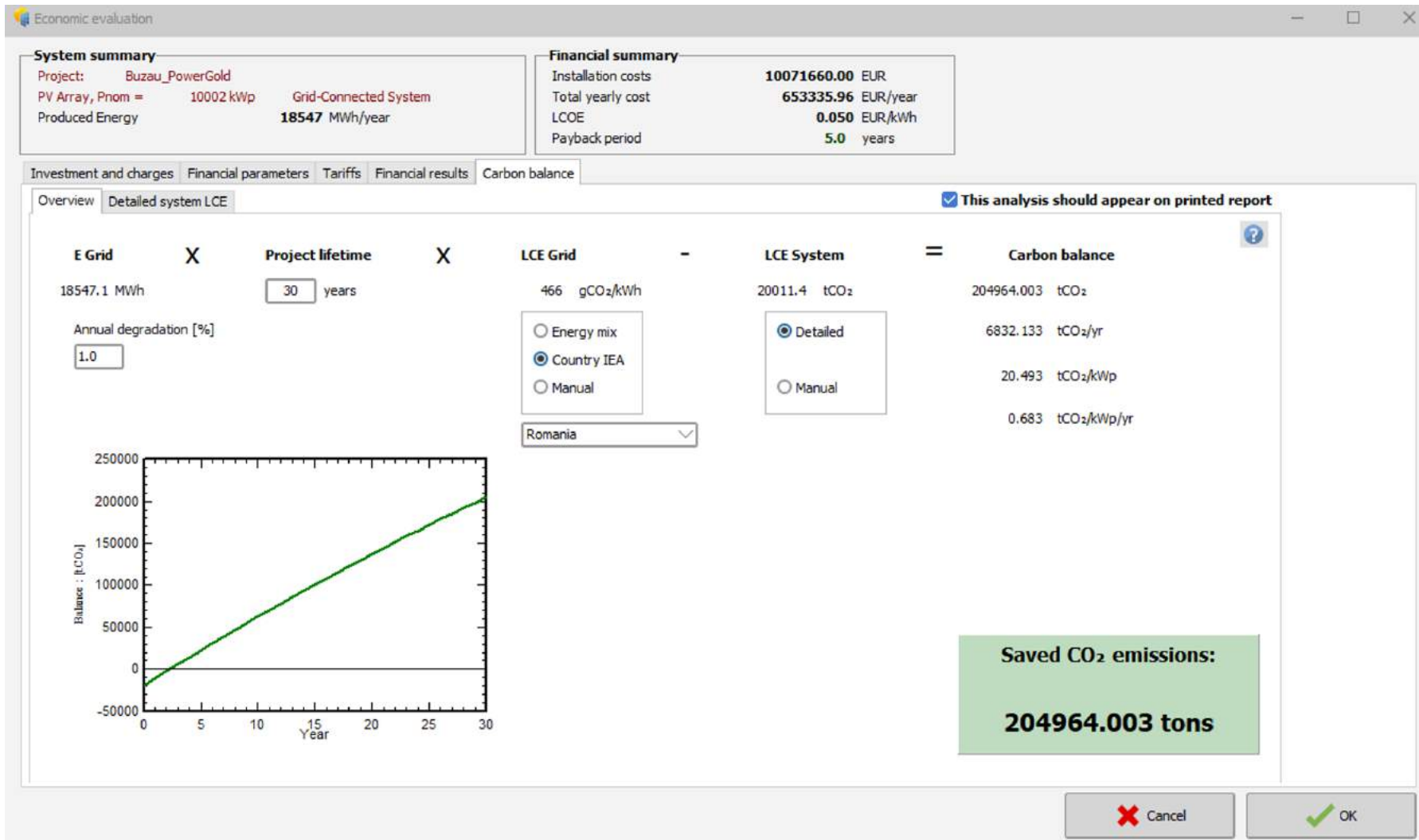
This analysis should appear on printed report

Cancel
 OK

Legend: the chart outlines the economic impact of the underlying tariffs



Legend: the chart outlines the financial results



Legend: this chart outlines the saved CO₂ triggered by the investment

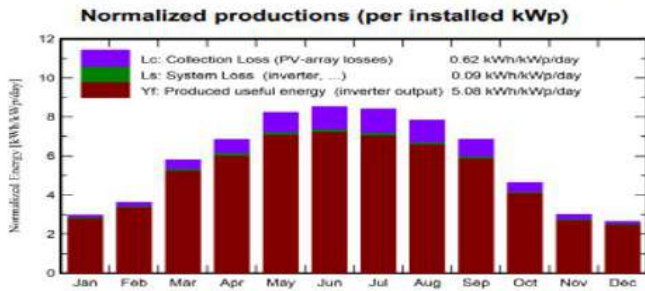


PVsyst V7.2.21
 VC0. Simulation date:
 18/10/23 12:10
 with v7.2.21

Project: Buzau_PowerGold
 Variant: PowerGold - 2024
 Enpower Energy SRL (Romania)

Main results

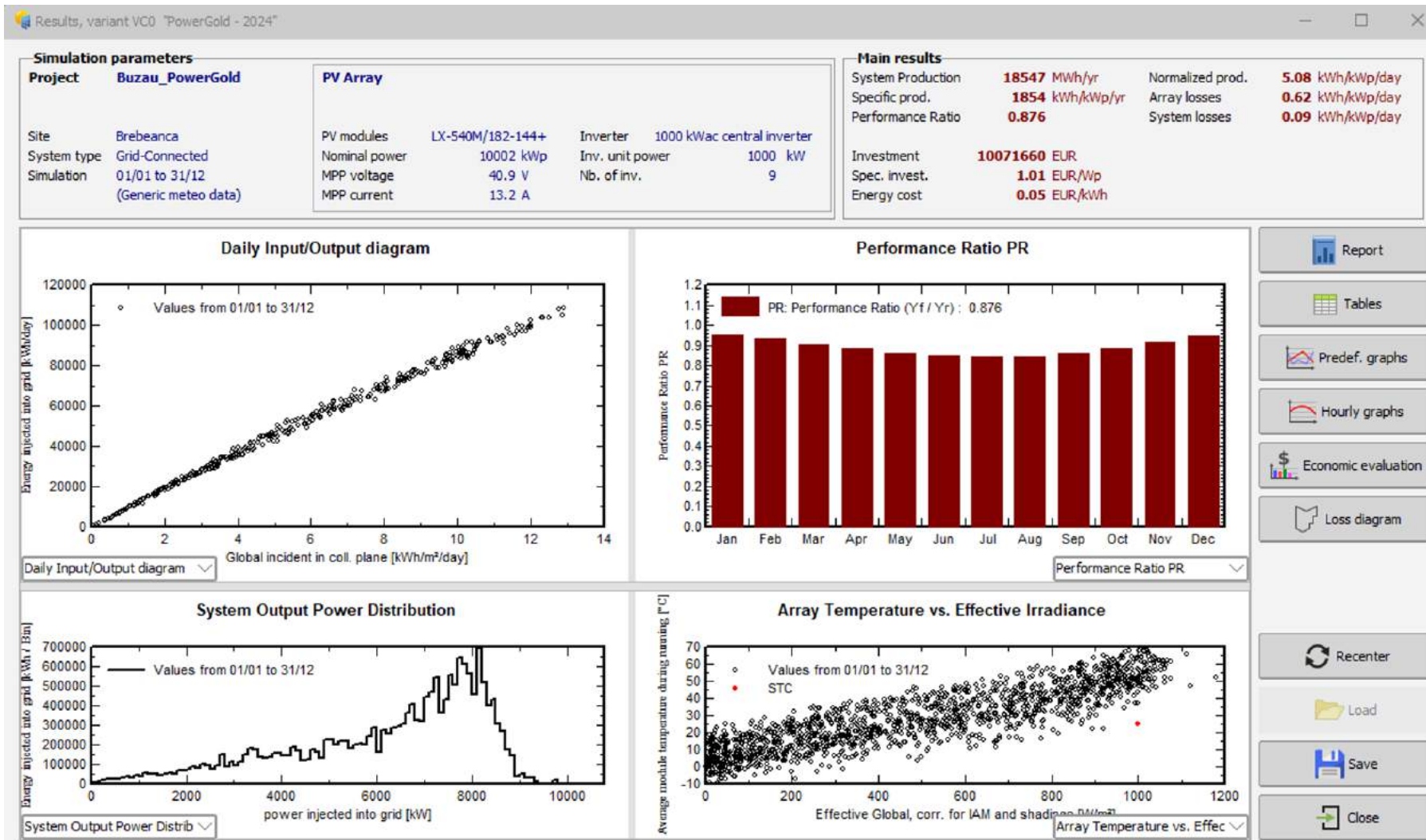
System Production							
Produced Energy	18.55 GWh/year	Specific production	1854 kWh/kWp/year	Performance Ratio PR	87.62 %		
Economic evaluation							
Investment		Yearly cost		LCOE			
Global	10071660.00 EUR	Annuities	0.00 EUR/yr	Energy cost	0.05 EUR/kWh		
Specific	1.01 EUR/Wp	Run. costs	653335.96 EUR/yr	Payback period	5.0 years		



Balances and main results

	GlobHor	DiffHor	T_Amb	GlobInc	GlobEff	EArray	E_Grid	PR
	kWh/m ²	kWh/m ²	°C	kWh/m ²	kWh/m ²	GWh	GWh	ratio
January	43.2	25.38	-1.66	92.0	91.4	0.894	0.876	0.952
February	59.1	33.68	0.73	101.4	100.7	0.966	0.947	0.933
March	108.5	50.50	6.38	179.9	178.8	1.662	1.631	0.907
April	139.4	60.23	12.05	205.7	204.4	1.851	1.817	0.883
May	181.3	80.89	18.09	255.6	253.9	2.245	2.205	0.862
June	190.5	80.66	21.62	256.0	254.3	2.220	2.181	0.852
July	188.6	85.26	24.48	260.5	258.8	2.235	2.195	0.842
August	168.8	73.31	24.64	243.3	241.8	2.083	2.047	0.841
September	125.1	48.63	18.36	205.7	204.6	1.805	1.772	0.861
October	82.0	40.16	12.08	144.3	143.4	1.301	1.277	0.884
November	43.9	24.79	6.44	90.1	89.6	0.840	0.823	0.913
December	34.9	20.05	0.45	81.8	81.4	0.792	0.777	0.949
Year	1365.4	623.53	12.03	2116.4	2103.0	18.894	18.547	0.876

Legend: the chart outlines the main results of the investment



Legend: this chart outlines the main values of the investment

Introduceti data raportului

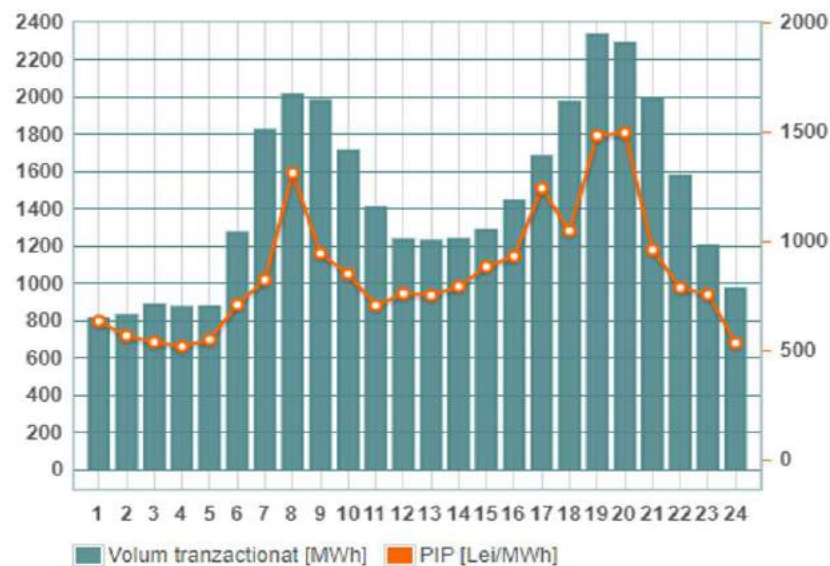
17 / 10 / 2023

Refresh

Export :

Select a format

Zona de tranzactionare	Interval	ROPEX_DAM_H [lei/MWh]	Volum tranzactionat [MWh]	Volum tranzactionat pe cumparare [MWh]	Volum tranzactionat pe vanzare [MWh]
Romania	1	633,39	810,3	810,3	809,0
Romania	2	566,15	825,7	785,3	825,7
Romania	3	537,95	883,2	779,6	883,2
Romania	4	517,73	869,4	802,6	869,4
Romania	5	549,49	872,9	872,9	674,9
Romania	6	709,43	1.270,6	1.270,6	663,8
Romania	7	822,17	1.821,3	1.821,3	609,5
Romania	8	1.311,46	2.011,2	2.011,2	600,5
Romania	9	943,33	1.977,9	1.977,9	593,6
Romania	10	849,23	1.709,2	1.709,2	633,2
Romania	11	705,43	1.404,9	1.404,9	812,2
Romania	12	759,57	1.231,7	1.231,7	821,2
Romania	13	751,97	1.224,9	1.224,9	807,8
Romania	14	792,43	1.233,8	1.233,8	611,9
Romania	15	883,43	1.283,1	1.283,1	628,1
Romania	16	930,19	1.440,8	1.440,8	589,8
Romania	17	1.241,53	1.679,2	1.679,2	588,3
Romania	18	1.046,65	1.971,3	1.971,3	707,7
Romania	19	1.482,15	2.331,5	2.331,5	844,0
Romania	20	1.495,06	2.287,3	2.287,3	783,9
Romania	21	959,56	1.984,9	1.984,9	804,5
Romania	22	786,28	1.573,7	1.573,7	799,0
Romania	23	755,30	1.200,4	1.200,4	764,7
Romania	24	533,88	969,7	912,6	969,7



	ROPEX_DAM [lei/MWh]	Volum [MWh]
ROPEX_DAM_Base* (1-24)	856,82	34.868,9
ROPEX_DAM_Peak* (9-20)	990,08	19.775,6
ROPEX_DAM_Off_peak* (1-8) & (21-24)	723,57	15.093,3

Legend: the chart outlines the official prices employed by OPCOM

VII.3. Costs and time-to-market aspects

Acquisitions in the sector of renewable energy are mainly conducted as follows:

- (i) acquisition of projects at various stages of development such greenfield, brownfield or ready-to-build projects;
- (ii) acquisition of fully licensed and operational capacities;
- (iii) developing projects from scratch.

Irrespective of the chosen approach, an acquisition in this sector of the industry involves going through several steps that must be carefully considered for the completion of the same, namely:

- (i) identifying and selecting the required team of qualified experts – technical, operational, tax, legal, environmental, engineers, etc. – to perform the due diligence exercises and guide the buyer under the relevant legal framework;
- (ii) performing the due diligence exercises to assess the assets profitability, viability, compliance with the regulatory architecture;
- (iii) negotiating and executing the transactional documents;
- (iv) obtaining the required approvals and clearances to close the transaction.

Timewise, the acquisition process of a renewable energy project may last up to six months, whilst the acquisitions of an operational capacity may take up to nine months. The development of a renewable project will normally span over a period of 12 months in case of solar plants, 18 months for wind farms and up to 24 months in case of hydrogen plants.

The acquisition costs of a solar project depend on the authorization status of the same and may range from EUR 35 thousand per MW to EUR 45 thousand per MW for greenfield and brownfield projects, and may reach as high as EUR 100 thousand per MW for projects which achieved ready-to-build status or EUR 130 thousand per MW for projects that have reached ready-to-build status and secured subsidies from the local government.

The construction costs pretty much depend on the chosen supply chain and whether contains or not a battery energy storage system or not. Typically, these costs range from EUR 850 thousand per MW up to EUR 1 million per MW.

On the other hand, the acquisition costs of a wind farm project range from EUR 55 thousand per MW to EUR 60 thousand per MW for a greenfield project, EUR 100 thousand per MW for a brownfield project and may reach as high as EUR 200 thousand per MW for a project with ready-

to-build status and good wind resources. In terms of construction costs, wind farms require approximately EUR 1,2 to EUR 1,5 million per MW.

The acquisition costs for BESS projects range from EUR 40 thousand per MW to EUR 50 thousand per MW, whilst the construction costs are approximately EUR 600 thousand per MW.

The acquisition price for operational solar capacities range between EUR 850 thousand per MW up to EUR 1 million per MW if green certificates are attached to the transaction. As regards operational wind farms, the acquisition price may range from EUR 1,4 million per MW to EUR 1,7 million per MW if green certificates are also available.

Important notice: all the above figures, prospects, projections, amounts, ranges, costs, forecasts, criteria and any other subjective opinions are mere illustrative examples and are based on market records and reasonable assumptions that must not be interpreted as being certain of their level, range or materialization. All these projections, representations, forecasts, predictions, etc., may not occur, may materialize differently or may differ materially from those forecasted as they depend on multiple business factors, technology features, negotiations power, market specificity, regulatory matters, market dynamics, tariffs volatility, macro-economic indicators, geo-political developments, etc. All potential investors are cautioned not to place undue reliance on these projections, amounts, forecasts, ranges, etc. Each potential investor is advised to rely solely on its own assessment and decisions taken based upon the information disclosed herein or which is further made available in connection with any inquiries during the investment process.

VII.4. Acquisitions road map

The technology needed to generate electricity from wind and solar resources has evolved greatly in the last decade, becoming mature, efficient and cost-effective. The producers offer highly efficient, resilient, long-life solar farm equipment with extended warranty periods, whether offshore or onshore, with or without trackers. On the other hand, the old 3 MW turbines have been replaced by new generation turbines of 6 to 6.3 MW, while some well-known manufacturers have 15 MW turbines in testing.

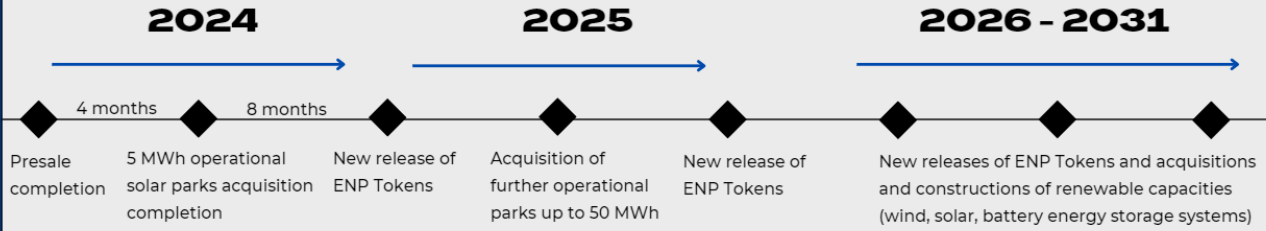
In this context and considering the particularities of the business architecture behind ENP Token, we intend to start by acquiring and building a portfolio of around 50MW of solar plants that will allow us to further gain traction and financial leverage to acquire operational wind farms and build further renewable capacities. This mix of renewable power generation capacities will provide us with the cash flow to expand our renewable capacity portfolio beyond 100 MW by acquiring or building new wind farms, solar farms and electricity storage systems in line with the ENP Token release and investment program outlined in Section 6. below.

At the beginning, the net proceeds obtained from the presale will be used to acquire operational solar farms of 5MWp that will generate revenues from the day one after the acquisition. In terms of timing, from the closing of the presale campaign and the purchase of the first operational photovoltaic parks we estimate a period of four months. Shortening the acquisition period from 6 - 9 months to 4 months is possible as these operational photovoltaic parks have been already identified and the M&A process is in full swing at the time of publication of this white paper.

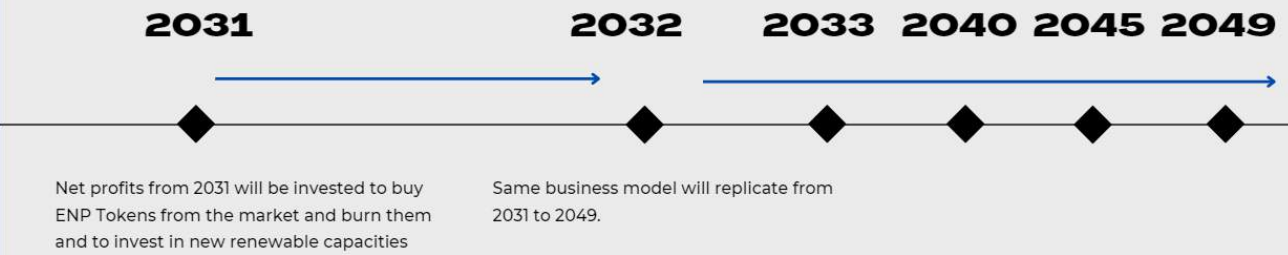
Moving forward, after the acquisition of the 5MW and the compliance with transparency process undertaken under Section 6., we intend to release a new issue of ENP Tokens meant to finance further acquisitions of operational parks and buy the available ENP Tokens from the market to burn them. Timewise, we believe that the first operational solar parks totaling 5MW will be acquired in the first half of 2024, whilst the second release of ENP Token is expected by the end of 2024, at the latest. Upon 6 months of the second release of ENP Token, the acquisition process of further operational solar parks should be completed.

As dynamic, in the first seven years we intend to carry out at least one issue of ENP Tokens and one acquisition of operational solar farms until reaching the portfolio of 50MW, subsequently diversifying the portfolio by purchasing or building wind farms and energy storage systems too. Upon completion of the seven investment years program, the net amounts obtained from the renewable energy capacities built or purchased during this period will be used entirely to buy available ENP Tokens from the market and invest in further renewable capacities. The below graphs show the seven years roadmap of the ENP Tokens project, as well the evolution of the same after this period.

I. FIRST SEVEN YEARS INVESTMENT PROGRAM



II. NEXT EIGHTEEN YEARS INVESTMENT PROGRAM



VIII. THE EU AND ROMANIAN ENERGY MARKETS

VIII.1. Considerations on the energy markets of several EU member states

PowerGold investment strategy will focus on the territory of the European Union, starting with Romania and, depending on existing opportunities, continuing with other member states such as Croatia⁵⁰, Slovenia, Hungary⁵¹, Bulgaria⁵², Spain, Italy⁵³, etc.

Pursuant to Market Intelligence publication, Croatia *"has excellent potential for the development of renewable energy resources. Currently, the country covers 28,02% of the gross final energy consumption by renewable energy. Hydropower is the dominant renewable source at this moment; significant funds have been invested in the production of electrical energy from wind power, and solar power has the most significant potential for growth in the upcoming years. According to the Energy Institute Hrvoje Požar study conducted in 2018, Croatia will cover 32% of its energy consumption from renewables by 2030, and 56.3% by 2050. In order to achieve that, 40 to 50 million USD will be invested annually. Incentives for further development of renewable energy resources are abundant. Croatia still imports about half of its energy consumption, and it could save significant funds by increasing the production of renewable energy. The estimated technical potential of solar power plants in Croatia is 5,303 MW, with an estimated production of 6,364 GWh of electrical energy annually. Croatian regions Istria and Dalmatia have 30% and 40% more insulation compared to German city Munich, creating 30 to 40% earlier return on investment. Additionally, the EU Green Deal will further support and partially fund the development of renewables in Croatia"*⁵⁴.

Slovenia *"due to its strategic location, is essential to the European electricity market. The domestic transmission network consists of 508 km of 400 kV lines, 328 km of 220 kV lines, and 1,736 km of 110 kV lines. Slovenia has strong connections with neighbouring countries, including 2x400 kV and 1x220 kV lines to Austria, 1x400 kV and 1x220 kV lines to Italy, and 3x400 kV and 2x220 kV lines to Croatia and 1x400 kV to Hungary through Croatia. By the end of 2009, the Slovenian photovoltaic market was underdeveloped, with only 9.5MW of cumulative installed capacity. The favourable renewable energy law with a very attractive feed-in tariff between 2010 and 2014 led to a sharp rise in solar PV installations to 262MW at the end of 2015. After the reduction of government support, the solar market in Slovenia was stalling, with only 199MW of new solar capacity additions between 2015 and 2021. The Ministry of the Environment, Climate and Energy presented, on 28 January 2023, a draft law for a change of spatial planning law to enable faster installation of renewable power plants. Slovenia must catch up to the average EU-27 level regarding solar and wind energy use. The new legislative change is the first step towards fulfilling internationally binding goals that may bring Slovenia closer to a climate-neutral society."*⁵⁵

Likewise, Bulgaria "started its renewable energy expansion in 2007 with most of it being hydropower. Solar power installation started in 2009 and reached a total of 100 Megawatts (MW) in 2011, since then however newer installations have come to a halt with only about 12 MW installed between 2013 and 2014 and the capacity hasn't increased much till 2020. According to the Hydrology and Meteorology (IHM) of the Bulgarian Academy of Sciences (BAS) has estimated the solar energy potential of the country, which is around 12,995 million metric tons of oil equivalent. It has been estimated that the county has never used the solar capacity to its full potential at all. Such a high potential is expected to provide solar energy companies a significant opportunity to tap into this market in the future. The downside is the higher installation costs which have been preventing companies to tap into the market. To overcome this barrier the government is updating its policy to promote investments. As a part of the EU's ambitious plans to become carbon neutral by 2050, Bulgaria is trying to promote low tax rates, low land prices, and favorable policies for installation for renewable energy sources in general Bulgaria started its renewable energy expansion in 2007."⁵⁶

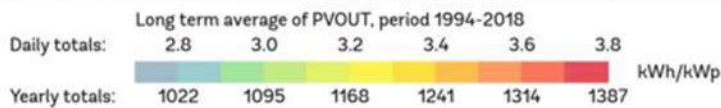
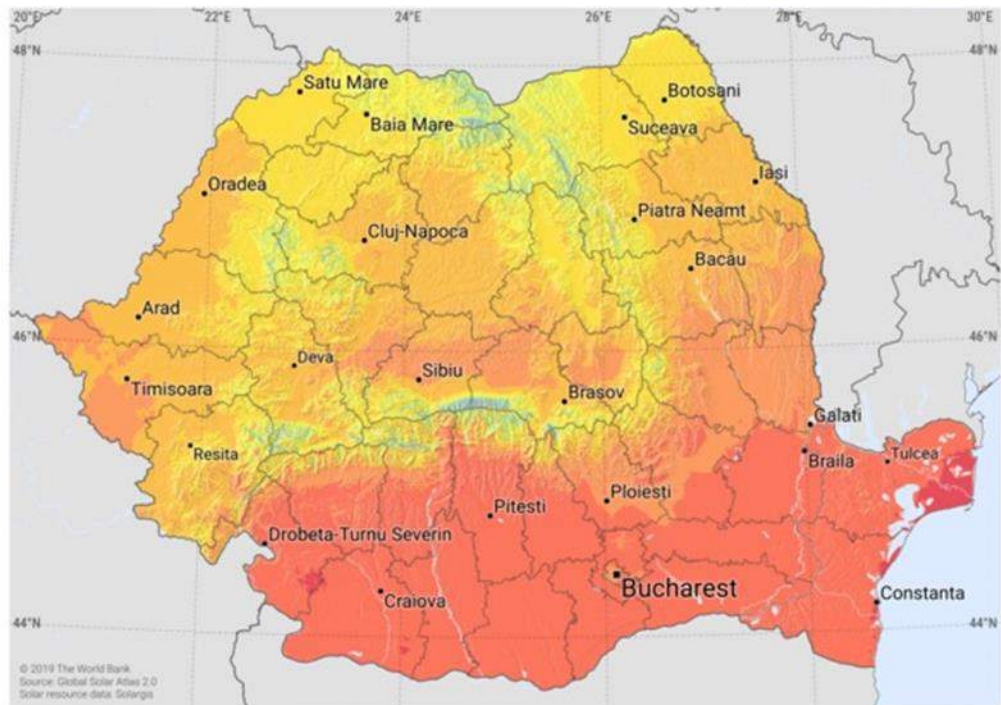
In Spain, solar "power is growing steadily ... as the national climate plan means it will soon be 'lights off' for nuclear and coal power. Analysis from AFRY Management Consulting shows healthy growth in the Spanish solar power industry. Wind power is also expected to be ramped up to meet demand as coal power plants will be phased out by 2025 and nuclear plants by 2035. Currently, Spain has approved 60 gigawatts (GW) of large-scale renewable projects. UNEF, the Spanish solar power association, is now urging the country to revise its energy strategy to accommodate an additional 65 GW of photovoltaic (PV) capacity installation by 2030."⁵⁷ Furthermore, it appears that "in 2022 Spain recorded its highest annual additions of photovoltaic power plants, making it the largest photovoltaic market in Europe and the fifth largest in the world in terms of new installed capacity. And it doesn't end there – the country now intends to almost double its 2030 PV target."⁵⁸

At the same time, Italy "...is one of the most outstanding countries in Europe and the world when it comes to renewable energy production. After hydroelectric power, solar energy is the star performer of our green energy sources. Photovoltaic energy, in particular, accounts for a fifth of all the green energy we produce and meets between 7% and 8% of the nation's total energy requirements (data based on 2019 figures)."⁵⁹

VIII.2. The Romanian energy market

Romania is located in Central and Eastern Europe and neighbours Ukraine to the north, Hungary to the west, Serbia to the southwest, Bulgaria to the south, Republic of Moldova to the east, and the Black Sea to the southeast⁶⁰. It has an area of 238,397 square kilometers with a population of 19.8 million people at the end of September 2023⁶¹. Romania is the twelfth-largest country in Europe and the sixth-most populous member state of the European Union⁶². Romania joined the North Atlantic Treaty Organization in 2004, became a member of the EU in 2007, and underwent rapid reforms meant to achieve state modernization. From 1990 to 2021, Romania's gross national income increased from EUR 36 billion to EUR 240 billion.

As regards the energy market, Romania features a balanced portfolio of energy generation capacities consisting of hydro, nuclear, natural gas-fueled power, geothermal and renewable energy plants. Considering its geographical position and natural resources, Romania benefits from various sources of renewable energy. In particular, electricity production from solar, wind, hydrogen, battery energy storage systems plants represent appealing sources of renewable power. As shown below, Romania has a high potential for solar energy throughout its territory, whilst the abundant solar resources are located in the southern and south-eastern part of the country⁶³. Romania's potential market for solar energy is rather large, with some studies estimating 1.2 Terawatt-hours of electricity per year or 2.5% of its national consumption⁶⁴.

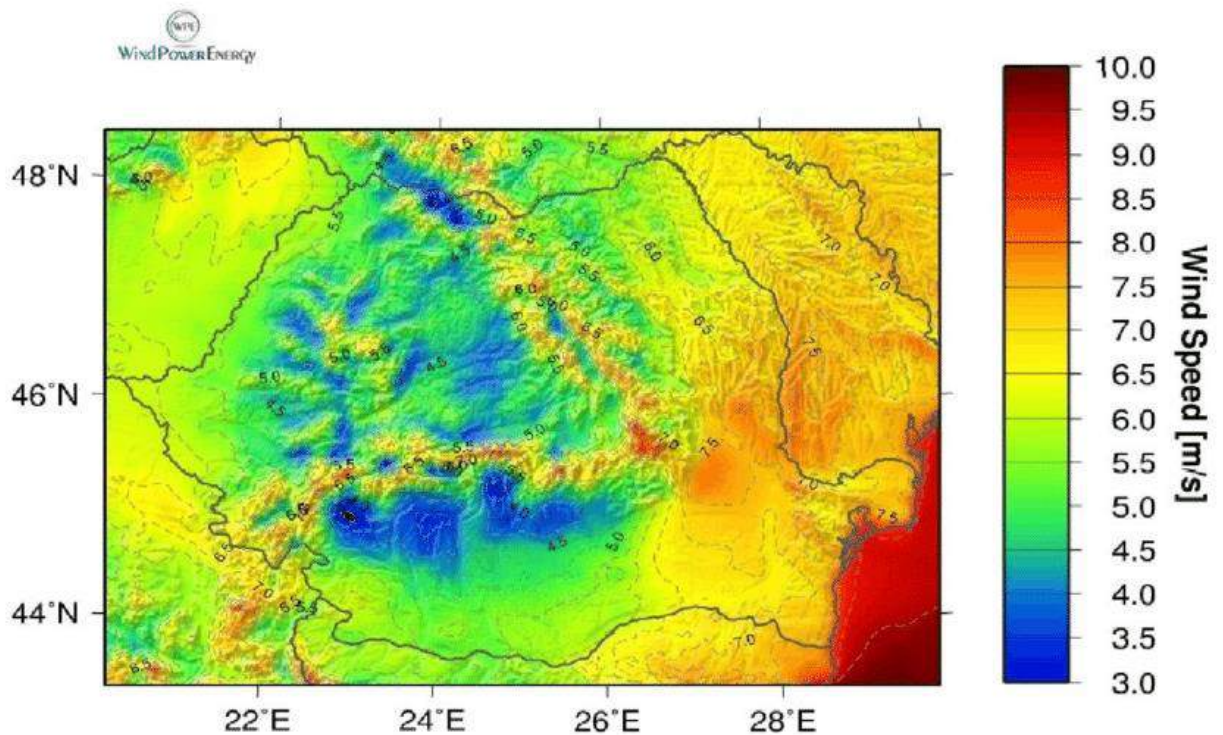


This map is published by the World Bank Group, funded by ESMAP, and prepared by Solargis. For more information and terms of use, please visit <http://globalsolaratlas.info>

Legend: this map shows the solar energy potential in Romania on a daily and yearly basis

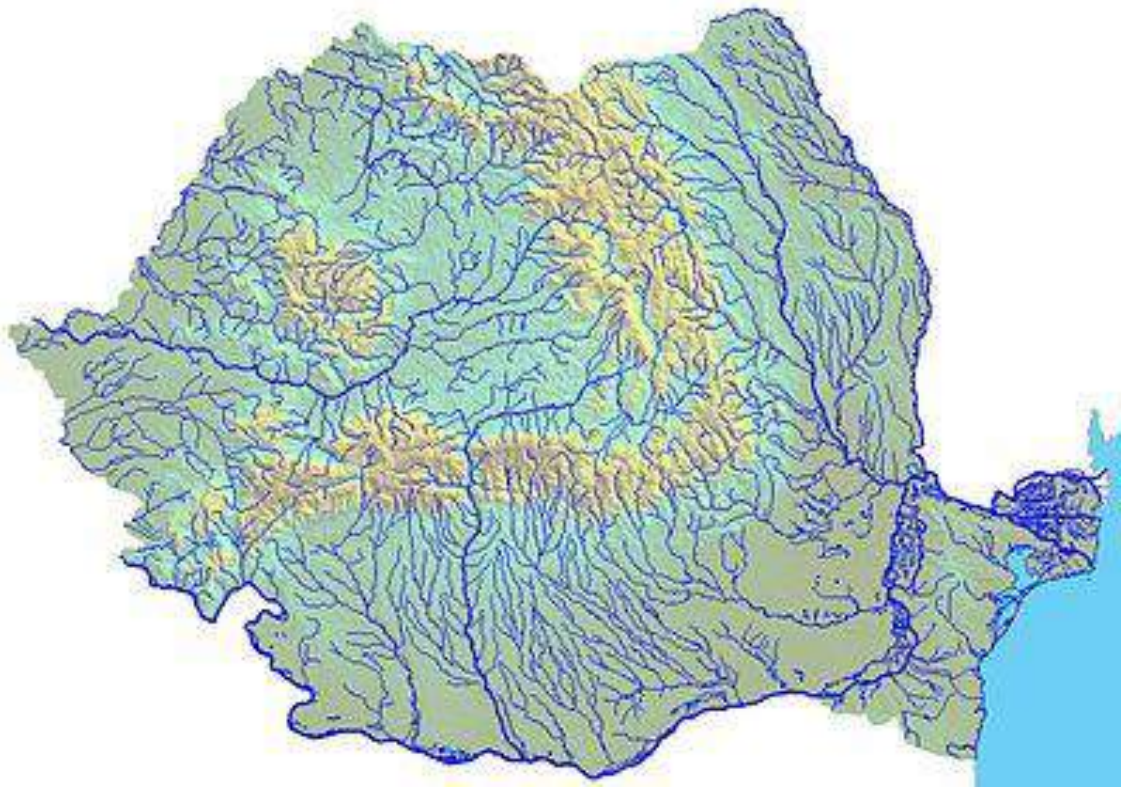
On the other hand, Romania's wind energy sector is the second-largest renewable energy source after hydropower. In 2021, wind energy generated about 16% of Romania's electricity. As of 2021, the installed capacity of onshore wind energy in Romania was 3,013 MW⁶⁵. The share of wind and other renewables in Romania's electricity generation mix is expected to rise by 35% by 2030. Upcoming wind energy projects and plans to increase the renewable energy share in the country's power generation mix are expected to drive the market during the forecast period⁶⁶.

As outlined below, Romania has significant wind resources, onshore and offshore, in the east, south-west, south-east, in the mountains, as well as on the Black Sea⁶⁷.



Legend: this map indicates the wind speed – meters per second – throughout Romania

The map below shows a great deal of rivers spread out all over the Romanian territory which stand testimony for the tremendous hydroelectric and hydrogen potential production of Romania⁶⁸. Due to its significant renewable potential and the government favorable regulation and incentive driven policies, Romania's hydrogen market has reached rapidly a production of almost 94 million tons in 2021⁶⁹. Industries such as energy intensive plants (steel, ammonia, fertilizers, refineries, and high value chemicals), transportation (long-haul aviation, maritime shipping, HDVs and some railway segments), heating sector, green energy production and storage systems, etc., are at the forefront of the hydrogen fuel use on a large scale and development⁷⁰. By 2030 Romania intends to install approximately 3,9 GW of water electrolysis capacity⁷¹. Under the National and Recovery Resilience Plan, Romania estimated a total budget of EUR 148,752,500 "*...aimed at promoting investments in building capacities of at least 100 MWh2 in electrolysis facilities, with an estimated generated quantity of at least 10,000 tons of renewable hydrogen per year due by December 2025.*"⁷²

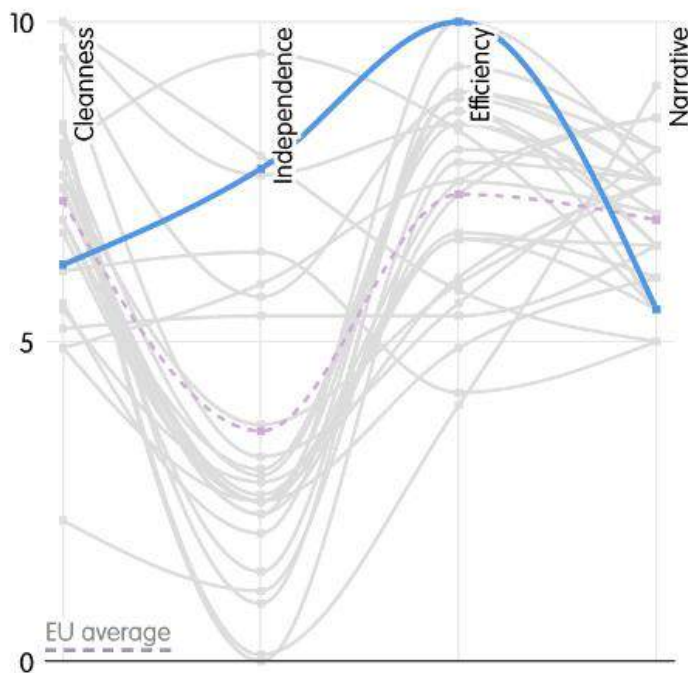
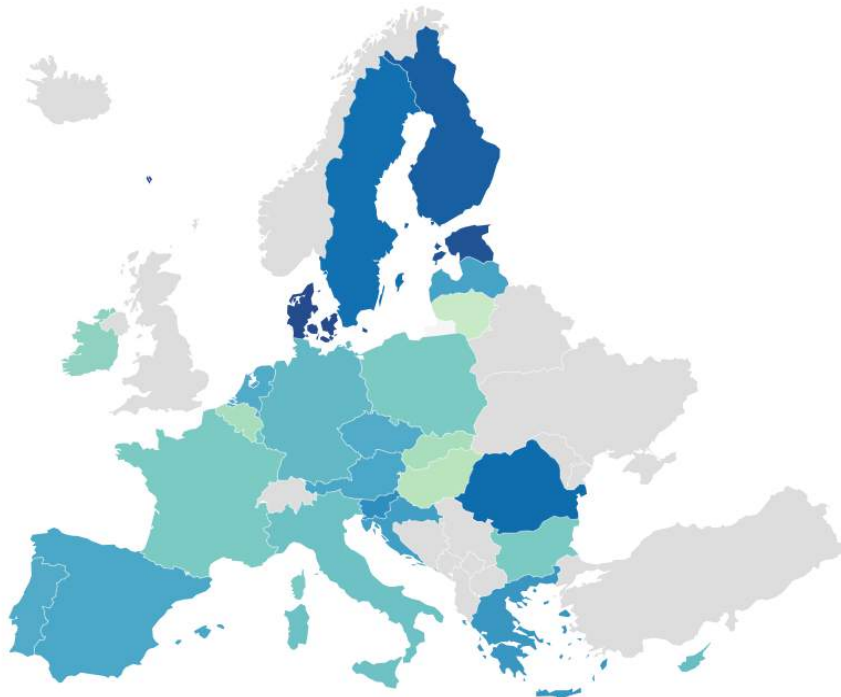


Legend: the map outlines the network of rivers that cross Romania

Given the above numerous and versatile natural resources, Romania has a high degree of independency considering green energy resources, from various sources such as solar, wind, hydro, etc., thus being ranked on the 4th place, Europe wide, as seen in the two charts below.

Energy sovereignty mapped

4.1 8.5



Romania: 7.7 **Good**

Rank: **#4** /27

6.2 Cleanness

7.7 Independence

10 Efficiency

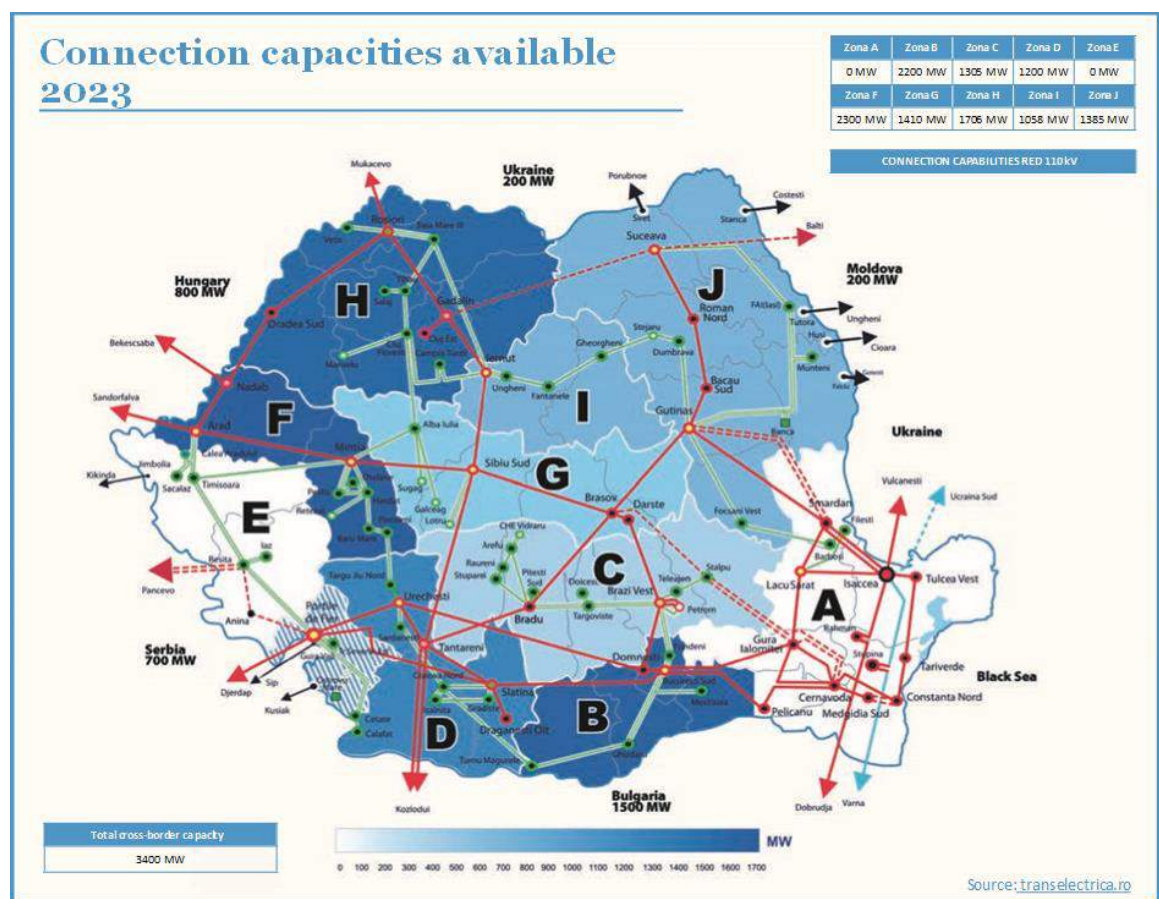
5.5 Narrative

Source: Energy Sovereignty Index | ECFR

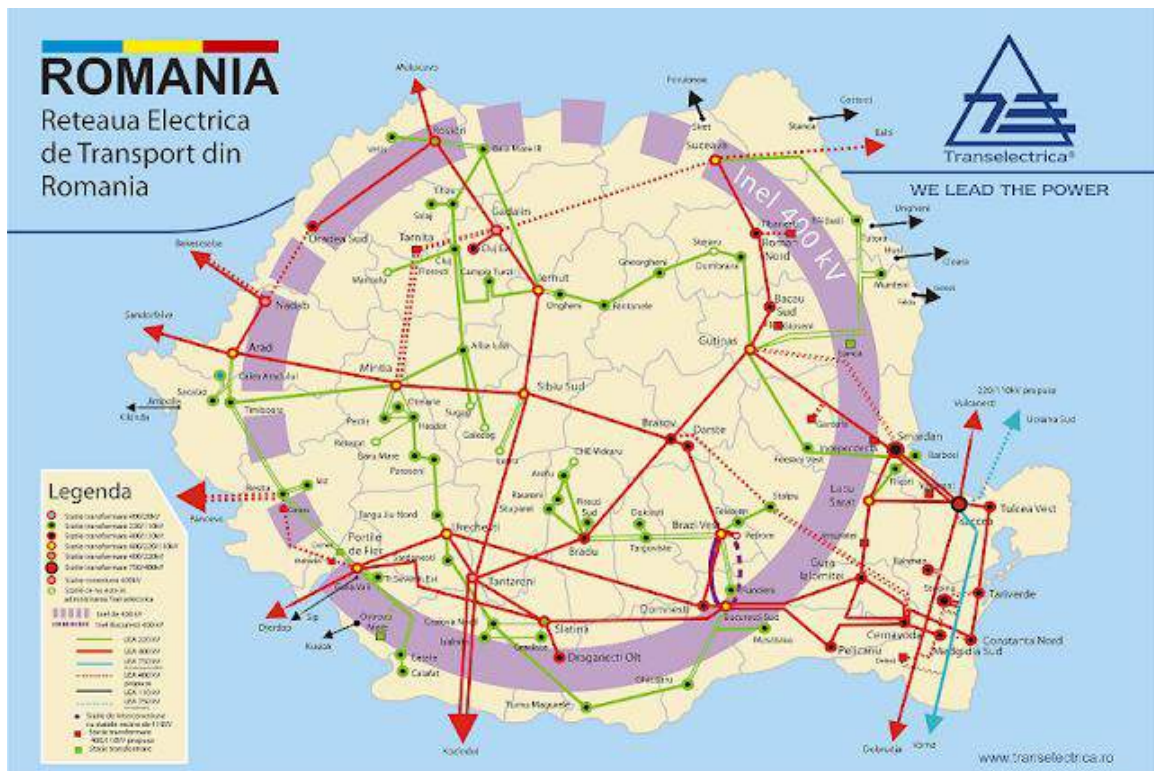
Legend: the two graphs above shows Romania's level of energy independence due to its various and versatile green energy resources (solar, wind, hydro, etc.)

Currently, Romania appears to be the largest market in the region considering the companies involved in the green energy and their turnovers, according to a study conducted by the SeeNext platform. According to the source mentioned, on the green energy markets in Romania, Greece, Bulgaria, Slovenia and Croatia in 2021 were 2,567 companies active in renewable energy. Romania, Greece and Bulgaria top the podium⁷³.

Almost all photovoltaic, wind or energy storage projects must connect to the grid. Compania Nationala de Transport al Energiei Electrice Transelectrica S.A., is the Romanian Transmission and System Operator ("TSO") in charge with the electricity transmission system and the electricity exchanges between the central and eastern European countries as an ENTSO-E member (European Network of Transmission and System Operators for Electricity). TSO is also responsible for electricity transmission, system and market operation, grid and market infrastructure⁷⁴. As shown in the below pictures, the Romanian electricity transmission system is well spread and balanced throughout the territory.



Source: Code of good practice for renewable energy in Romania, no. 2, 2023, page 47, available at Code-of-Good-Practice-for-Renewable-Energy-In-Romania-No-2.pdf (rwea.ro)



Source: <http://www.transelectrica.ro> / <https://romania594.blogspot.com/2017/11/sistemul-energetic-national-al-romaniei.html>

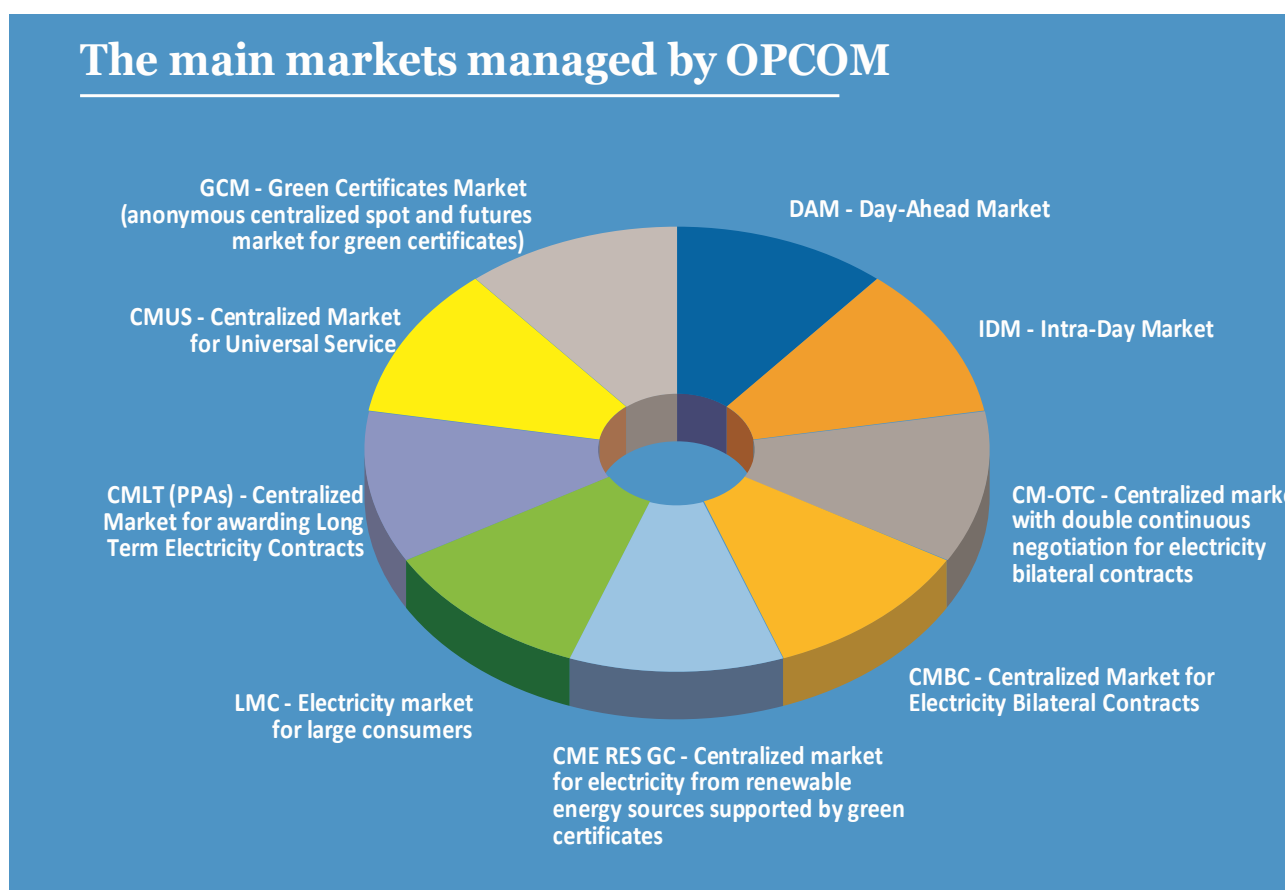
Legend: the two above charts show the Romanian TSO network and its available connection capacities

As of December 31, 2022 Romania had 202,183 kilometers of electricity network⁷⁵ which undergo a process of expansion, upgrading and modernization to enhance the transmission capacity and interconnection with other markets, especially the EU market. In 2022, the TSO secured the largest-ever European funding for the company from the Modernization Fund, totaling around EUR 424 million designed to enhance the national electricity transmission grid to accommodate the new renewable energy production capacities and energy storage systems⁷⁶. Besides TSO, other important actors in the Romanian energy market are the following:

- (i) the National Energy Regulatory Authority, the Romanian state regulatory agency responsible for the implementation of legislation in the electricity, heating, and gas sectors⁷⁷; and
- (ii) Romanian Gas and Electricity and Gas Market Operator S.A., also known as OPCOM, which administers and computes the market price of green certificates, as well as operates the wholesale electricity market⁷⁸.

In Romania, any producer may sell electricity on the wholesale electricity market or by way of direct bilateral transactions. The main energy market is the one managed by OPCOM where over 50% of electricity volumes are traded on a single market (Day-Ahead Market, DAM), well above the European level, maintaining the most liquid energy market⁷⁹. The Day-ahead and the Intra-Day markets in Romania have been modernized and upgraded to allow them to interconnect with the regional and European energy markets. Now they operate coupled with the European energy markets, at the Day-Ahead market level, and in a regime coupled with 24 states at the Intra-Day Market level. As of March 30, 2022, the Romanian Commodities Exchange was also licensed as an administrator of the wholesale electricity market, announcing in June 2022 the launch of futures contracts trading with electricity as an asset⁸⁰.

Power purchase agreements (PPAs) are available and regulated accordingly, whilst recently Romania, with specific advisory and support from the European Bank for Reconstruction and Development, has announced the contract for difference support mechanism that is expected to be in place by the end of 2023. The main markets under OPCOM umbrella are shown below.



Source: Code of good practice for renewable energy in Romania, no. 2, 2023, page 89, available at [Code-of-Good-Practice-for-Renewable-Energy-In-Romania-No-2.pdf](https://rwea.ro/Code-of-Good-Practice-for-Renewable-Energy-In-Romania-No-2.pdf) (rwea.ro)

Legend: the above chart outlined the main Romanian energy markets managed by OPCOM

VIII.3. Considerations on the EU regulatory framework

As regards the bigger picture, one should know that the EU energy market is an integrated market that features common rules and cross-border interconnected infrastructure, so that energy can be produced in one EU country and delivered to consumers in another. At the EU level, the share of electricity produced by renewable energy sources (predominantly solar and wind) is expected to grow from 37% in 2020 to more than 60% by 2030⁸¹.

In this respect, the EU has advanced RePower EU (2022), following the European Green Deal approved in 2020. The RePower EU targets aim to install 600 GW of solar energy and double wind capacity to at least 480 GW by 2030. On the same note, the revision of the Renewable Energy Directive includes the EU target of 42.5% of total gross energy consumption in 2030 coming from renewable energy sources, with the aim of reaching even 45%. This principle has a domino effect in EU member states, including Romania and Eastern European countries such as Poland, Hungary, or Bulgaria, which are in the process of updating the National Energy – Climate Change Plans and, implicitly, the RES targets. As regards, the net installed renewable energy sources capacity, in 2021 Romania ranked second in the region (4,409 MW) after Poland (14,383 MW). Central and Eastern European region features a correlation between cumulative capacities installed and country size. Romania maintains a leading position at regional level, with clean energy sources installed representing just over 59% of the country's total capacity, according to data provided by the National Energy Regulatory Authority⁸².

The last 18 months have brought important changes to the underlying EU energy regulations whose implementation in the national energy legislation is either finalized or under process of finalization. Recently, the European Parliament and the Council reached a provisional political agreement to increase the mandatory target established by the RED II Directive to 42.5% by 2030, with the commitment to pursue a target of up to 45%. Each EU member state should align to these efforts to reach carbon neutrality by 2050 by contributing to the targets set at European level. The most recent goal is included in the RePowerEU program and stipulates a target for renewable energy in the final gross consumption of the EU of 42,5% in 2030⁸³.

The pillars of the regulatory framework regarding the energy transition at EU level are listed below:

- (i) the European Green Deal – represents a set of policies and commitments aimed at achieving climate neutrality at the EU level by 2050;
- (ii) Regulation (EU) 2021/1119 of the European Parliament and of the Council establishing the framework for achieving climate neutrality (European Climate Law) – it implements at the legislative level the commitments assumed under the European Green Deal, including the achievement of climate neutrality by 2050 and reducing net greenhouse gas emissions by at least 55% by 2030;

- (iii) RePower EU - the EU plan to reduce dependence on fossil fuels imported from Russia coupled with accelerating the energy transition to replace conventional energy sources with renewable sources;
- (iv) RES Simplify - the initiative of the European Commission to carry out a detailed analysis of the main causes that delay or block the development of renewable projects in the member states (as well as Norway and Iceland);
- (v) Council Regulation (EU) 2022/2577 laying down a framework to accelerate the deployment of renewable energy – it establishes temporary measures (applicable for a period of 18 months) for member states, in order to accelerate the authorization of renewable projects (including those for repowering operational assets); until December 31, 2023;
- (vi) the RED II Directive⁸⁴.

IX. STATEMENTS AND RISKS

IX.1. Statements

PowerGold is solely responsible for the content of this white paper. This white paper has not been reviewed or approved by any competent authority in any Member State of the European Union or elsewhere.

The potential investors are cautioned not to place undue reliance on these forward-looking statements and to perform their assessment taking into account the following:

- (i) ENP Token may lose its value in part or in full, as the case may be;
- (ii) ENP Token may not always be transferable, as the case may be;
- (iii) ENP Token may not always be liquid;
- (iv) ENP Token value may be volatile.

This white paper does not constitute an offer or solicitation to sell financial instruments and any such offer or solicitation to sell financial instruments can be made only using a prospectus or other offering documents under the relevant jurisdictions. Furthermore, this white paper does not constitute a prospectus as referred to in Regulation (EU) 2017/1129 of the European Parliament and of the Council of 14 June 2017 on the prospectus to be published when securities are offered to the public or admitted to trading on a regulated market, and repealing Directive 2003/71/ECText with EEA relevance, or another offering document under the European Union legislation or national laws⁸⁵ or in Law No X-1023 on securities of the Lithuanian Republic⁸⁶.

IX.2. Risks

IX.2.1. Risks associated with PowerGold

We have identified two main types of risks concerning PowerGold namely trust and transparency in the normal course of business and, on the other hand, the regulatory risks.

The predicament stemming from trust and transparency has been addressed above and we invite the potential investors to carefully assess these aspects before purchasing any ENP Token.

The regulatory risks that PowerGold, may face mainly equates to legislative changes that may not be anticipated to their full ambit at this time. However, PowerGold intends to comply with each legislative change that may occur throughout its existence, including the long-awaited REGULATION (EU) 2023/1114 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 May 2023 on markets in crypto-assets, and amending Regulations (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937.

The costs which such compliance will be transparently disclosed on the PowerGold website and by way of restated versions of this white paper, as the case may be.

IX.2.2. Risks associated with cryptocurrencies and blockchain technology

Volatility. In terms of genesis, the tokens market can be considered a relatively young market under regulatory scrutiny. In the absence of consistent and mature benchmarks, the tokens market is in a continuous unpredictable movement whose amplitude is much greater and far less predictable than for the traditional assets. Under the auspices of this intrinsic volatility, the cryptocurrency market experienced *"epic booms, busts, wild swings, and scams..."*⁸⁷ which *"...have amazed and baffled investors who have witnessed unexplainable and unprecedented gains and losses over the last decade."*⁸⁸ Likewise, tokens market may not be conceived without the blockchain technology which consists of a plethora of automated software programs meant to create investment and behavioural algorithms, patterns and forecasts to predict market trends and prices. All these factors contribute also to the price volatility of the cryptocurrency market.

Bottom line, one should bear in mind that there is always a risk of volatility in digital transactions. Thus, access to information and assessing carefully the same before making any investment in such digital assets is a must.

Taxes. Nowadays, all token investment-friendly jurisdictions have developed and implemented clear taxation policies and rules regarding the issuance of mining, selling, buying, exchanging, etc., digital assets. We recommend that you review these policies of the jurisdiction whose tax resident you are and comply with. Where these rules lack or are unclear, we advise you to seek the recommendations of a tax specialist.

The investors alone have the legal responsibility to pay any tax stemming from buying or selling ENP Token. Since the risks arising from non-compliance with tax payment obligations are severe under almost all jurisdictions (such as penalties, interest, enforcement, criminal charges, etc.), it is very important for the investor to comply to the tax regulations that govern its income.

Blockchain technology associated risks. The investor should understand from the outset if it benefits from full custody or not of its private keys allowing access to its crypto wallet. Irrespective of the chosen wallet – custodial or non-custodial -, the investor is strongly advised to make sure that it is as secure as possible and has features that could help in its recovery in case the access to the wallet is lost. Thus, the investor is advised to not share or expose the private keys to anyone and, most importantly, to store it safely and creating secure backups in case that it needs to regain access to the lost wallet. All in all, it is the responsibility of the investors to store safely the private keys by choosing a secure wallet and a reliable backup method, mainly offline, paper copy, USB flash drive, offline storage devices, etc.

The investor should also be aware that transactions with ENP Token on the PowerGold Chain cannot be reversed. Thus, the investor should always make sure that the funds are transferred to the correct address, otherwise the same are not recoverable. We fully advice any investor to at least double check the information and address before transferring the funds.

Token investors should always pay attention to scammers, hackers and hustlers which stand on watch to exploit any vulnerabilities their software may have in order to steal the relevant data or take control of the device. We firmly advise investors to beware of bogus reviews and testimonials, to have their devices equipped with protected and upgraded software and operating systems, avoid unreliable and fake websites, nice ad positives stories about profits in a relatively short period of time, phishing e-mails, etc.

Investors should also always remember: reputable partners, services providers, token issuers, etc., will not ask for your private keys, usernames, passwords or other related data⁸⁹.

From time-to-time the PowerGold Chain may be either updated or amended and that may slow down or temporarily affect the functionality of the ENP Token.

PowerGold strongly advise the investors to educate themselves before investing in any digital assets project, use protected and updated devices and adopt security best practices⁹⁰.

IX.2.3. Risks associated with project implementation

Potential non-completion of an offering. This white paper is not a guarantee that the ENP Token offering will be successfully placed. Its potential success depends on a multitude of factors, most of them beyond PowerGold control. Among these external factors it is worth mentioning the market appetite for this tokenised project, the macro-economic indicators, the future of the

technologies involved, the regulatory evolution, the relevant market development and the economic architecture which define the project and the issue of the tokens.

Albeit PowerGold addressed in this white paper all these issues through a sound, transparent and trustworthy token economics and business construction, yet the potential investors are advised to make their own assessment before any acquisition of the same is made.

Potential decline ENP Token price due to the sale of a substantial number of units. ENP Token market price may be negatively affected by the future sales of the same. Any potential investor is recommended to closely assess the proposed token economics in this white paper, especially the token distribution matrix, the releases and their timing, the lock up periods, the vesting rights, and periods, before acquiring any ENP Token.

¹ See The call for evidence for an impact assessment. 2040 Climate Target. A. Political context, problem definition and subsidiarity available at https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13793-EU-climate-target-for-2040_en

² Supra 1.

³ See European Green Deal: Commission proposes transformation of EU economy and society to meet climate ambitions available at https://ec.europa.eu/commission/presscorner/detail/en/IP_21_3541

⁴ The Global Power & Energy Elites 2020: Projects. Decentralized energy trading available at <https://www.global-energy-elites.com/articles-2020/decentralised-energy-trading->; See also Rodger Smith, Senior Vice President and General Manager, Oracle Utilities - Utility salvation will be in services available at <http://clarioneventsmedia.com/Media/SmartEnergy/2019/2020GlobalElites/index.html?r=75>

⁵ Climate Ledger Initiative, Juerg Fuessler, Nick Beglinger, Sven Braden, Marion Verles, Pio Wennubst, Kirsten Dunlop, Panagiotis Potosidis-Beck, Yusuf Karacaoglu, Nerrej Prasad, Martinn Frick, Rodolfo Lacy, Navigating blockchain and climate action. An overview. December 4, 2018. " *Blockchain technology provides a key to solving some of the critical issues that hinder effective scaling of climate action. The main benefits of blockchain technology are rooted in three main characteristics: - Data records on a blockchain are immutable through a permanent ledger for increased transparency. — Blockchain technology brings trust to peer-to peer transactions – particularly important in the context of weak regulatory settings or under decentralised governance. — Smart contracts – applications that can automatically execute the terms specified in a contract on a blockchain – increase efficiency and reduce transaction costs.*", page 11, available at https://www.goldstandard.org/sites/default/files/documents/cli_report-january19.pdf

⁶ Ashay Abbhi and Prachi Seth, Revolutionizing Decentralized Renewable Energy (DRE) through Blockchain available at <https://www.powerforall.org/insights/technologies/revolutionizing-decentralized-renewable-energy-dre-through-blockchain>

⁷ Energy Catalyst, Blockchain for energy access. Application dynamics of blockchain for energy access, page 10 available at <https://energycatalyst.ukri.org/wp-content/uploads/2021/11/ECAP-Blockchain-energy-access-compressed.pdf>

⁸ Jingya Donga, Chunhe Songa, Tao Zhanga, Youjun Hue, Hao Zhengb, Yuanjian Lib, Efficient and privacy-preserving decentralized energy trading scheme in a blockchain environment. 2022 The 5th International Conference on Renewable Energy and Environment Engineering, (REEE 2022), 24–26 August, 2022, Brest, France available at <https://www.sciencedirect.com/science/article/pii/S2352484722020911>

⁹ Nathan Reiff and Vikki Velasquez, What happened at Credit Suisse, and why did it collapse? at <https://www.investopedia.com/what-happened-at-credit-suisse-and-why-did-it-collapse-7369825>; and Allison Morrow, Why almost everyone failed to predict Silicon Valley Bank's collapse available at <https://edition.cnn.com/2023/03/26/business/silicon-valley-bank-red-flags/index.html>

¹⁰ International Renewable Agency, Blockchain Innovation Landscape Brief, page 9 at https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2019/Feb/IRENA_Landscape_Blockchain_2019.pdf?la=en&hash=1BBD2B93837B2B7BF0BAF7A14213B110D457B392

¹¹ Axpo peer-to-peer platform enables consumers to buy electricity directly from renewable producers, see Power right from the producer available at <https://www.axpo.com/dk/en/magazine/innovation/power-right-from-the-producer.html>

¹² Douglas Miller and Peter Mockel, Using blockchain to enable cleaner modern energy systems in emerging markets, page 2 available at <https://www.ifc.org/wps/wcm/connect/46ad7055-a5b5-4db0-af78-92fc67a61566/EMCompass-Note-61-Blockchain.pdf?MOD=AJPERES&CVID=mthzuiy>

¹³ For more details see Douglas Miller and Claire Henly, Blockchain is reimagining the rules of the game in the energy sector available at <http://www.rapidshift.net/blockchain-is-reimagining-the-rules-of-the-game-in-the-energy-sector/>; and supra 12, pages 2 – 4;

¹⁴ Supra 12, page 3.

¹⁵ Leoncio Montemayor, Thomas Boersama, Tom van Dorp, Comprehensive guide to companies involved in blockchain and energy. Solar Plaza, page 34, available at <https://ipci.io/wp-content/uploads/2017/12/Energy-Blockchain-Report.compressed.pdf>, pages 34 and 35.

¹⁶ Supra 15, pages 26, 36 and 41.

¹⁷ Supra 6, page 21.

¹⁸ Supra 15, page 8.

¹⁹ Supra 15, pages 9 – 12 and 15.

²⁰ Supra 10, pages 10 and 16.

²¹ "...this mechanism does not depend on a centralised body or entity that could manipulate or control the flow of resources", page 41, supra 5.

²² "The fast transfer of financial resources from donors to receivers can also be facilitated since blockchain consensus protocols guarantee that information regarding the transfer of those resources is validated within a few minutes. This can then be used to transfer fiat money or well- established cryptocurrencies.", page 41, supra 5.

²³ Supra 7, page 28.

²⁴ Supra 7, page 29. See also International Renewable Energy Agency, Innovation Landscape for a renewable-powered future: Solutions to integrate variable renewables, page 46 available at https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2019/Feb/IRENA_Innovation_Landscape_2019_report.pdf?rev=754a9a1985434152ba4eaa5ef80b7225

²⁵ Christian Hübner, Blockchain technology as driving force for renewable energy development, see supra 5, page 65. See also Maurice Greenberg, David Livingston, Varun Sivaram, Madison Freeman, and Maximilian Fiege, Applying blockchain technology to electric power systems page 13, available at https://backend-live.cfr.org/sites/default/files/report_pdf/Discussion_Paper_Livingston_et_al_Blockchain_OR_0.pdf

²⁶ See also Pascale Bronder, Effective disruption: How blockchain technology can transform the energy sector at <https://www.linkedin.com/pulse/effective-disruption-how-blockchain-technology-can-energy-bronder/> - "...climate financing, governance and security, energy access, and distributed renewable energy..." are four primary use cases in the climate and energy sectors where blockchain technology may make a significant difference. By July 31, 2018 an amount of USD 466 million was invested in blockchain power companies, 79 % of which came from Initial Coin Offerings, see Colleen Metelitsa, State of the market: A snapshot into blockchain deployments and investments in the power sector, page 2, available at <https://innovationweek.irena.org/-/media/InnovationWeek/2018-edition/01-DIGITALISATION-AND-DECENTRALISATION/IRENA-IW18-Blockchain-03-Metelitsa-State-of-the-Market-05-Sept-18.pdf?rev=b99297e403b147f589fa03887f5b6f01&hash=D67405B0208CDCBCB594C9109B1F9ED1>

²⁷ Supra 10, page 10.

²⁸ Sven Braden, Crowd financing for climate action, role of tokenisation in see supra 5, page 60.

²⁹ "Blockchain technology is perfectly suited for the decentralised, digitised new energy paradigm to facilitate a massive roll out of clean energy, with tremendous potential in applications related to energy trade, finance, and electric mobility" - Christian Hübner, Blockchain technology as a driving force for renewable energy development, page 65, available at https://www.goldstandard.org/sites/default/files/documents/cli_report-january19.pdf

³⁰ Maurice Greenberg, David Livingston, Varun Sivaram, Madison Freeman, and Maximilian Fiege, Applying blockchain technology to electric power systems pages 13 - 14, available at https://backend-live.cfr.org/sites/default/files/report_pdf/Discussion_Paper_Livingston_et_al_Blockchain_OR_0.pdf

³¹ Enpower Energy Srl, a limited liability company, having its headquarters at Floreasca Lake Offices, 194 Calea Floreasca, 5th Floor 5, Bucharest, Sector 1, 014472 Romania, duly registered with the Bucharest Trade Registry under no. J40/7012/2016, website www.enpower.ro

³² See <https://www.quora.com/How-much-does-1-MW-of-solar-cell-electricity-generate-to-be-able-to-reduce-CO2-emissions>

³³ Supra 32. See also 1 MW of solar power! available at <https://gridalternatives.org/regions/ie/news/1-megawatt-solar-power>. "One Megawatt of solar power means over 9 million dollars in savings over the lifetime of the systems for families in need. It also offsets 31,500 tons of harmful carbon dioxide emissions, equal to planting over 741,100 trees or removing 5,581 cars from the road for an entire year!"

³⁴ Grace Smoot, What Is the Carbon Footprint of Renewable Energy? A Life-Cycle Assessment available at <https://impactful.ninja/the-carbon-footprint-of-renewable-energy/>, see also Carbom Brief at Solar available at <https://www.carbonbrief.org/solar-wind-nuclear-amazingly-low-carbon-footprints/> - "wind and nuclear have 'amazingly low' carbon footprints..."

³⁵ See <https://www.natureoffice.com/en/carbon-offset-projects/wind-energy>

³⁶ See <https://www.reading.ac.uk/news/2022/Research-News/Hydrogen-based-economy-could-save-carbon-emissions#:~:text=They%20found%20the%20release%20of,a%20%E2%80%9Cgreen%E2%80%9D%20hydrogen%20economy; see also Didier Hauglustaine, Fabien Paulot, William Collins, Richard Derwent, Maria Sand & Olivier Boucher, Climate benefit of a future hydrogen economy available at https://www.nature.com/articles/s43247-022-00626-z>

³⁷ For more detail see The Future of Hydrogen Report prepared by the IEA for the G20, Japan Seizing today's opportunities at https://iea.blob.core.windows.net/assets/9e3a3493-b9a6-4b7d-b499-7ca48e357561/The_Future_of_Hydrogen.pdf

³⁸ For more details see Jeremy Hinsdale, Cryptocurrency's dirty secret: energy consumption available at <https://news.climate.columbia.edu/2022/05/04/cryptocurrency-energy/>

³⁹ See <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32023R1114; also https://www.cssf.lu/en/2023/07/regulation-on-markets-in-crypto-assets-mica-and-regulation-on-information-accompanying-transfers-of-fund-and-certain-crypto-assets/> - "On June 9, 2023, both the Markets in Crypto-Assets Regulation (MiCA or MICAR) and the recast Regulation on information accompanying transfers of funds and certain crypto-assets and amending Directive (EU) 2015/849 (TFR) were published in the Official Journal of the European Union. With MiCA (Regulation (EU) 2023/1114), the European Union is adopting for the first time a harmonised regulatory framework for the crypto-asset market which applies to both traditional institutions of the financial sector and new players emerging in the crypto ecosystem that are engaged in the issuance, offer to the public and admission to trading of crypto-assets or that provide services related to crypto-assets in the EU. These institutions must meet a set of specific requirements to benefit from a regulated status recognised at Union level, thereby permitting the passporting of these services across the EU market. By adopting MiCA, the EU aims to bring legal certainty to the crypto-asset ecosystem and support innovation while safeguarding consumer protection, markets integrity and financial stability. MiCA will come into full application from 30 December 2024, except for Titles III and IV (the framework for asset-referenced tokens (ART) and e-money tokens (EMT) issuers) which will apply from June 30, 2024"

⁴⁰ Legal opinion of Company in Lithuania UAB

⁴¹ See also Republic of Lithuania Law on the Prevention of Money Laundering and Terrorist Financing (<https://eseimas.lrs.lt/portal/legalAct/lt/TAD/2c647332ba5111eb91e294a1358e77e9?jfwid=twcznlk4w>) 2. Republic of Lithuania Law on Electronic Money and Electronic Money Institutions (<https://eseimas.lrs.lt/portal/legalAct/lt/TAD/573b9080166911eaad00dac7ebcb2435?jfwid=-mjdvmv43y>) 3. Republic of Lithuania Law on Payment Institutions 7 (<https://eseimas.lrs.lt/portal/legalAct/lt/TAD/5fc319d0490311e68f45bcf65e0a17ee?jfwid=>

⁴² See supra 40.

⁴³ "Crypto has applications and an inherent malleability that goes beyond what is achievable through TradFi. It's a factor that draws investors to it in the first place.", Simon Schaber, DeFi has a trust gap. What can rebuild its credibility? available at <https://forkast.news/defi-has-trust-gap-what-can-rebuild-credibility/>

⁴⁴ See Charlotte Principato in Don't Trust Crypto, But They're Buying It Anyway by Adam Hardy and Julia Glum available at <https://money.com/trust-in-crypto-low/>

⁴⁵ "A 2018 study published by a University of Michigan law journal found that, rather than being trustless, crypto requires people to supplant their trust in less-regulated and less-accountable parties.", Adam Hardy and Julia Glum, Don't Trust Crypto, But They're Buying It Anyway available at <https://money.com/trust-in-crypto-low/>

⁴⁶ The sales of green energy produced by the underlying assets and the amounts obtained therefrom will be published monthly on the PoerGold website and can be checked against the public information published by the market regulators on their official websites.

⁴⁷ <https://www.pvsyst.com/>

⁴⁸ See infra 64.

⁴⁹ Gage Kellogg, What is PVsyst Solar Design Software? available at <https://www.partneresi.com/resources/articles/what-is-pvsyst-comprehensive-guide-2023/>

⁵⁰ "The estimated technical potential of solar power plants in Croatia is 5,303 MW, with an estimated production of 6,364 GWh of electrical energy annually" - https://www.google.com/search?q=solar+potential+of+croatia&rlz=1C1GCEA_enRO1068RO1068&eq=solar+potential+of+croatia&gs_lcrp=EgZjaHJvbWUyBggAEEUYOTIICAEQABgWGB7SAQoxMzY0MGowajE1qAlAsAIA&sourceid=chrome&ie=UTF-8

⁵¹ "By the end of 2022 Hungary had just over 4,000 megawatt (MW) of photovoltaics capacity, a massive increase from a decade prior. Relatedly, solar power produced 12.5% of the country's electricity in 2022, up from less than 0.1% in 2010." - https://www.google.com/search?q=solar+potential+of+hungary&sca_esv=577589367&rlz=1C1GCEA_enRO1068RO1068&ei=mT4-Za-fAqX87_UPgKquUA&ved=0ahUKEwvjv6q1kJuCAXU_rslHQVCwoQ4dUDCBA&uact=5&eq=solar+potential+of+hungary&gs_lp=Egxn3Mtd2I6LXNlcnAiGnNvbGFyIHbvdGVudGlhbCBvZiBodW5nYXJ5MgYQABgWGB4yBhAAGBYHhkgIVC1jFE3ACeAGQAQCYAWagAZoFqgEDNi4xuAEDyAEA-AEBwgIKAAAYRxiWBBiW8ICCBAAAGBYHhgP4gMEGAAgQYgGAZAGBA&slclient=gws-wiz-serp

⁵² "According to the Hydrology and Meteorology (IHM) of the Bulgarian Academy of Sciences (BAS) has estimated the solar energy potential of the country, which is around 12,995 million metric tons of oil equivalent." - https://www.google.com/search?q=solar+potential+of+bulgaria&sca_esv=577589367&rlz=1C1GCEA_enRO1068RO1068&ei=00E-ZaLtBf2hi-gPsKgt2AE&ved=0ahUKEwjiop2_k5uCAxX90AIHHbBQCxsQ4dUDCBA&uact=5&eq=solar+potential+of+bulgaria&gs_lp=Egxn3Mtd2I6LXNlcnAiG3NvbGFyIHbvdGVudGlhbCBvZiBidWxnYXJpYTIgEAAyFhgeSPomUPcGWJQgCAF4AZABAjgBfaABxwuqAQM3Lji4AQPIAQD4AQHCAGoQABhHGNYEGLADwglIEAAyFhgeGA_CAgcQABgTGIAEwglIEAAyFhgeGBPCAgcQABgWGB4YDxgTwglIEAAyFhgeGAriAwQYACBBiAYBkAYG&slclient=gws-wiz-serp

⁵³ "The entire nation of Italy retains high potential for solar energy production, ranging from 3.6 kWh per square meter per day in the Po river plain to 5.4kWh per square meter per day in Sicily" - https://www.google.com/search?q=solar+potential+of+italy&sca_esv=577589367&rlz=1C1GCEA_enRO1068RO1068&ei=B0M-ZdKDOJW2sAfG04KADw&ved=0ahUKEwiSo77SIJuCAxUVG-wKHcAPAPA4dUDCBA&uact=5&eq=solar+potential+of+italy&gs_lp=Egxn3Mtd2I6LXNlcnAiGHNvbGFyIHbvdGVudGlhbCBvZiBpdGFseTIGEAAYFhgeSOKnUO4GWIEhCAF4AZABAjgBiAGgAaALqgEEMC4xM7gBA8gBAPgBAcICChAAGEcy1gQYsAPCAggQABgWGB4YCsICCBAAAGBYHhgPwglIEAAyExiABMICCBAAAGBYHhgTwglIEAAyFhgeGA8YE-IDBBgAIEGIBgQBgg&slclient=gws-wiz-serp

⁵⁴ International Trade Administration, Market Intelligence, Croatia Renewable Energy available at <https://www.trade.gov/market-intelligence/croatia-renewable-energy>

⁵⁵ Renewable Market Watch, Slovenian Solar Photovoltaic (PV) Power Market with stellar growth in 2022 and excellent development opportunities by 2030 available at <https://renewablemarketwatch.com/news-analysis/487-slovenian-solar-photovoltaic-pv-power-market-with-stellar-growth-in-2022-and-excellent-development-opportunities-by-2030>

-
- ⁵⁶ Bulgaria Solar Energy Market available at <https://ae-solar.com/bulgaria-solar-energy-market/>
- ⁵⁷ Report: Spain's solar power capacity to see strong growth available at <https://www.consultancy.eu/news/8989/report-spains-solar-power-capacity-to-see-strong-growth>
- ⁵⁸ Balkan Green Energy News. Renewables. Spain led solar surge in EU in 2022, plans to almost double its 2030 PV target available at <https://balkangreenenergynews.com/spain-led-solar-surge-in-eu-in-2022-plans-to-almost-double-its-2030-pv-target/>
- ⁵⁹ How much solar energy Italy produces and where it's produced – available at <https://www.enelgreenpower.com/learning-hub/renewable-energies/solar-energy/solar-energy-italy>
- ⁶⁰ <https://en.wikipedia.org/wiki/Romania>
- ⁶¹ <https://www.worldometers.info/world-population/romania-population/>
- ⁶² <https://en.wikipedia.org/wiki/Romania>
- ⁶³ <https://solargis.com/maps-and-gis-data/download/romania>
- ⁶⁴ See Renewable Energy in Romania Study, Flanders Investment & Trade, available at https://www.flandersinvestmentandtrade.com/export/sites/trade/files/market_studies/2021-Romania-Renewable%20energy.pdf
- ⁶⁵ https://www.google.com/search?q=wind+resources+in+romania&rlz=1C1GCEA_enRO1068RO1068&oq=wind+resources+in+romnai&gs_lcrp=EgZjaHJvbWUqCQgBECEYChigATIGCAAQRRg5MgkIARAhGAoYoAEyCQgCECEYChigATIHCAMQIRIPAIHCAQQRIPATIBCTgxNTdqMGoxNagCALACAA&sourceid=chrome&ie=UTF-8
- ⁶⁶ Romania wind energy market size & share analysis – growth trends & forecasts 2023 – 2028 at <https://www.mordorintelligence.com/industry-reports/romania-wind-energy-market>
- ⁶⁷ https://www.researchgate.net/figure/Map-of-the-wind-speed-in-Romania-Source-69_fig4_341423220; the German company Nordex, one of the biggest wind turbine manufacturers in the world, receive their first order from Romania after years of hiatus: "It is great to see a new project. Romania has the best wind power potential in south-eastern Europe." – see [Wind Turbine Maker Nordex Gets First Order From Romania In Years | ZF English](#)
- ⁶⁸ <https://www.britannica.com/place/Romania/Drainage>
- ⁶⁹ <https://member.reportlinker.com/next/search?date=3y&query=%22hydrogen+market+in+romania%22+OR+%28hydrogen+market%29&viewId=730ab0cc362d7d9eee906ecb060984a6&viewType=document&viewedItem=document%3A%3A730ab0cc362d7d9eee906ecb060984a6>
- ⁷⁰ <https://www.enpg.ro/clean-hydrogen-in-romania-elements-of-a-strategy/>
- ⁷¹ Code of good practice for renewable energy in Romania, no. 2, 2023 available at Code-of-Good-Practice-for-Renewable-Energy-In-Romania-No-2.pdf (rwea.ro)
- ⁷² Code of good practice for renewable energy in Romania, no. 2, 2023, page 65, available at Code-of-Good-Practice-for-Renewable-Energy-In-Romania-No-2.pdf (rwea.ro); for more details see also Clean hydrogen in Romania – elements of a strategy available at Clean Hydrogen in Romania – elements of a strategy - EPG (enpg.ro)
- ⁷³ See România, creditată cu cel mai bun potențial de creștere pe termen mediu în regenerabile. Cum arată concurența regională la etapa solare și eoliene? available at <https://www.zfcorporate.ro/energie/romania-creditata-cu-cel-mai-bun-potential-de-crestere-pe-termen-22147567/> see also Riding the wave and catalysing growth. Renewable energy industry in Romania. Report available at <https://seenext.org/reports/renewable-energy-in-romania-2023-edition/>.
- ⁷⁴ <https://www.transelectrica.ro/en/web/tel/home>
- ⁷⁵ https://www.google.com/search?q=kilometri+de+retea+electrica+in+romania&rlz=1C1GCEA_enRO1068RO1068&oq=kilometri+de+retea+electrica+in+romania&gs_lcrp=EgZjaHJvbWUyCQgAEEUYORigATIKCAEQIRgWGB0YHjIHCAIQIRIPAIHCAMQIRIPATIBCTkOMTIqMGoxNagCALACAA&sourceid=chrome&ie=UTF-8#ip=1

⁷⁶ Code of good practice for renewable energy in Romania, no. 2, 2023, page 46, available at [Code-of-Good-Practice-for-Renewable-Energy-In-Romania-No-2.pdf \(rwea.ro\)](#) and <https://www.transelectrica.ro/en/web/tel/investitii-planificare>

⁷⁷ <https://anre.ro/despre/>

⁷⁸ <https://www.opcom.ro/acasa/en>

⁷⁹ Code of good practice for renewable energy in Romania, no. 2, 2023, page 88, available at [Code-of-Good-Practice-for-Renewable-Energy-In-Romania-No-2.pdf \(rwea.ro\)](#)

⁸⁰ Code of good practice for renewable energy in Romania, no. 2, 2023, page 88, available at [Code-of-Good-Practice-for-Renewable-Energy-In-Romania-No-2.pdf \(rwea.ro\)](#)

⁸¹ Electricity market design available at https://energy.ec.europa.eu/topics/markets-and-consumers/market-legislation/electricity-market-design_en

⁸² Code of good practice for renewable energy in Romania, no. 2, 2023, pages 8-10, available at [Code-of-Good-Practice-for-Renewable-Energy-In-Romania-No-2.pdf \(rwea.ro\)](#)

⁸³ Code of good practice for renewable energy in Romania, no. 2, 2023, pages 18 and 26, available at [Code-of-Good-Practice-for-Renewable-Energy-In-Romania-No-2.pdf \(rwea.ro\)](#)

⁸⁴ Code of good practice for renewable energy in Romania, no. 2, 2023, page 27, available at [Code-of-Good-Practice-for-Renewable-Energy-In-Romania-No-2.pdf \(rwea.ro\)](#)

⁸⁵ See <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R1129>

⁸⁶ See <https://www.lb.it/en/legislation>

⁸⁷ Anthony Back, 5 risks you need to know about before investing in cryptocurrencies available at <https://anthonyback.medium.com/the-risks-benefits-of-investing-in-cryptocurrencies-digital-assets-52689c2a222e>

⁸⁸ See supra 87.

⁸⁹ For more tips and advice see also BEWARE OF CRYPTO-SCAMS, THE TOP THREAT TO INVESTORS “BY FAR available at <https://internationalbanker.com/brokerage/beware-of-crypto-scams-the-top-threat-to-investors-by-far/>

⁹⁰ For more information see also Jake Frankenfield, Cierra Murry, Suzanne Kvilhaug, Cryptocurrency explained with pros and cons for investment. Learn what you need before investing in a virtual currency available at <https://www.investopedia.com/terms/c/cryptocurrency.asp>

PVsyst - Simulation report

Grid-Connected System

Project: Buzau_PowerGold

PowerGold - 2024

No 3D scene defined, no shadings

System power: 10.00 MWp

Brebeanca - Romania

Author

Enpower Energy SRL (Romania)



Project: Buzau_PowerGold

Variant: PowerGold - 2024

PVsyst V7.2.21

VCO, Simulation date:
18/10/23 12:10
with v7.2.21

Enpower Energy SRL (Romania)

Project summary

Geographical Site		Situation		Project settings	
Brebeanca		Latitude	44.98 °N	Albedo	0.20
Romania		Longitude	26.79 °E		
		Altitude	78 m		
		Time zone	UTC+2		
Meteo data					
Brebeanca					
Meteonorm 8.0 (1991-2010), Sat=100% - Synthetic					

System summary

Grid-Connected System		No 3D scene defined, no shadings			
PV Field Orientation		Tracking algorithm		Near Shadings	
Orientation		Astronomic calculation		No Shadings	
Tracking two axis, frame E-W					
System information					
PV Array					
Nb. of modules	18522 units	Inverters		9 units	
Pnom total	10.00 MWp	Nb. of units		9000 kWac	
		Pnom total		1.111	
		Pnom ratio			
User's needs					
Unlimited load (grid)					

Results summary

Produced Energy	18.55 GWh/year	Specific production	1854 kWh/kWp/year	Perf. Ratio PR	87.62 %
-----------------	----------------	---------------------	-------------------	----------------	---------

Table of contents

Project and results summary	2
General parameters, PV Array Characteristics, System losses	3
Main results	4
Loss diagram	5
Special graphs	6
Cost of the system	7
Financial analysis	8
CO ₂ Emission Balance	11



General parameters

Grid-Connected System		No 3D scene defined, no shadings	
PV Field Orientation		Tracking algorithm	Trackers configuration
Orientation Tracking two axis, frame E-W		Astronomic calculation	No 3D scene defined
Models used			
Transposition	Perez		
Diffuse	Perez, Meteonorm		
Circumsolar	separate		
Horizon		Near Shadings	User's needs
Free Horizon		No Shadings	Unlimited load (grid)

PV Array Characteristics

PV module		Inverter	
Manufacturer	Luxor	Manufacturer	Generic
Model	LX-540M/182-144+	Model	1000 kWac central inverter
(Original PVsyst database)		(Original PVsyst database)	
Unit Nom. Power	540 Wp	Unit Nom. Power	1000 kWac
Number of PV modules	18522 units	Number of inverters	9 units
Nominal (STC)	10.00 MWp	Total power	9000 kWac
Optimizer Array	343 Strings x 1 In series	Operating voltage	700-1500 V
At operating cond. (50°C)		Pnom ratio (DC:AC)	1.11
Pmpp	9106 kWp		
U mpp	2003 V		
I mpp	4546 A		
AMPT String Optimizer			
Model	V1000-32-30		
Unit Nom. Power	29900 W		
Input modules	2 * 27 in series		
Total PV power		Total inverter power	
Nominal (STC)	10002 kWp	Total power	9000 kWac
Total	18522 modules	Number of inverters	9 units
Module area	47868 m ²	Pnom ratio	1.11
Cell area	44008 m ²		

Array losses

Thermal Loss factor		DC wiring losses		Module Quality Loss				
Module temperature according to irradiance		Global array res.	1.5 mΩ	Loss Fraction	-0.8 %			
Uc (const)	20.0 W/m ² K	Loss Fraction	1.5 % at STC					
Uv (wind)	0.0 W/m ² K/m/s							
Module mismatch losses		Strings Mismatch loss						
Loss Fraction	2.0 % at MPP	Loss Fraction	0.1 %					
IAM loss factor								
Incidence effect (IAM): Fresnel, AR coating, n(glass)=1.526, n(AR)=1.290								
0°	30°	50°	60°	70°	75°	80°	85°	90°
1.000	0.999	0.987	0.962	0.892	0.816	0.681	0.440	0.000



Project: Buzau_PowerGold

Variant: PowerGold - 2024

PVsyst V7.2.21

VCO, Simulation date:
18/10/23 12:10
with v7.2.21

Enpower Energy SRL (Romania)

Main results

System Production

Produced Energy 18.55 GWh/year Specific production 1854 kWh/kWp/year
Performance Ratio PR 87.62 %

Economic evaluation

Investment

Global 10071660.00 EUR
Specific 1.01 EUR/Wp

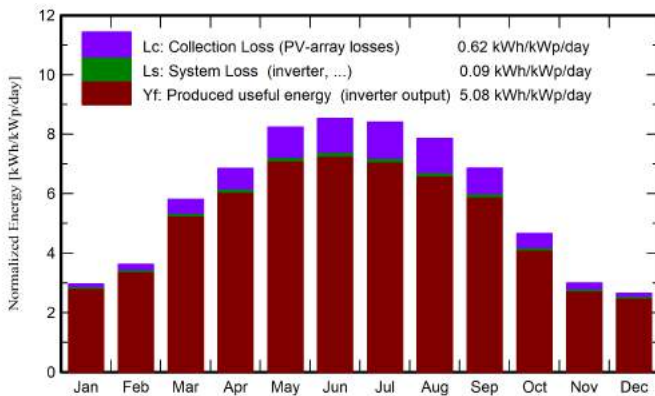
Yearly cost

Annuities 0.00 EUR/yr
Run. costs 653335.96 EUR/yr
Payback period 5.0 years

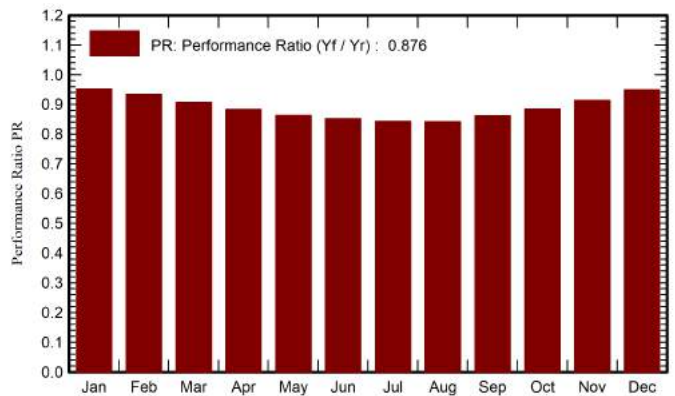
LCOE

Energy cost 0.05 EUR/kWh

Normalized productions (per installed kWp)



Performance Ratio PR



Balances and main results

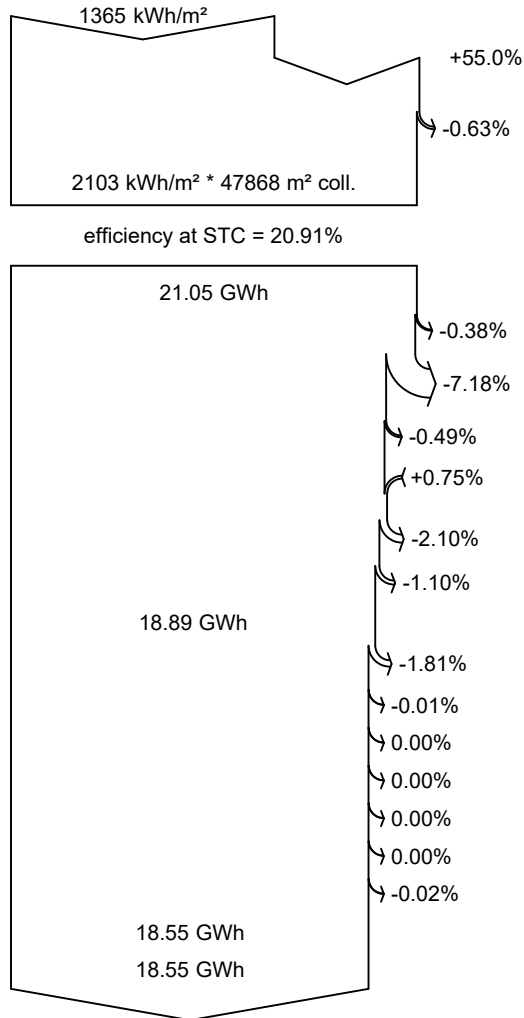
	GlobHor kWh/m ²	DiffHor kWh/m ²	T_Amb °C	GlobInc kWh/m ²	GlobEff kWh/m ²	EArray GWh	E_Grid GWh	PR ratio
January	43.2	25.38	-1.66	92.0	91.4	0.894	0.876	0.952
February	59.1	33.68	0.73	101.4	100.7	0.966	0.947	0.933
March	108.5	50.50	6.38	179.9	178.8	1.662	1.631	0.907
April	139.4	60.23	12.05	205.7	204.4	1.851	1.817	0.883
May	181.3	80.89	18.09	255.6	253.9	2.245	2.205	0.862
June	190.5	80.66	21.62	256.0	254.3	2.220	2.181	0.852
July	188.6	85.26	24.48	260.5	258.8	2.235	2.195	0.842
August	168.8	73.31	24.64	243.3	241.8	2.083	2.047	0.841
September	125.1	48.63	18.36	205.7	204.6	1.805	1.772	0.861
October	82.0	40.16	12.08	144.3	143.4	1.301	1.277	0.884
November	43.9	24.79	6.44	90.1	89.6	0.840	0.823	0.913
December	34.9	20.05	0.45	81.8	81.4	0.792	0.777	0.949
Year	1365.4	623.53	12.03	2116.4	2103.0	18.894	18.547	0.876

Legends

GlobHor	Global horizontal irradiation	EArray	Effective energy at the output of the array
DiffHor	Horizontal diffuse irradiation	E_Grid	Energy injected into grid
T_Amb	Ambient Temperature	PR	Performance Ratio
GlobInc	Global incident in coll. plane		
GlobEff	Effective Global, corr. for IAM and shadings		



Loss diagram

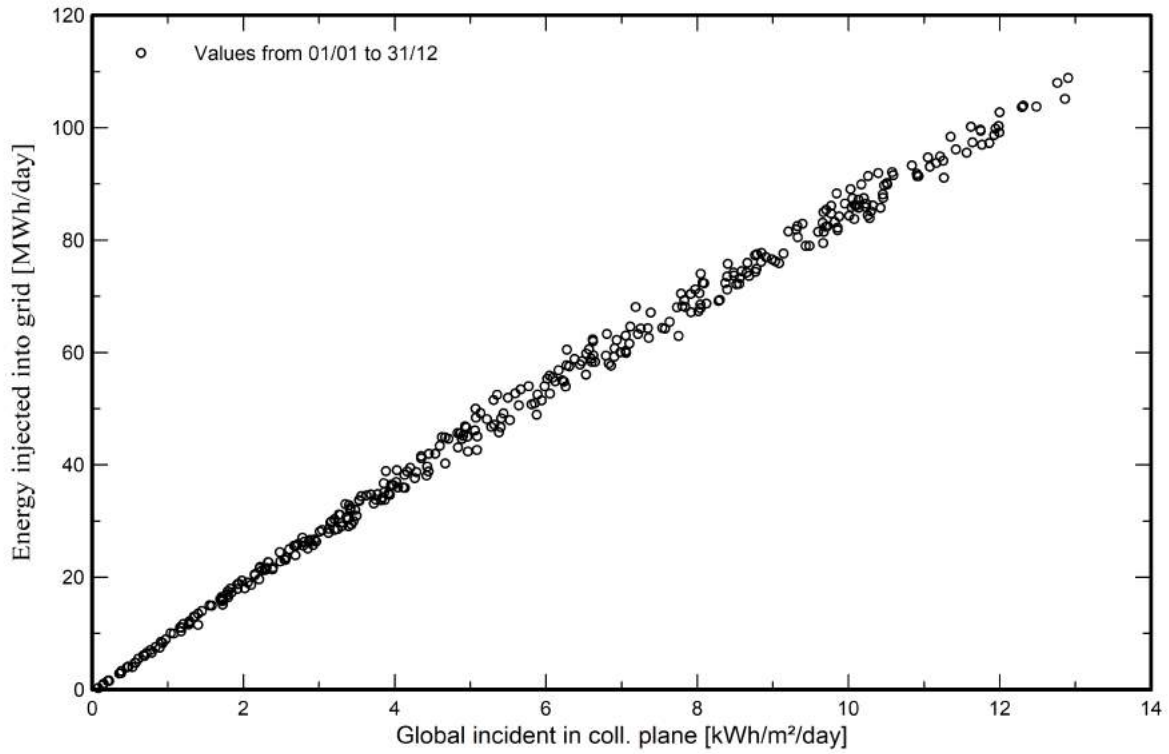


- Global horizontal irradiation**
- Global incident in coll. plane**
- IAM factor on global
- Effective irradiation on collectors**
- PV conversion
- Array nominal energy (at STC effic.)**
- PV loss due to irradiance level
- PV loss due to temperature
- Optimizer efficiency loss
- Module quality loss
- Mismatch loss, modules and strings
- Ohmic wiring loss
- Array virtual energy at MPP**
- Inverter Loss during operation (efficiency)
- Inverter Loss over nominal inv. power
- Inverter Loss due to max. input current
- Inverter Loss over nominal inv. voltage
- Inverter Loss due to power threshold
- Inverter Loss due to voltage threshold
- Night consumption
- Available Energy at Inverter Output**
- Energy injected into grid**

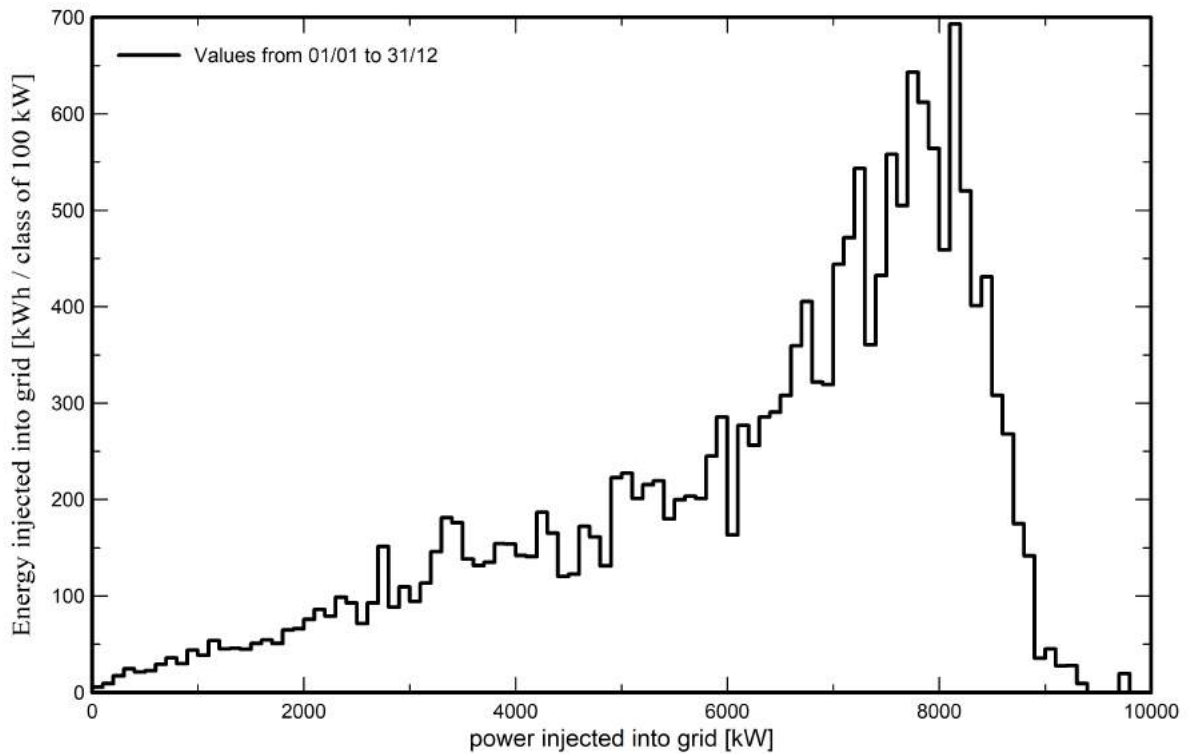


Special graphs

Daily Input/Output diagram



System Output Power Distribution



**Cost of the system****Installation costs**

Item	Quantity units	Cost EUR	Total EUR
PV modules			
LX-540M/182-144+	18522	410.00	7594020.00
Trackers	18522	120.00	2222640.00
Inverters			
1000 kWac central inverter	9	5000.00	45000.00
Other components			
Accessories, fasteners	50	50.00	2500.00
Wiring	50	50.00	2500.00
Combiner box	50	50.00	2500.00
Monitoring system, display screen	50	50.00	2500.00
Studies and analysis			
Engineering	1	50000.00	50000.00
Permitting and other admin. Fees	1	50000.00	50000.00
Environmental studies	1	50000.00	50000.00
Economic analysis	1	50000.00	50000.00
Total			10071660.00
Depreciable asset			9864160.00

Operating costs

Item	Total EUR/year
Maintenance	
Salaries	70000.00
Land rent	22500.00
Insurance	
Facilities insurance	30000.00
Total (OPEX)	122500.00
Including inflation (12.00%)	653335.96

System summary

Total installation cost	10071660.00 EUR
Operating costs (incl. inflation 12.00%/year)	653335.96 EUR/year
Produced Energy	18547 MWh/year
Cost of produced energy (LCOE)	0.050 EUR/kWh



Project: Buzau_PowerGold

Variant: PowerGold - 2024

PVsyst V7.2.21

VCO, Simulation date:
18/10/23 12:10
with v7.2.21

Enpower Energy SRL (Romania)

Financial analysis

Simulation period			
Project lifetime	25 years	Start year	2024
Income variation over time			
Inflation			12.00 %/year
Production variation (aging)			1.00 %/year
Discount rate			0.00 %/year
Income dependent expenses			
Income tax rate			12.50 %/year
Other income tax			0.00 %/year
Dividends			0.00 %/year
Financing			
Own funds		10071660.00	EUR
Electricity sale			
Feed-in tariff		0.1300	EUR/kWh
Duration of tariff warranty		25	years
Annual connection tax		0.00	EUR/kWh
Annual tariff variation		0.0	%/year
Feed-in tariff decrease after warranty		0.00	%
Return on investment			
Payback period		5.0	years
Net present value (NPV)		35235758.61	EUR
Return on investment (ROI)		349.9	%



Project: Buzau_PowerGold

Variant: PowerGold - 2024

PVsyst V7.2.21

VCO, Simulation date:
18/10/23 12:10
with v7.2.21

Enpower Energy SRL (Romania)

Financial analysis

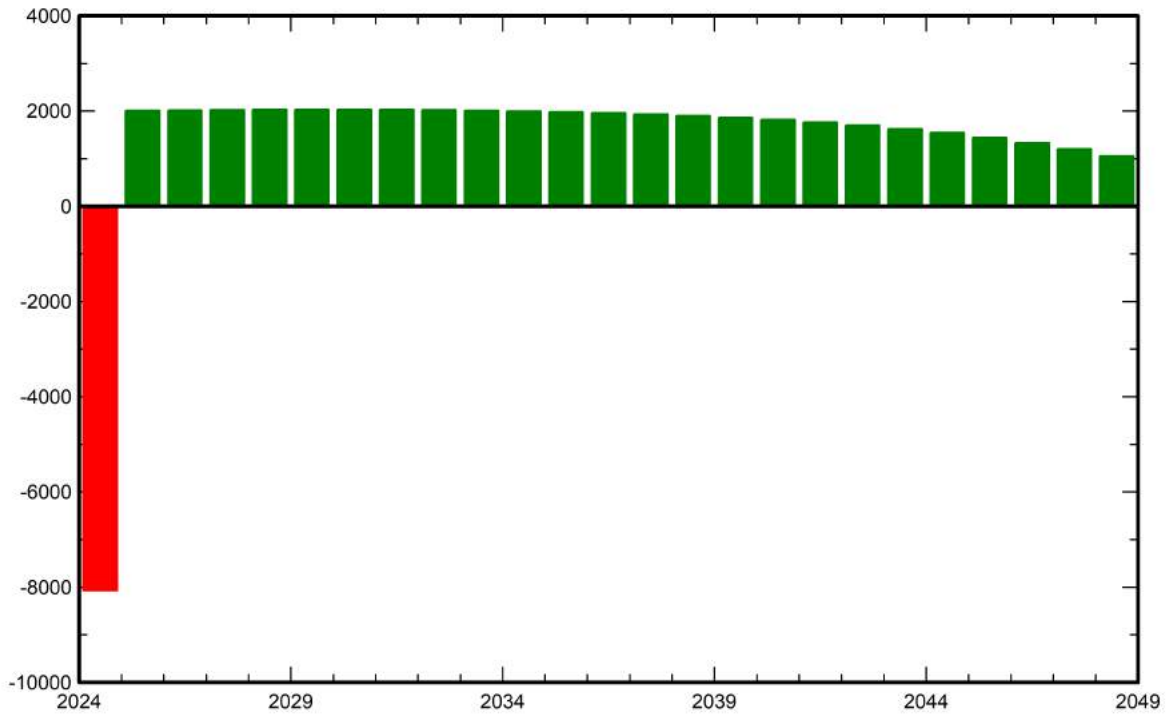
Detailed economic results (kEUR)

	Electricity sale	Run. costs	Deprec. allow.	Taxable income	Taxes	After-tax profit	Cumul. profit	% amorti.
2024	2412	123	0	2289	286	2003	-8069	19.9%
2025	2436	137	0	2299	287	2011	-6057	39.9%
2026	2460	154	0	2306	288	2018	-4039	59.9%
2027	2485	172	0	2313	289	2024	-2016	80.0%
2028	2510	193	0	2317	290	2027	12	100.1%
2029	2535	216	0	2319	290	2029	2041	120.3%
2030	2560	242	0	2318	290	2028	4069	140.4%
2031	2586	271	0	2315	289	2025	6094	160.5%
2032	2611	303	0	2308	289	2020	8114	180.6%
2033	2638	340	0	2298	287	2011	10125	200.5%
2034	2664	380	0	2284	285	1998	12123	220.4%
2035	2691	426	0	2265	283	1981	14104	240.0%
2036	2718	477	0	2240	280	1960	16065	259.5%
2037	2745	535	0	2210	276	1934	17998	278.7%
2038	2772	599	0	2173	272	1902	19900	297.6%
2039	2800	671	0	2129	266	1863	21763	316.1%
2040	2828	751	0	2077	260	1817	23581	334.1%
2041	2856	841	0	2015	252	1763	25344	351.6%
2042	2885	942	0	1943	243	1700	27044	368.5%
2043	2914	1055	0	1858	232	1626	28670	384.7%
2044	2943	1182	0	1761	220	1541	30211	400.0%
2045	2972	1323	0	1649	206	1443	31653	414.3%
2046	3002	1482	0	1520	190	1330	32983	427.5%
2047	3032	1660	0	1372	171	1200	34183	439.4%
2048	3062	1859	0	1203	150	1052	35236	449.9%
Total	68113	16333	0	51780	6472	45307	35236	449.9%

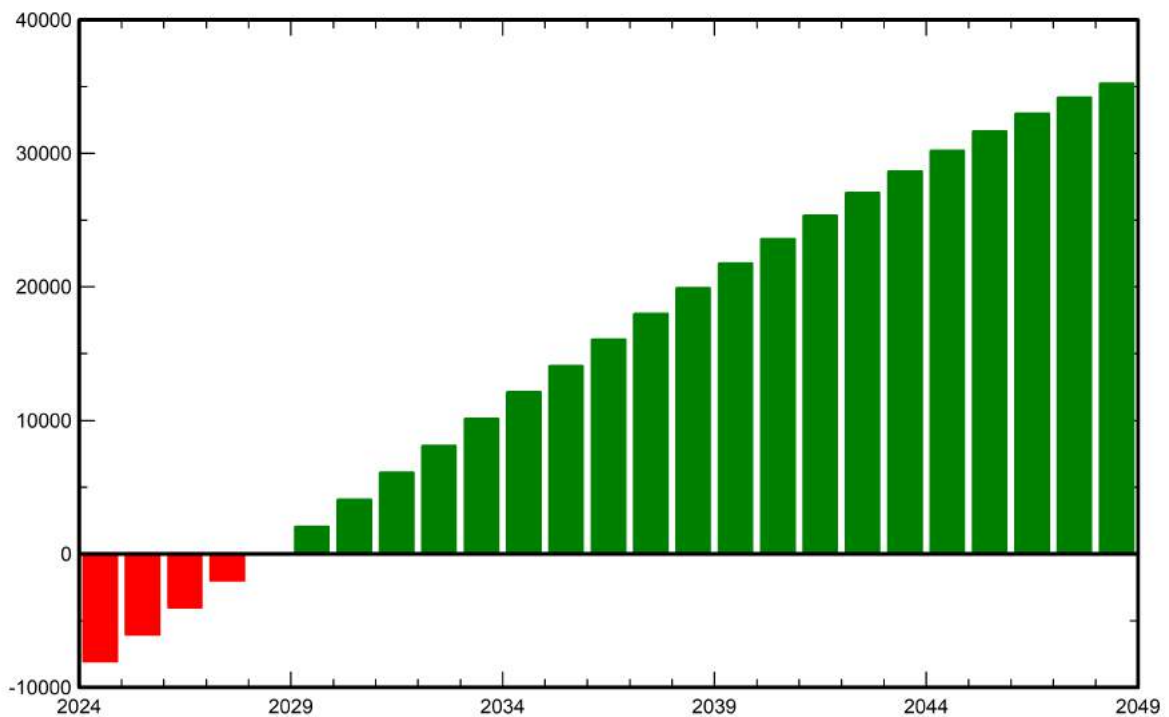


Financial analysis

Yearly net profit (kEUR)



Cumulative cashflow (kEUR)





PVsyst V7.2.21

VCO, Simulation date:
18/10/23 12:10
with v7.2.21

CO₂ Emission Balance

Total: 204964.0 tCO₂

Generated emissions

Total: 20011.41 tCO₂

Source: Detailed calculation from table below:

Replaced Emissions

Total: 259288.2 tCO₂

System production: 18547.08 MWh/yr

Grid Lifecycle Emissions: 466 gCO₂/kWh

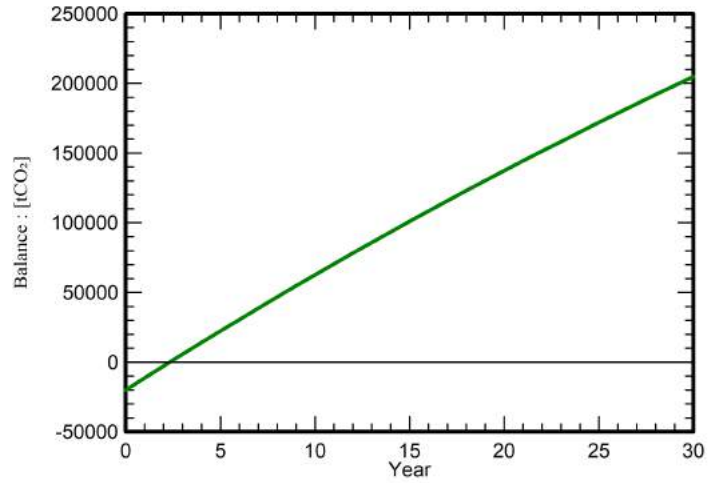
Source: IEA List

Country: Romania

Lifetime: 30 years

Annual degradation: 1.0 %

Saved CO₂ Emission vs. Time



System Lifecycle Emissions Details

Item	LCE	Quantity	Subtotal
			[kgCO ₂]
Modules	1713 kgCO ₂ /kWp	10002 kWp	17130420
Supports	3.11 kgCO ₂ /kg	926100 kg	2878523
Inverters	308 kgCO ₂ /units	8.00 units	2463