



# TREETINO

whitepaper

The future of energy rooted in sustainability

# TL;DR

In this whitepaper, we as Treetino Corp s.r.o. present an innovative solution at the intersection of sustainable energy generation and Web3 technology. We are addressing the escalating global energy demand and the underutilization of urban spaces. Treetino develops aesthetically integrated, high-efficiency solar and wind energy generation units, dubbed "Treetino Trees."

This document will outline both our business plan with the HW trees, where we try to position them in this lucrative but very old-fashioned market and our innovative blockchain solution positioned to disrupt it.

Our HW units leverage existing Victron Energy infrastructure, focusing on superior design and energy output compared to conventional alternatives that currently exist. The project introduces a robust Web3 framework to democratize access to renewable energy investments, ensure transparent energy data recording, and foster a community-driven ecosystem, which aims to bring power over this vital resource into the hands of the consumers most sensitive to recent unprecedentedly growing prices.

Through a multi-token economy, Treetino offers investors attractive, liquid returns on energy infrastructure, provides on-chain verification of green energy production, and establishes a path towards decentralized autonomous organization (DAO) governance. Treetino is poised to transform urban landscapes into intelligent, clean energy hubs, offering a compelling investment opportunity for both traditional and Web3-native capital.



# Energy demands and our vision

The global energy landscape is undergoing a profound transformation, driven by an ever-increasing demand for power coupled with an urgent need for sustainable solutions. Traditional energy infrastructure often struggles to adapt to this dual challenge, particularly in urban environments where space is at a premium and aesthetic considerations are paramount. The proliferation of electric vehicles, AI-driven data centers, and advanced robotics further exacerbates the demand, highlighting a critical need for innovative, distributed energy generation.

Treetino directly addresses this imperative by reimagining urban energy production. Our core innovation lies in the development of highly efficient, visually appealing energy generation units – the Treetino Trees – designed to seamlessly integrate into and revitalize underutilized urban spaces such as parks, car parks, and roundabouts. Unlike conventional solar panels that often compromise urban aesthetics and require a significant footprint, Treetino Trees offer a futuristic design combined with superior energy output, making them a compelling alternative to existing solutions.



# A fusion of design and efficiency

We are engineering 2 models right now with carefully picked characteristics to best position us in this market:

- 300/128 solar leaves: Utilizing the most effective technology and AI to track sun movement boosting efficiency by 32%
- 12/5 wind turbines: Uniquely designed to operate efficiently at low wind speeds, ensuring continuous power generation, even at night. They are also silent, making them suitable for urban environments.
- 49/12 kWh: Thanks to combining these two we can outrank the existing options powering up to 60/15 modern households.
- Minimal Footprint: Occupying just 1m<sup>2</sup> of ground space and made to fit European no-license for construction, Treetino Trees offer a compact solution that saves approximately 400m<sup>2</sup> of space compared to traditional installations, equivalent to two tennis courts.
- 180k/40k EUR: At this price we can aim to capture non-trivial portion of this lucrative and growing market of design sustainable energy production in urban environments.

Competitors exist and we see that as bullish information. We distinguish ourselves through an unique blend of futuristic design, enhanced energy production capabilities, and efficient space utilization.



300



12



49kWh



400 m<sup>2</sup>



1 m<sup>2</sup>



60

# Competition

SolarBotanic™ Trees

€25k

3.4 kWh



SmartFlower

€35k

4 kWh



Spotlight Solar (Industry)

€45k

3 kWh



# Unique wind turbine technology

Traditional wind turbines face critical limitations in urban environments: high minimum wind speeds, excessive noise, and poor aesthetic integration. Our wind turbine design, developed over the past two years solves these challenges through an enhanced Savonius vertical-axis turbine wrapped with a proprietary transparent blade-directing system.

While conventional Savonius turbines capture wind from any direction and operate at lower speeds than horizontal-axis alternatives, they typically suffer from low efficiency. Treetino's breakthrough centers on transparent outer blades that channel and accelerate incoming air directly into the Savonius rotor at optimal angles, creating localized pressure differentials that deliver efficiency improvements of up to 27% over conventional designs.

Treetino turbines initiate rotation at wind speeds as low as 2 meters per second—compared to 3-4 m/s for traditional turbines—making them ideal for urban settings where buildings create turbulent, lower-velocity wind patterns. The turbines operate continuously, complementing solar generation during daylight and providing the only energy production at night.

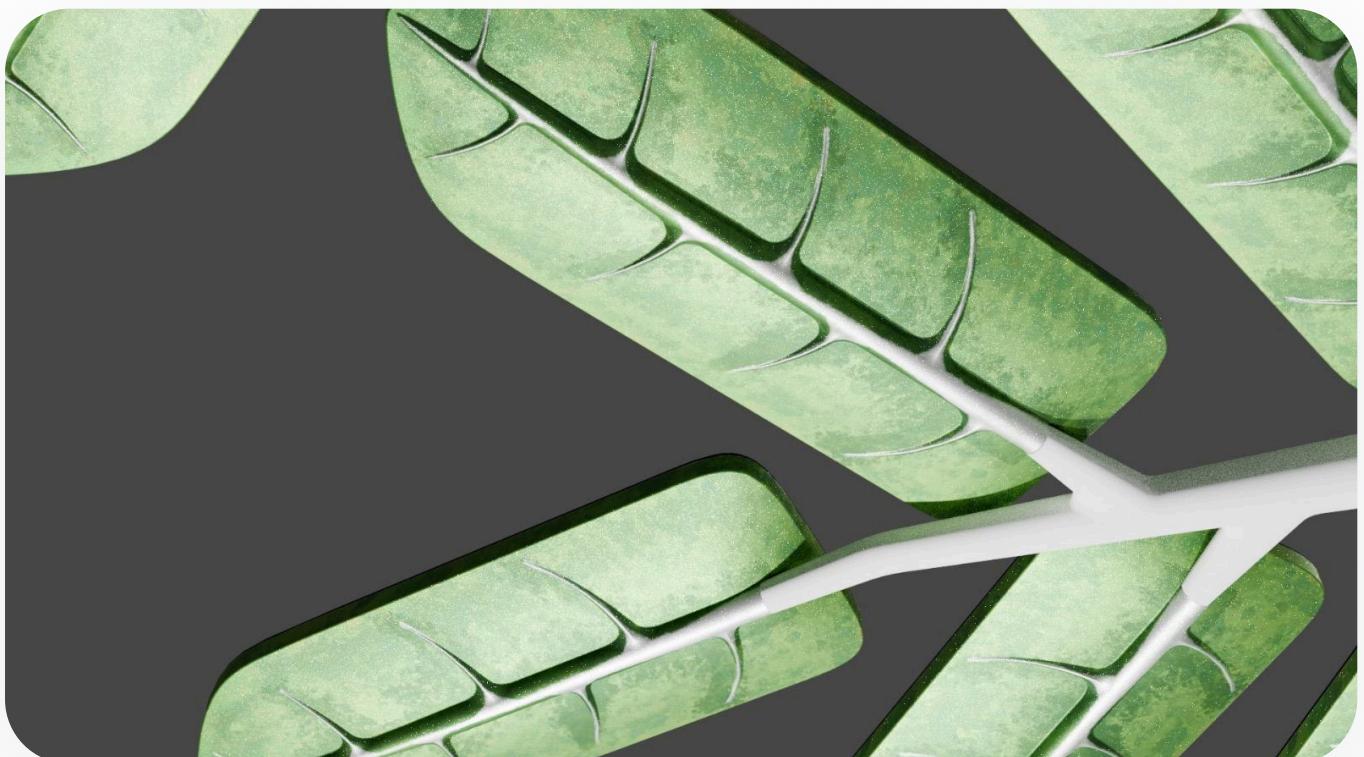
Noise pollution presents a critical barrier to urban wind adoption. Treetino's vertical-axis configuration eliminates high-speed blade tip rotation—the primary noise source in horizontal turbines—while transparent directional blades minimize turbulent flow. The result is whisper-quiet operation below 35 decibels at 10 meters, enabling installation near residential areas, schools, and healthcare facilities.



# Competitive advantage

Treetino operates within the rapidly expanding renewable energy market, specifically targeting urban environments. Our competitive advantages stem from a multi-faceted approach:

- Addressing Growing Demand: Positioned to capitalize on the escalating global energy consumption, offering a scalable and sustainable solution.
- Unique Design and Space Utilization: Our futuristic Treetino Trees offer an aesthetic and functional advantage, transforming unusable urban spaces into productive energy hubs.
- Superior Energy Output: Outperforming existing competitors in terms of energy generation per footprint, making Treetino a highly efficient choice.
- Web3 Integration: The blockchain-based Energy, Capital, and Governance Protocols provide unparalleled transparency, liquidity, and community engagement, differentiating Treetino from traditional renewable energy projects.
- Leveraging AI: Integration of state-of-the-art AI for optimization further enhances the efficiency and performance of Treetino Trees.





# TREETINO

Web3 visions

The human owned future of energy rooted in blockchain

# Decentralizing green energy

Our vision extends beyond physical energy generation; it encompasses a comprehensive Web3 protocol designed to bring transparency, efficiency, and community participation to the renewable energy sector. This protocol is built upon three interconnected pillars: the Energy Protocol, the Capital Protocol, and the Governance Protocol, each powered by a distinct token.

We intend to build on an EVM-compatible blockchain, with Flow currently under consideration, pending ongoing discussions. The choice of blockchain will prioritize scalability, security, and developer support, ensuring a robust foundation for the entire ecosystem. The multi-chain approach, including "presale modules" for fundraising, will allow for flexibility in accepting both fiat and various cryptocurrencies, catering to a broad investor base.

Energy production data from Victron Energy hardware is collected via IoT sensors. This data is then processed through a custom solution developed in collaboration with our development agency, which acts as an intermediary layer to bring the energy output data onto the blockchain. This process ensures that every kilowatt-hour (kWh) produced by a Treetino Tree is accurately and immutably recorded on-chain. This gives us scalability beyond just our sales as we are creating a solution ready to be pushed into the entire network through our contact providing a unique solution to the market.



# Three pillars

The Treetino ecosystem operates through three interconnected tokens. Together, they bridge the gap between physical renewable energy production and decentralized finance. This tri-token structure ensures transparency, liquidity, and community-driven control over every stage of the green energy cycle—from generation to reinvestment.

This reflects our belief that blockchain technology should serve a real-world market - not speculative memecoins - but assets transparently traded and rooted in tangible value.



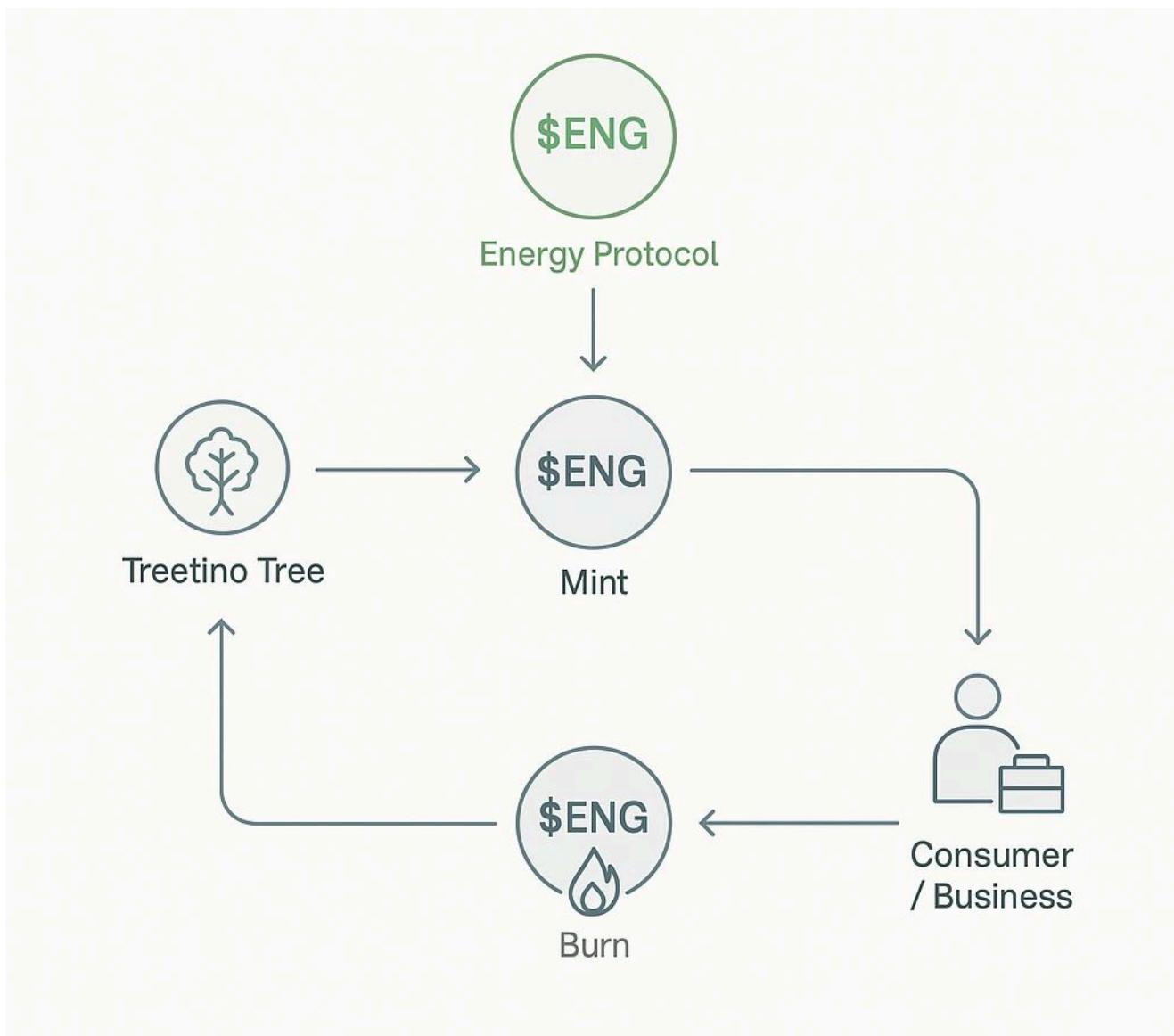
# Energy (\$ENG)

**Purpose:** Represents verified energy generation (1 \$ENG = 1 kWh).

**Utility:** Enables transparent energy accounting and trade.

**Mechanics:** Minted via IoT data; burned upon energy consumption.

**Goal:** Build trust and liquidity in clean energy as a measurable, tradable asset. We aim to bring power into the hands of small energy producers and transparent price discovery for consumers.



# Vault (\$VAULT)

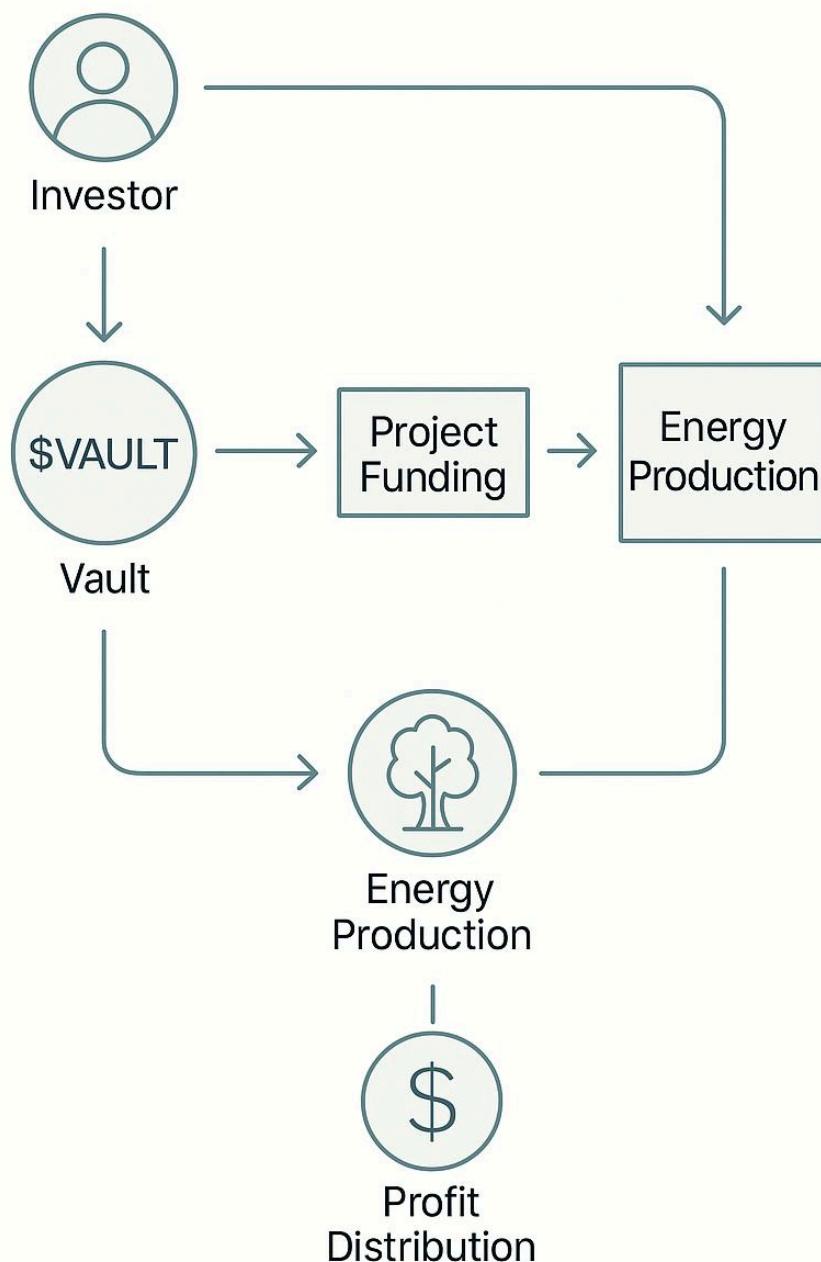
**Purpose:** Tokenized investment position in real-world energy projects.

## Mechanics:

- ERC-4626 compatible vault token.
- Represents claim on yield from monetization strategies

## Benefits:

- Instant liquidity (tradable on secondary market).
- Diversified exposure to multiple projects.
- Compounding yield via liquidity provision and staking.

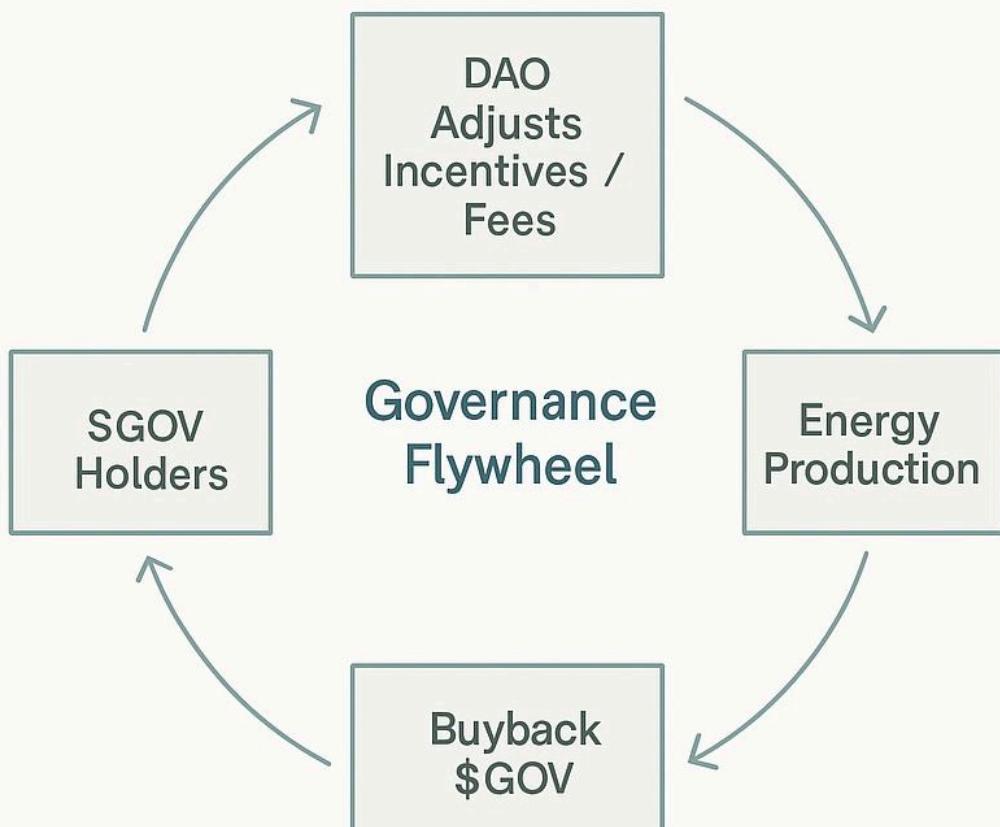


# Governance (\$GOV)

**Purpose:** Aligns incentives and decentralizes platform control.

**Utility:**

- Voting on DAO proposals, project approvals, and platform parameters.
  - Staking rewards for liquidity providers and long-term supporters.
- Goal: Create an ecosystem governed by those who sustain it.



# Backed by energy sales

Beyond our Web2 HW sales we position ourselves in Web3 as a Real-World Asset (RWA) and Decentralized Physical Infrastructure Network (DePIN) project, where investors directly fund the construction of Treetino Trees through \$VAULT tokens. This investment model delivers transparent, blockchain-verified returns of at least 7% annually, backed by actual energy sales recorded immutably on-chain.

Unlike traditional renewable energy investments, every kilowatt-hour produced is minted as \$ENG tokens with cryptographic proof of origin. This creates a human-to-human energy marketplace where buyers can verify they're purchasing genuinely green energy—not just paper certificates. This transparency may command premium pricing above baseline calculations, as consumers increasingly value verifiable sustainability, but in our promises we count on selling at baseline price.

The revenue model extends beyond energy sales. Each Treetino Tree generates energy production, but also additional revenue from weather data licensing, and carbon credits. As the network grows, aggregated IoT sensor data becomes increasingly valuable—a single tree provides limited insights, but hundreds create comprehensive urban climate models worth substantial licensing fees to municipalities, agricultural companies, and research institutions.

With such project we of course have to highlight the network effect multiplier, which means that each additional installation exponentially increases the value of the entire ecosystem. More trees mean more data, more energy trading opportunities, and stronger carbon credit portfolios—all transparently distributed to \$VAULT holders through smart contracts.



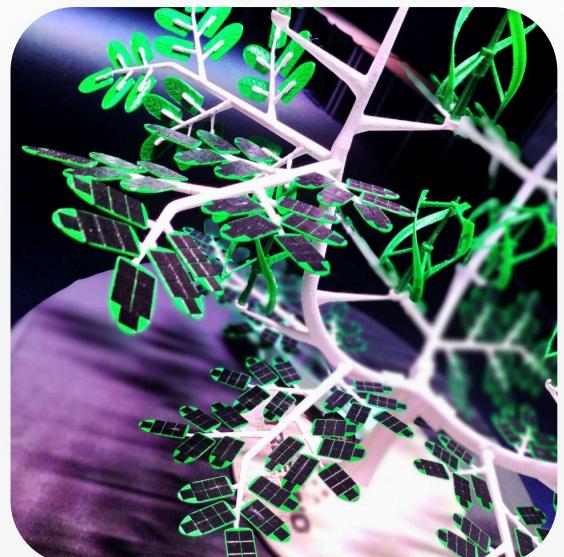
# Smart energy trading

With distributed sensors across our growing network, Treetino will develop \*\*sophisticated energy trading algorithms\*\* that capitalize on market volatility. Our installations generate unprecedented datasets on production patterns, weather conditions, and real-time consumption trends—creating a competitive advantage in energy arbitrage.

Each Treetino Tree includes \*\*integrated battery systems\*\* that execute automated trades based on spot market prices. European energy markets regularly experience \*\*negative pricing\*\* when renewable generation exceeds demand—the grid literally pays consumers to absorb excess power. Our algorithm automatically charges batteries during these windows and discharges when prices spike during peak demand periods like evenings or extreme weather events.

This \*\*battery arbitrage strategy\*\* multiplies returns beyond base energy generation. The system requires no human intervention—smart contracts monitor market conditions continuously, optimizing charge/discharge cycles to maximize profit. As our network scales, the algorithm becomes increasingly sophisticated, learning patterns and predicting price movements with greater accuracy.

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# Urban mobility focus

Perhaps our most innovative revenue stream leverages the sharing economy: rental electric scooter and moped batteries for food delivery couriers. We've engineered a dual-purpose system where the same batteries serve both grid arbitrage and courier rentals.

The model sources affordable swappable batteries from Chinese manufacturers, cost-optimized for high-volume deployment. During off-peak hours (late night and early morning), these batteries participate in grid trading—charging when prices are negative, selling when they're high. Until we have a vast forest of trees we will focus on renting to delivery platforms like Uber Eats, Deliveroo, and Bolt Food.

Even then the financial analysis demonstrates investment recovery in approximately 6 months through rental fees alone, with energy arbitrage providing pure additional profit. Delivery couriers can save a lot of time and money with electric mopeds in traffic. Meanwhile, battery rental during peak delivery hours perfectly aligns with off-peak grid arbitrage opportunities.

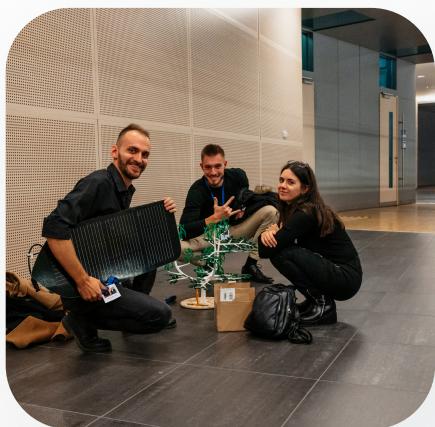
This creates a symbiotic ecosystem where the same hardware generates multiple simultaneous revenue streams—energy trading profits subsidize affordable battery rentals for gig workers, while rental income accelerates platform growth and funds additional tree deployments.

The combination of energy sales, data licensing, carbon credits, trading algorithms, and battery rentals establishes a diversified foundation resistant to single-market fluctuations. This multi-stream approach ensures \$VAULT holders receive stable returns across all economic conditions, positioning Treetino as a resilient investment in the future of decentralized energy infrastructure.

Initially we can guarantee 7% p.a. ROI paid monthly thanks to selling the energy alone. But as you can see, with time, scale and algorithm training we create a very lucrative suite of products for all in the DAO.

# Conclusion

Treetino is more than an energy project; it is a vision for a decentralized, sustainable, and aesthetically pleasing urban future. By combining cutting-edge renewable energy technology with the transformative power of Web3, Treetino offers a unique opportunity to invest in real-world assets with tangible returns, contribute to environmental sustainability, and participate in a truly decentralized ecosystem. We invite investors, developers, and environmental advocates to join us in rooting the future of energy in Web3.



# Team



## Dominik Mašek

Founder and CEO of the project. He has been working in the energy market for the past 5 years on projects related to funding of large-scale wind turbines and navigating Czech/EU energy regulations. He is also the founder of Wattino, a company selling design photovoltaics that can be mounted as facades, transforming modern houses into powerhouses. Under his leadership, Wattino has delivered over 23 MW of solar installations across the Czech Republic. His background includes a technical high school education in mechanical engineering and 5 years of hands-on engineering practice in manufacturing, providing critical expertise in hardware integration and system reliability essential for IoT sensor deployment. With 7 years of entrepreneurial experience managing technical teams and coordinating complex installations, he brings proven execution capabilities and an established network of energy producers across Central Europe to lead Treetino's mission of bridging decentralized energy production with blockchain-verified trading mechanisms.

## Jakub Lustyk

Cofounder and CTO, with a primary focus on fundraising and software integrations. He started with a marketing agency at 19, which led to founding two startups and gradually venturing into Web3 - first working at two centralized exchanges, then launching a SocialFi project.



# Team



## Matěj Čížek

Designer specializing in interdisciplinary problem solving and technical design. Now studying design at the Faculty of Architecture, CTU in Prague. Bachelor's thesis with the BioEM research team from FBMI, CTU, on new tech for diagnosing cerebrovascular complications.

## Monika Zvěřinová

PR lead, supporting marketing and good project visibility. She currently works as a news reporter for the second largest television in the country. Her public speaking expertise and communication skills are setting us up for global success beyond our region.



## Greta Božkova

Shapes the project's public voice and visibility, leading its social media presence, marketing strategy, and brand expression. She manages communications and project workflows, aligning content, timelines, and team coordination.

# Team



## Radim Novotny

Designer and mechanical engineering expert with 10 years of experience in structural design & product development. His expertise in mechanical systems and construction design is critical for developing Treetino's IoT sensor hardware, ensuring reliable integration with energy production infrastructure.

## Artiffine team

An external Web3 development agency with experienced developers, accomplished Web3 consultants, legal heavyweights, and communications masterminds. They are active members of Web3 communities and regularly present their ideas at international conferences and meetups.



## Wattino team

Tomáš Folprecht: 25 years as a certified electrician with 10 years in photovoltaic installations and energy legislation expertise.  
Tomáš Krayzel: 20 years in construction, including supervisor at ČEPS a.s., Czech Republic's transmission grid operator, providing critical grid integration knowledge.