KYOTO
GREENPAPER

EXPLORE THE WOLRD'S FIRST CARBON-NEGATIVE
BLOCKCHAIN BUILT TO SCALE THE VCM

CONTENTS

WELCOME TO **KYOTO**

WELCOME TO KYOTO, THE CARBON-NEGATIVE BLOCKCHAIN BUILT TO SCALE THE VOLUNTARY CARBON MARKET AND REGENERATIVE FINANCE BY HARNESSING THE POWER OF WEB3.

01

INTRODUCTION

The global Voluntary Carbon Market (VCM) is set to see exponential growth over the next few years with a predicted value of $50bn by 2030. This market growth is driven by the importance of solving climate change and global initiatives for corporates to tackle their carbon footprint and attain net-zero targets.

This new demand for carbon offsets will present new challenges as carbon markets have historically been fraught with issues. A lack of regulation, transparency, double counting and greenwashing means that offsetting with confidence is a genuine concern.

The Kyoto Blockchain is the first Layer One designed with the specific purpose of solving these legacy issues by bringing an evidence-based, high-integrity digital standard of carbon credit to the market, delivering transparency, liquidity, Web3 access and much lower costs.

These objectives not only give our blockchain a solid use case and utility, they also ensure Kyoto has a positive impact on the planet.

ABOUT US

Kyoto Technologies AG is a climate technology company registered in Zug, Switzerland. It utilises blockchain technology to solve the issues facing the VCM, making it much easier for the industry to scale.

Our unique and innovative solution delivers a complete supply chain that is data-driven and optimally positioned to take advantage of the future growth of the $50BN VCM by 2030.

Kyoto's vision is to become the ultimate "Infrastructure-as-a-Service" for carbon markets across the globe through our unique approach to delivering high-integrity digital carbon assets, using our proprietary and standard agnostic dMRV process.

JOIN OUR COMMUNITY

Click icon for official links

OUR GOALS AND OBJECTIVES

SCALING THE VOLUNTARY CARBON MARKET

The VCM allows individuals, companies, and governments to invest in carbon offset projects to balance out their carbon emissions. However, scaling this market to meet the growing demand for climate solutions presents challenges such as verification, liquidity, double-counting, and transparency. As an immutable, transparent, and decentralized ledger system, blockchain technology has the potential to address these challenges and foster growth in the VCM.

Kyoto has built a complete supply chain solution to address these issues, using climate technology to improve transparency and efficiency while reducing costs. Our Infrastructure-as-a-Service (IaaS) solution is optimally positioned to take advantage of the future growth of the VCM.

The VCM has experienced significant growth over the past years, both in terms of volume and value. This growth signals the readiness of companies to tackle the climate change crisis by investing in climate solutions.

The Taskforce on Scaling Voluntary Carbon Markets (TSVCM) estimates that demand for carbon credits could increase by a factor of 15 or more by 2030 and by a factor of up to 100 by 2050. Overall, the market for carbon credits could be worth $50 billion by the end of 2030 and $250 billion by 2050.

Given this predicted demand and growth potential, it is apparent that the world will require a VCM that is large, transparent, verifiable, and environmentally robust, as opposed to today's market, which is fragmented and complex. This will also create demand for high-quality reporting and monitoring tools as well as highly liquid, transparent exchanges for the VCM.

Kyoto is the first and only Layer One blockchain built specifically to scale the VCM. Our solution is data-driven, evidence-based and provides a high integrity, digital carbon asset that allows corporates to offset with complete confidence whilst addressing all of the scaling issues facing the voluntary market.
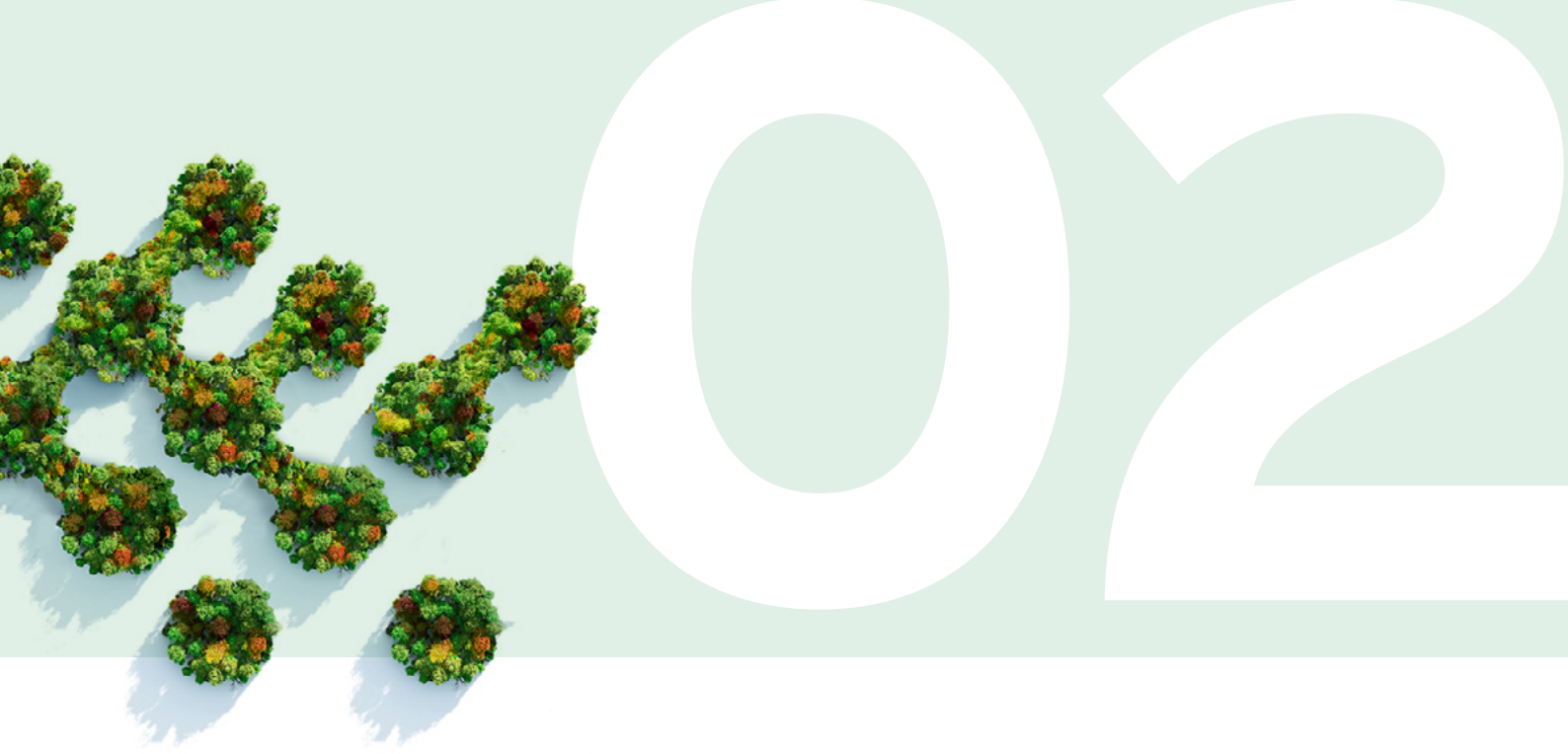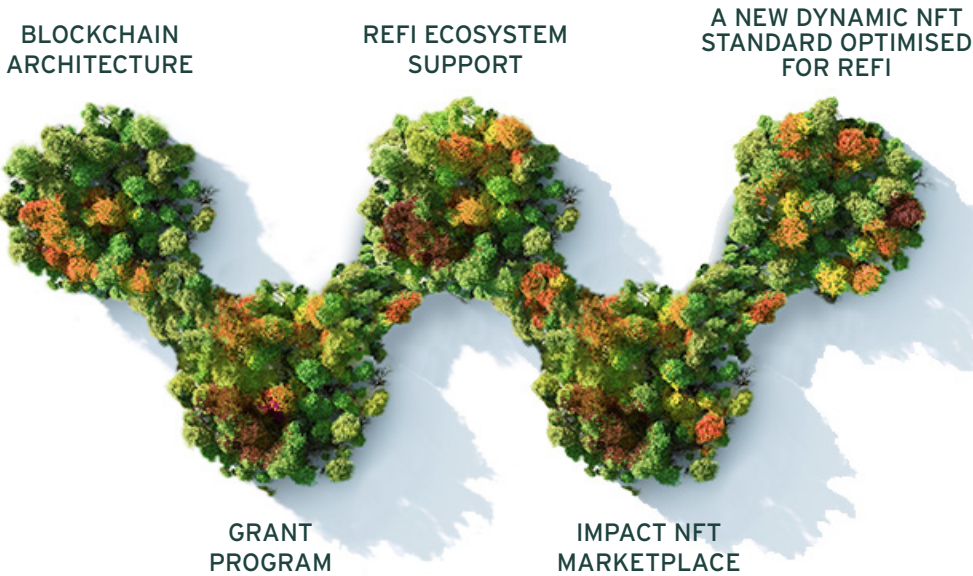
SCALING REGENERATIVE FINANCE

Regenerative Finance (ReFi) is a concept that blends elements of Decentralized Finance (DeFi) and sustainability principles within cryptocurrency and Web3. It seeks to create financial systems that not only provide economic value but also contribute to environmental, ecological and social impact.

As a ReFi pioneer, Kyoto hopes to play a significant role in scaling regenerative finance on our blockchain by providing the necessary infrastructure, support and tools to builders that support sustainable and environmentally friendly initiatives.

Kyoto have built a complete ecosystem ready to enhance the collective positive impact made by ReFi pioneers and builders. By choosing to build on Kyoto, project owners can amplify the positive impact made by their project and be part of a thriving ReFi community.

Kyoto is committed to becoming the Green Chain and attracting projects that understand our vision and mission. We believe that using Web3 to make a positive impact is the blockchain's true purpose.

WAYS IN WHICH KYOTO SUPPORTS REFI

BLOCKCHAIN
ARCHITECTURE

REFI ECOSYSTEM
SUPPORT

A NEW DYNAMIC NFT
STANDARD OPTIMISED
FOR REFI

GRANT
PROGRAM

IMPACT NFT
MARKETPLACE

A SUSTAINABLE BLOCKCHAIN

Kyoto is committed to becoming the world's most sustainable blockchain.
The world's most sustainable blockchain? We recognise this is a bold and audacious claim.
But the Kyoto blockchain has been built specifically with this goal in mind.

01 CARBON-NEGATIVE BY DESIGN

Kyoto is carbon-negative by design. 25% of each gas fee goes directly to offsetting the Kyoto blockchain. This unique architecture is a force multiplier in creating a positive impact and is a key differentiator to other market participants in both the VCM and blockchain market.

02 OVER ONE MILLION TREES PLANTED PRE-LAUNCH

In order to demonstrate our commitment to ReFi and sustainability, we planted over one million trees prior to our blockchain launch.

03 COLLECTING AND STORING VITAL CLIMATE DATA

The Kyoto blockchain forms the backbone of Kyoto's IaaS and will become an important data silo; tracking and monitoring other VCM registries and credits, collating data that is stored securely on the Kyoto blockchain and making climate change and clean project data accessible to data optimization and machine learning.

POSITIVE IMPACT

Decentralised positive impact, led by Kyoto DAO
Kyoto is positive impact-led and blockchain technology makes it easy to bring new levels of transparency and trust to ReFi initiatives and decentralized philanthropy.

The Kyoto DAO is an impact DAO that works closely with the Kyoto Foundation to ensure the decentralization of the Kyoto Blockchain, vote on strategic direction and allocate funds towards initiatives that help make an environmental and social impact.

The Kyoto Positive Impact Wallet will collect fees from Ecosystem projects and blockchain transactions and issue them directly to the wallet managed by the DAO.

These funds will be issued quarterly and proposals and votes for how the funds will be allocated will be presented to the DAO, to ensure funds go towards initiatives that make a difference.

Positive Impact Wallet address - 0x386A5eCF5F9e41E8b7e5F-26d671709aC3791843a

THE KYOTO SOLUTION

INTRODUCTION

The Kyoto Solution - a blockchain backed by a real business

The Kyoto solution presents an end-to-end supply chain, engineered to enhance the VCM through transparency, traceability, and trust. At the heart of this solution is the deployment of a dedicated Layer 1 blockchain built for the integration of Digital Measurement, Reporting, and Verification (dMRV) systems, interoperable carbon registries and the establishment of the Kyoto Carbon Exchange.

IaaS solution

Kyoto's Infrastructure-as-a-Service (IaaS) solution allows any existing registry, exchange and project owners to directly integrate its blockchain technology, dMRV, registry and marketplace without having direct expertise in solidity, smart contracts or blockchain, improving market participation, trust and integrity to the VCM.

Climate Data

As a climate technology company, Kyoto Technologies AG aims to use its proprietary blockchain to collect and store data through live feeds, trusted data providers and on-chain activity. The climate data collected can be used alongside machine learning and AI to improve the VCM.

Project Development (Proof of Concept)

Kyoto will pilot a digital carbon credit from its clean project. Utilizing its IAAS, the pilot validates the entire technology stack and capabilities of the Kyoto ecosystem. The digital carbon credit will be offered directly to Kyoto coin holders. After the pilot project is completed, other clean project developers can onboard their projects through our dMRV onto our registry and marketplace.

We believe that carbon offsetting should occur only on a blockchain ledger with verifiable offsets. Our mission is to make the carbon offset industry more transparent, efficient, accessible, and profitable. Through this, we aim to make a real difference in the fight against climate change while providing benefits to Kyoto holders and blockchain users.

We are not simply creating a single piece of technology for the VCM. We are creating a network of decentralized cross-chain applications that run on a fully transparent blockchain ledger, designed to connect the VCM to new-age funding mechanisms with Decentralized Finance (DeFi).

KYOTO BLOCKCHAIN

Trust through technology

The Kyoto Blockchain is the foundational layer of our climate technology company and is designed specifically to handle large volumes of climate-related data and carbon credit transactions, ensuring scalability, security, and speed.

By choosing to build our own 1, we ensure that we retain complete control of the carbon supply chain. This is crucial for the integration of dMRV, recording accurate data, and the issuance of our digital-only carbon standard.

Blockchain technology also solves several of the current issues associated with the VCM, and it is widely accepted that a blockchain ledger will be critical to maintaining successful carbon credit markets in the future.

Kyoto provides a complete supply chain solution, built from the ground up to utilize this technology, while other carbon standards look to bring carbon on-chain retrospectively.

The Kyoto Blockchain enables the following:

Increased Transparency

Blockchain technology provides a decentralized, transparent and secure system where all transactions are verified and recorded on an immutable public ledger.

The Eradication of Double Counting

Blockchain technology solves this problem by creating unique digital tokens that represent carbon credits. These digital tokens can only be created and retired once, with the whole lifecycle and trading activity tracked on the Kyoto Blockchain.

Market Accessibility

Web3 has unrivaled potential to increase participation in VCM, making carbon credits more accessible to individuals and companies.

Scalability

The current infrastructure for the VCM is fragmented, containing many different standards and platforms. Kyoto provides a single platform and ecosystem for carbon trading, making it easier to successfully scale the market.

Reduces Costs

Blockchain technology streamlines carbon markets by removing intermediaries and reducing transaction costs.

Overall, these issues create a need for more transparency and trust in the VCM which can make it difficult for buyers to know which carbon offsets are legitimate and effective at reducing emissions.

We believe that addressing these challenges will lead to carbon credits becoming a truly unique store of value.

THE KYOTO CARBON STANDARD

The new digital benchmark in carbon markets
The Kyoto Carbon Standard introduces a ground-breaking approach to carbon markets, by being the first digital-only carbon standard to enhance the integrity and efficiency of scaling the VCM

The Kyoto Credit, an integral part of this standard, aligns with internationally recognized accreditation standards, ensuring credibility and effectiveness in carbon reduction efforts. This adherence to high standards fosters trust and encourages broader participation in climate change mitigation.

The Kyoto standard adopts an 'impact first' approach, aligning with multiple Sustainable Development Goals (SDGs). This commitment positions it as a leader in creating high-integrity, data-driven carbon emission credits, contributing not just to carbon reduction but also to broader environmental and social goals.

1 NO POVERTY	2 ZERO HUNGER	3 GOOD HEALTH AND WELL-BEING	4 QUALITY EDUCATION	5 GENDER EQUALITY	6 CLEAN WATER AND SANITATION
7 AFFORDABLE AND CLEAN ENERGY	8 DECENT WORK AND ECONOMIC GROWTH	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	10 REDUCED INEQUALITIES	11 SUSTAINABLE CITIES AND COMMUNITIES	12 RESONSIBLE CONSTRUCTION AND PRODUCTION
13 CLIMATE ACTION	14 LIFE BELOW WATER	15 LIFE ON LAND	16 PEACE, JUSTICE AND STRONG INSTITUTIONS	17 PARTNERSHIPS FOR THE GOALS	SUSTAINABLE DEVELOPMENT GOALS

Source: United Nations. Use of the UN SDG icons is for illustrative purposes only and does not imply endorsement by the UN.

These new Kyoto Credits (KYCR) will be sold on a global, decentralized marketplace, hosted exclusively on the Kyoto blockchain - the Kyoto Carbon Exchange.

d-MRV INNOVATING VERIFICATION

Accelerating green i mpact

The Kyoto Digital Measurement, Reporting, and Verification (dMRV) framework aims to transform the VCM by infusing unparalleled precision and integrity into the carbon crediting process. Our dMRV approach records detailed environmental impact claims and the corresponding evidence on the Kyoto Blockchain, ensuring each carbon credit is backed with the necessary evidence for its entire lifecycle.

The Kyoto blockchain's immutable ledger serves as the cornerstone for this process, allowing for the secure and unalterable recording of the entire carbon cycle. It accurately timestamps and stores data, such as the amount of CO_2 reduced, the methods used, and the ongoing performance of carbon offset projects. It combines satellite imagery, IoT sensors, and AI algorithms

to measure carbon sequestration and emission reductions accurately. This provides all participants with access to reliable and consistent data, enhancing trust in carbon credit authenticity and reinforcing market stability.

Incorporating dMRV into the Kyoto blockchain assures that only legitimate and validated

environmental improvements are credited. This combats the risk of fraud and strengthens the market's infrastructure, encouraging more entities to invest in carbon offsets. The dMRV framework, underpinned by the robustness of the Kyoto Blockchain, is essential for a transparent, accountable, and reliable VCM.

KYOTO REGISTRY

Empowering Carbon Data Access

The Kyoto Carbon Registry (KCR) is a blockchain-driven and interoperable carbon registry that provides open

access. It is designed to provide clear and transparent sharing of the providence and lifecycle of carbon assets. The KCR reads and tracks data on the Kyoto blockchain, exclusively tracking approved data providers that qualify through Kyoto dMRV. Additionally, the Kyoto registry monitors and records other registries that are not currently on blockchain, bringing data to a secure ledger, which

enhances accountability and integrity within the VCM.

Existing carbon registries are often segregated and challenging to navigate. Some restrict access to viewership with account ownership, making it difficult to obtain data. Kyoto's objective is to eliminate these barriers to data access, facilitating machine learning and AI to optimize markets.

KYOTO CARBON EXCHANGE

The Kyoto Carbon Exchange is a trusted and decentralized marketplace powered by the Kyoto Blockchain

The Kyoto Carbon Exchange (KCE) connects purchasers of high integrity Carbon Credits with high quality carbon reduction projects.

This unique marketplace will facilitate the flexible purchase and trading of accredited Carbon Emission Credits.

Integrating Web3, smart contracts and DeFi to amplify innovation, helping corporations improve how they meet offsetting obligations in the process.

KCE is the endpoint of the Kyoto Solution and is optimized for both retail and institutional buyers. Created

with the primary purpose of driving the utility and use case of the Kyoto token. Buyers and traders on the Kyoto marketplace will obtain discounts and offers by holding Kyoto tokens

INITIAL CARBON OFFERING (ICO2)

Carbon Futures on the Kyoto Blockchain

The Kyoto Carbon Exchange is poised to bring a revolutionary advancement in the carbon market through the implementation of high integrity, digital forward carbon sales.

The smart contract-driven process involves the issuance of tokens that represent a 'growing' carbon credit. As the project progresses and hits

predetermined milestones, these tokens accrue value and functionality, eventually maturing into claim-eligible units. This method not only accelerates the funding of vital carbon reduction projects but also embeds a sense of accountability and progression, as the value of tokens is directly tied to project performance.

The Initial Carbon Offering (ICO2) allows Kyoto coin holders early access to our digital carbon credit, which will utilize our IaaS and be tradable on the Kyoto Carbon Exchange.

BLOCKCHAIN
OVERVIEW

INTRODUCTION

The Kyoto Blockchain emerges as a pioneering platform platform that blends both the efficiency and control of the QBFT (Quorum Byzantine Fault Tolerance) proof of authority (PoA) consensus with a steadfast commitment to environmental sustainability.

Tailored for enterprise-grade private networks, Kyoto stands out by leveraging a distinctive consensus mechanism where validators, masternodes, and delegators are intricately classified based on the Non-Fungible Tokens (NFTs) they possess and their stake within the Kyoto ecosystem. This structure not only fosters a secure and efficient network but also aligns with the growing global imperative to reduce energy consumption, thereby contributing to lower global emissions – a critical concern addressed by major cryptocurrencies, including Ethereum.

The operational core of the Kyoto Blockchain is its innovative and eco-friendly approach to blockchain technology. As an EVM-compatible blockchain, Kyoto weaves the principles of Regenerative Finance (ReFi) into its fabric, enabling seamless interoperability with prominent blockchains like Ethereum, Polygon, BSC, and others. This interoperability, along with a focus on utility, liquidity, and revenue sustainability, positions Kyoto as not just a green alternative within the EVM market, but as a hub for the Kyoto Foundation's diverse supply chain of businesses. Envisioning a future powered by a circular green economy, Kyoto aims to host its own carbon offset market, fostering positive environmental, social, and economic impacts in collaboration with its user base.

The selection of Hyperledger Besu as the foundation for the Kyoto Blockchain underscores this vision. Recognized for its robustness and enterprise-friendly features, Hyperledger Besu – an Ethereum client suitable for both public and private permissioned network use cases – is an ideal choice for Kyoto's infrastructure. Offering compatibility with test networks like Rinkeby, Ropsten, and Görli, and supporting various consensus algorithms including PoS and PoA, Besu's comprehensive permission schemes are perfect for consortium environments. This choice reflects Kyoto's commitment to security, scalability, and sustainability, positioning it as a forward-thinking player in the blockchain space, ready to make a significant impact with its innovative approach to decentralized technology and green economics.

PERFORMANCE AND UTILITY

Built to scale the Voluntary Carbon Market and regenerative finance harnessing the power of Web3

CONSENSUS ALGORITHM	QBFT (QUORUM BYZANTINE FAULT TOLERANCE)
TRANSACTIONS PER SECOND	200+
TRANSACTION FINALITY	<2 SECONDS

QBFT Consensus Mechanism and Kyoto Blockchain

The Kyoto Blockchain employs the QBFT (Quorum Byzantine Fault Tolerance) proof of authority (PoA) consensus protocol, specifically tailored for enterprise-grade private networks. In this consensus mechanism, validators, masternodes, and delegators participate in the network, classified based on the Non-Fungible Tokens (NFTs) they hold and their stake in the Kyoto network.

More and more blockchains are moving to the planet-friendly consensus as it uses far less energy, as reducing energy consumption contributes to lowering global emissions. The most notable cryptocurrency that made this transition is Ethereum.

Validators and masternodes, who can own nodes using their corresponding NFTs as proof of ownership, play a crucial role in the QBFT consensus. Once Kyoto receives a new chain head, it initiates the block time timer, which counts down for the duration specified by the block period seconds. When the timer expires, the round timeout timer (request timeout seconds) begins, and

the Kyoto Blockchain proposes a new block. If the proposed block isn't added within the request timeout seconds, a round change is triggered, resetting the block time and timeout timers. The timeout period for the new round is then set to twice the value of the request timeout seconds. Additionally, if a round fails to add a block, the timeout period will continue to double with each subsequent round.

The QBFT consensus mechanism is based on the concept of Proof of Authority (PoA), where block validators and masternodes are identified and authorized by a central authority or a group of trusted entities. This approach offers an efficient and controlled environment for specific use cases compared to traditional public blockchains relying on decentralized nodes and proof of work/stake mechanisms.

> *i* The Kyoto network implements the **QBFT proof of authority (PoA)** consensus protocol, where **validators** and **masternodes** play crucial roles based on their **ownership of NFTs.** This PoA-based mechanism ensures efficiency, control, and reward participation in the Kyoto Blockchain ecosystem.

UTILITY WITH INTEROPERABILITY

The Kyoto Blockchain is an EVM-compatible blockchain intertwined with principles of Regenerative Finance (ReFi). Giving seamless interoperability with over 40 billion dollars of TVL, Kyoto Blockchain is compatible with blockchains such as Ethereum, Polygon, BSC, FTM AVAX...

Blockchains and DeFi require utility, liquidity, and revenues to be sustainable. We built the Kyoto Blockchain with this in mind. The Kyoto blockchain isn't just a green solution for the existing EVM market; it will also be the hub for the Kyoto Foundation's supply chain of businesses, supporting the entire ecosystem.

The Kyoto Blockchain will be a blockchain powered by a circular green economy, hosting our own carbon offset market and creating positive environmental, social, and economic opportunities together with our users.

To ensure our token holders can swap networks seamlessly and generate carbon emission reduction, choosing the proper wireframe for the Kyoto Blockchain was important.

The secure, fast, and robust enterprise solution Hyperledger, an umbrella project of open-source blockchains and related tools, was started in December 2015 by the Linux Foundation and has received contributions from companies like IBM and Intel. These are just some of the reasons why we opted to build Kyoto Blockchain on HyperLedger BESU.

Hyperledger Besu is an Ethereum client designed to be enterprise-friendly for public and private permission network use cases. It can also be run on test networks such as Rinkeby, Ropsten, and Görli. Hyperledger Besu includes several consensus algorithms, including PoW and PoA (IBFT, IBFT 2.0, Etherhash, and Clique). Its comprehensive permission schemes are explicitly designed for use in a consortium environment.

BUILDING THE TOOL KIT FOR REFI PROJECTS

For a blockchain to be successful, it needs to offer a use case that has value to businesses or users. Whether you are new to cryptocurrency, a startup, or an established protocol, the Kyoto Blockchain offers a solution for you.

Whether a ReFi protocol is built on Ethereum, Polygon, BSC, or any other EVM-compatible blockchain, it can bridge its data to Kyoto Blockchain. This makes us unique, as the blockchains mentioned above have no interest in collating data that could be used to help improve our understanding of climate change.

KyotoProtocol.io will reward ReFi projects for the data it provides through an opt-in program; the data provided will share the origin of the ReFi project but, more importantly, originate from a trusted source.

ReFi protocols do not have to switch to the Kyoto Blockchain, as Kyoto

Foundation is developing a solution for established protocols that mirror its project on the Kyoto Blockchain. So it retains 100% of its community and network loyalty but has access to the Kyoto Blockchains tool kit to help assist and scale the project.

ARCHITECTURE

The Kyoto Blockchain network operates on a specific topology that ensures secure and decentralized transaction validation and additional security measures. Each validator and masternode plays a distinct role in maintaining the network's integrity and stability

This topology ensures a secure and decentralized network where validators validate transactions and master nodes enhance security. The NFT-based ownership mechanism enables active participation, transparent ownership tracking, and effective management of the Kyoto Blockchain nodes.

Kyoto Blockchain nodes

In the Kyoto Blockchain, a variation of the PoA consensus is implemented, utilizing a predefined set of masternodes and validator nodes responsible for validating transactions and creating new blocks. These validator nodes are typically selected based on their reputation and identity within the network. Rewards in the form of transaction fees and block rewards are provided to these nodes for their participation and contribution.

To enhance the income stability for node owners in the initial phase, we have adopted the QBFT consensus mechanism, with a future vision of transitioning to Proof of Stake, aligning with our commitment to exploring sustainable and innovative solutions while ensuring a seamless and promising journey for our users.

All nodes on the Kyoto Blockchain are distributed third-party tokens when the Kyoto Foundation generates carbon credits, partners with a project, or hosts an airdrop of its own.

Masternodes

Master nodes provide additional security and decentralization to the Kyoto Blockchain. Similar to validator nodes, master nodes require ownership of an NFT token. They are responsible for enhancing the network's security measures and ensuring the robustness of the consensus mechanism. The ownership of master nodes is also subject to staking and reward distribution based on the node owner's stake.

Masternodes charge a 15% reward pool fee to the NET APY rewards for the Kyoto ecosystem.

Validator nodes

Validator nodes are responsible for validating transactions on the Kyoto Blockchain. To become a validator, individuals or entities need to hold a specific NFT token, which is allocated during the registration process.

Validators actively participate in the delegation process by staking their node ownership rewards and can earn rewards based on their stake. By securing the network and participating in block validation, validators contribute to the overall consensus mechanism.

Validator node operators charge the network 10% of distributed token rewards.

Ownership and Node Allocation

The number of nodes owned by validators and master nodes depends on the number of NFT tokens they hold. Each NFT represents ownership of a single node, and a higher number of NFTs results in the ownership of a larger number of nodes. The ownership of nodes is tracked on the Kyoto Blockchain, ensuring transparency and enabling verification of node ownership. This decentralized distribution of nodes through NFT ownership offers several advantages. It promotes network decentralization, offers higher blockchain security, provides a transparent system for ownership, and is an efficient way to manage and track nodes within the Kyoto ecosystem.
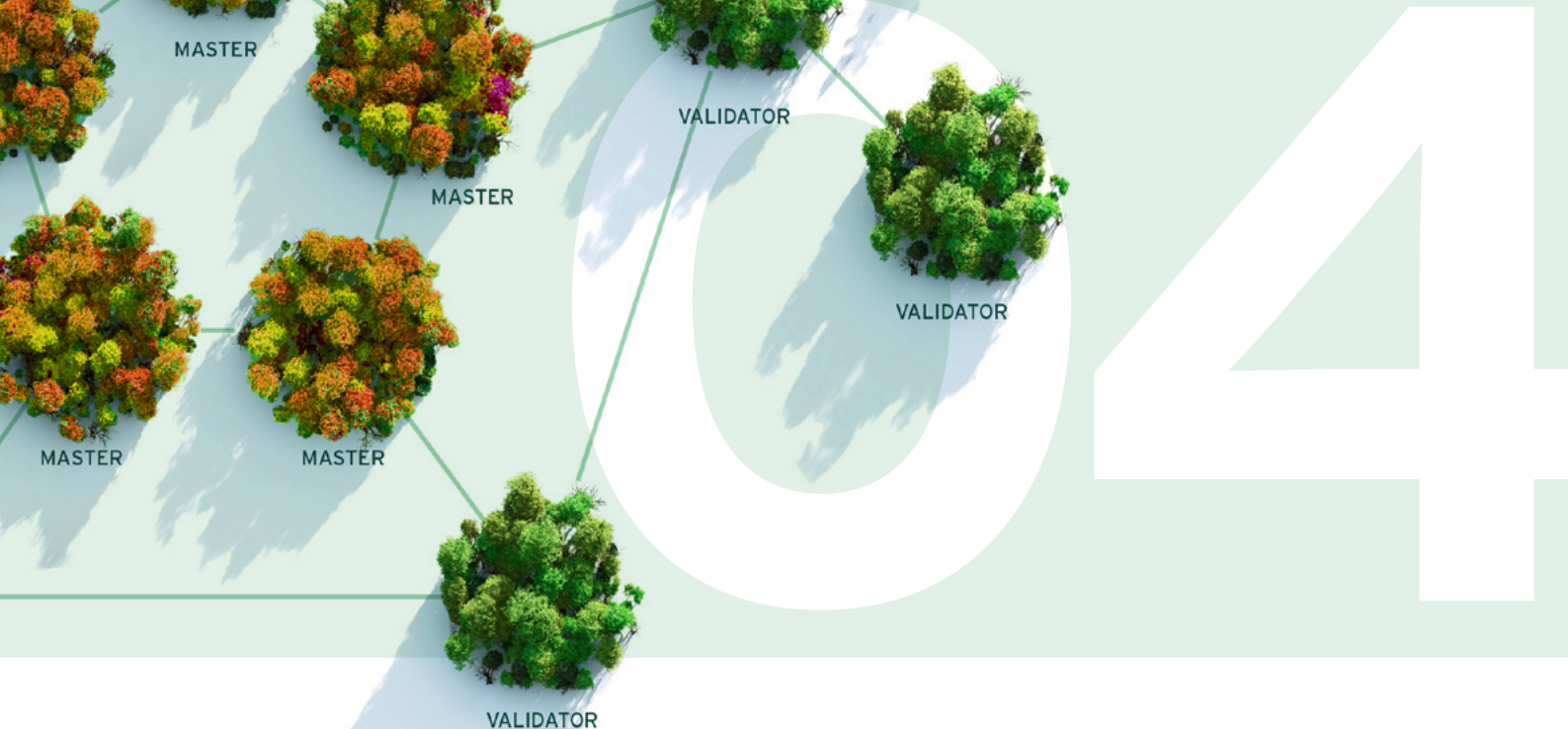
KYOTO NODES

As the Kyoto Blockchain transitions from its Quorum-Based Fault Tolerance (QBFT) consensus to a Proof of Stake (PoS) model, understanding node ownership and the associated reward mechanism is crucial.

Node Ownership and Node NFTs

Node ownership in Kyoto Blockchain is uniquely represented through Node NFTs. These digital tokens, signifying ownership, are distinct and tradable, allowing for the transfer and sale of node ownership rights. This system not only confirms ownership but also introduces flexibility and liquidity in the node market.

Transitioning to Proof of Stake (PoS)

The planned future shift to a PoS model marks a significant evolution for Kyoto Blockchain. This new model bases transaction validation and block creation on the stake of node owners, promising enhanced network efficiency and sustainability. Upon PoS upgrade (Yeugen) node owners will redeem their NFT for node ownership on the new Kyoto Blockchain, 206

million Kyoto are allocated out of the maximum supply of 750,000,000 for network rewards after POS upgrade.

POS UPGRADE

Yeugen Upgrade - The Path to Decentralization

As Kyoto Blockchain strides into a future rich with innovation and potential, its roadmap includes pivotal advancements like the upgrade to a Proof of Stake (PoS) mechanism, integration of cutting-edge Zero-Knowledge Proofs (ZKPs), and the exciting incorporation of Dynamic Non-Fungible Tokens (NFTs).

This transformation into PoS, a step aligning with the ethos of decentralization, marks a significant evolution in Kyoto's journey. The POS upgrade further democratizes the validation process, opening doors for broader participation based on stakeholders' investment in the network. This shift promises enhanced network security and efficiency, keeping vital climate change data secure.

The POS upgrade occurs 18 months after the genesis block of Kyoto's mainnet. All existing node NFT owners will receive the advertised rewards to nodes during the 18 month period, including gas fees.

KYOTO TOKEN
UTILITY

INTRODUCTION

Kyoto is the primary token on the Kyoto network. Kyoto is used for securing the network through staking, for governance and for payments delivering value to users.

Payments

The Kyoto token is ideal for sending and receiving payments thanks to the Kyoto network's high-throughput, fast finality, and low fees.

Network fees

Kyoto is used for network fees, such as transaction fees and fees to deploy smart contracts or to create new networks. Without a minimum barrier, the network would be an easy target for spam, ultimately hampering the performance and filling the ledger with useless information. On Kyoto, fees are very cheap but sufficient to make it extremely expensive for a malicious actor to carry out an attack.

Governance

The Kyoto token is designed to act as a governance token, empowering the users to vote on active governance proposals, giving them control over decisions on the Kyoto network. By participating in active proposals, they can shape the future of the network.

CRYPTO
ECONOMICS

TOKENOMICS

Maximum Supply

Maximum supply is hardcoded at a **750,000,000 $KYOTO**

Initial Supply

Migrated Supply +18 months staking rewards = **543,271,930 $KYOTO**

Circulating Supply

Initially **23,014,091 $KYOTO** at launch

Initial Market Cap

129,584,527 USD (at listing price of 0.33$)

Token Distribution

Team	5% - 19,634,019	
Foundation	62.40% - 245,028,029	
Public	26.74% - 105,004,247	
Liquidity	5.86% - 23,014,091	

LIQUIDITY
5.86%

TEAM
5%

PUBLIC
26.74%
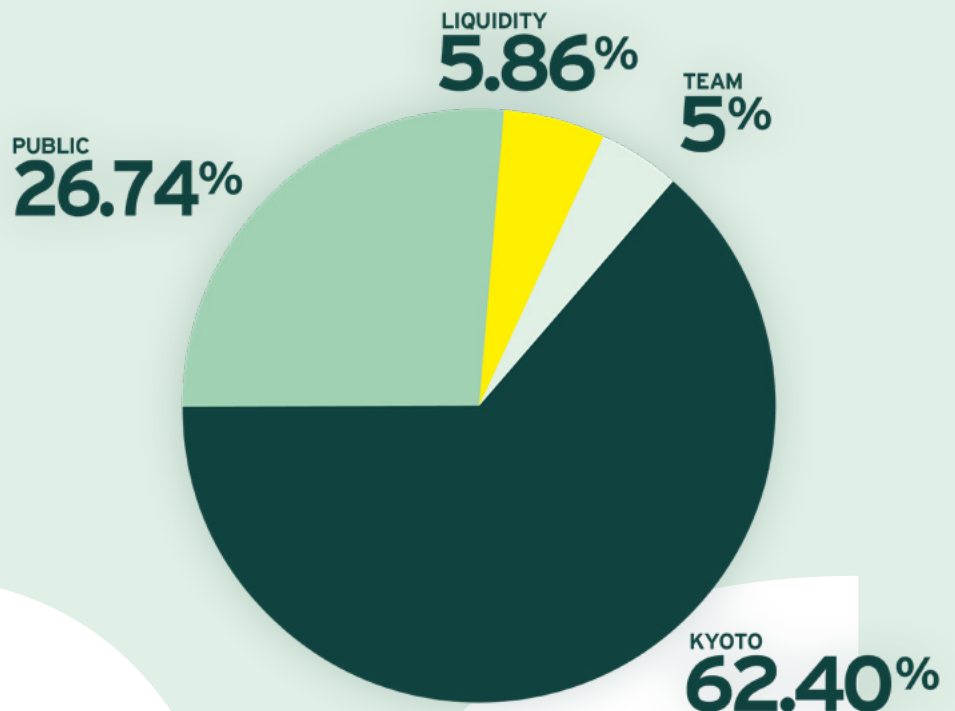
KYOTO
62.40%

Block Rewards

The Kyoto token has a maximum supply of **750,000,000** tokens. At the genesis block, **543,271,930 $KYOTO** tokens will be minted as the total supply. The remaining 206,728,070 tokens required to reach the maximum supply will be distributed after the initial 18 months of staking rewards. These tokens will be earned by those participating in the network.

Deflationary Mechanics

To help control the supply and appreciate Kyoto as an asset, we will implement planned token burns starting with 1 million Kyoto to be burned over the first year.

Token burns will be done in 15-minute intervals, reducing the circulating supply by the end of the first year by **0.2% (490,850,482.77 - 0.2% = 1 million $KYOTO)** or **28.5388127853 $KYOTO** burned per 15 mins.

STAKING

Incentives earned for validating transactions and securing blockchain networks, fostering decentralization and trust

Staking returns

$KYOTO holders that stake their tokens through kyotowallet.io receive a competitive **20% APY** for the **first year** and **18% APY** in **year two**.

Block rewards

206,728,070 $KYOTO will be distributed to validators and delegators on the POS network.

VESTING SCHEDULE

Kyoto completed its fair launch on 30th June 2022 selling 2.38m in just under 9 hours, the biggest of its time on BSC. Holders that hold the token before mainnet launch will be vested over 18 months to ensure the future success of the project.

Vesting Schedule

100% of the migrated supply will be released on an 18-month vesting schedule.

- Kyoto tokens will be vested daily in a linear vesting schedule, unlocking **0.18252523385808%** per day.

- **93.5%** f the circulating supply will be locked in a staking contract for 18 months. The remainder **6.5%** is ring-fenced for liquidity

NODE REWARDS

In the QBFT framework, node owners receive $KYOTO rewards through their Node NFT through the Kyoto Wallet.

How much will I earn?

Node holders will earn a fixed reward for the initial scaling of the Kyoto Network. This will be worked out by earning a % of the forecasted supply growth created by migrators and APY earned from staked users. The forecasted figures can be seen below:

EXAMPLE NODE INCOME IN $KYOTO

YEAR ONE

VALIDATOR NODE INCOME	MASTER NODE INCOME
24,383 $KYOTO	**373,067 $KYOTO**

YEAR TWO

VALIDATOR NODE INCOME	MASTER NODE INCOME
25,230 $KYOTO	**386,031 $KYOTO**

*(*Example rewards are calculated on 35% of staking APY rewards being sold daily)*

HOW CAN I ACCESS MY NODE RETURNS?

The Kyoto Wallet will read the blockchain and see that you own a Kyoto Node NFT. You will then open up an extra section of the Wallet as shown below.

Node holders will be able to see rewards accrue in real time, with the option to claim, or claim and stake them at any time.

KYOTO
GRANTS

GRANTS PROGRAM

Build your project on a like-minded blockchain through our Ecosystem Grants Program

We are passionate about onboarding trailblazing teams, individuals, and projects with a focus on making a positive impact into our growing ecosystem.

The Kyoto Ecosystem Grants Program (KGrants) is specifically designed to accelerate blockchain user adoption and utility while supporting creators looking to invest in carbon-neutral, sustainable initiatives.

KGrants support the growth of a holistic ecosystem of innovative projects and environmentally conscious creators worldwide. Meanwhile, the initiative will help to raise awareness and champion the progression of ReFi in Web3. We anticipate that the industry will experience exponential growth as creators continue to build in the current bear market.

Through kick-starting our grant program, we aim to drive a more industry-wide, collaborative effort that results in lasting, sustainable change for the planet.

Applications can be made directly on our website.
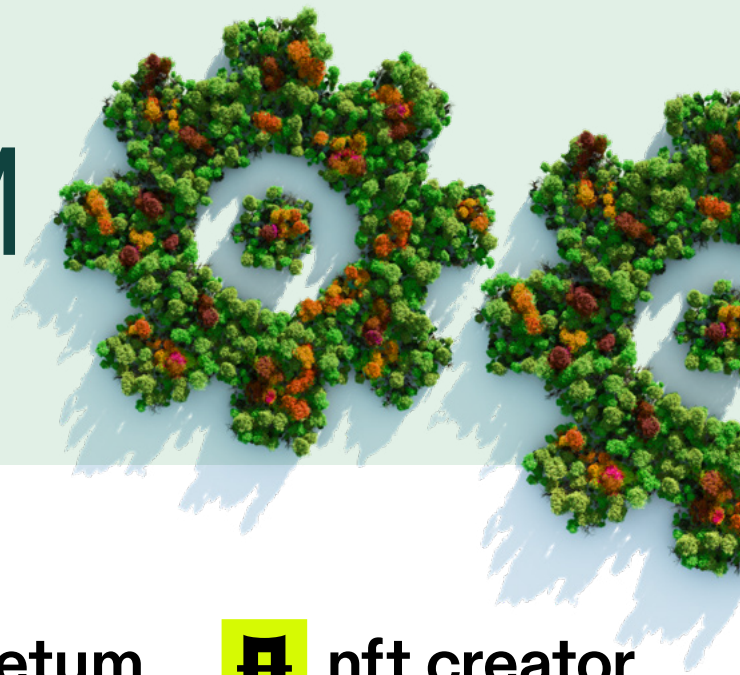
AVAILABLE GRANTS RANGE BETWEEN
$10,000-$50,000
FOR COMMUNITY PROJECTS AND
$100,000+
FOR ECOSYSTEM AND INFRASTRUCTURE PROJECTS.

KYOTO
ECOSYSTEM

KYOTO SWAP

Kyoto Swap is a ReFi DEX where every trade has the power to plant trees.

Our unique modular economy allows anyone to become carbon neutral at little to no cost, with the KSWAP token serving as the key to Web3 carbon neutrality.

Users who provide liquidity earn a share of platform profits or have the unique option to donate a portion of their yields to planting trees directly through the DEX, with the most conscious KSWAP users securing a spot on the impact leaderboard.

arboretum

Arboretum is an impact NFT marketplace housing a curated collection of NFTs to buy and sell.

With 60% of all fees generated on Arboretum going directly to positive impact projects, such as reforestation and conservation, it's one of the first platforms to harness the power of NFTs for a purpose bigger than pixels.

nft creator

The NFT Creator is a dedicated launchpad tool that empowers users to craft and mint personalized NFTs before listing them on Arboretum, the impact NFT marketplace.

From artists looking to digitize their work, to collectors interested in creating highly unique NFTs, the platform provides an intuitive solution that caters to all - allowing users to bring their creative vision to life while contributing to positive impact.

Click icon for official links

X

Click icon for official links

X

Coming Soon

Coming Soon

Click icon for official links

X

Coming Soon

Coming Soon

08

KYOTO WALLET

Kyoto Wallet is a safe and secure digital wallet through which users can earn, buy, store, and stake Kyoto coins.

Offering quick and secure account creation, flexible buying and deposit options, and the opportunity to earn 20% annual rewards by staking $KYOTO – Kyoto Wallet is designed to transform the way users interact with their finances.

KYOTO SAFE

Kyoto Safe is a multi-signature wallet application and the most secure way to own assets.

The safe ensures the safety of users' funds - whether they are a team, a project or even an individual - by deploying a specific security measure that requires signatures, from multiple private keys, to make on-chain transactions.

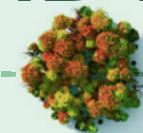Kyoto Safe was created using the battle-tested, open-source code of Gnosis Safe.

Click icon for official links

Click icon for official links

KYOTO
ROADMAP

Q4 2023
NEW CTO APPOINTED

NEW COO
APPOINTED

KYOTO FOUNDATION
INCORPORATED
(NOT-FOR-PROFIT)

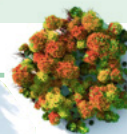KYOTO BLOCKCHAIN
PUBLIC TEST NET
LIVE

INITIAL KYOTO
GRANT ROUND
ALLOCATION

INVESTMENT
SEED ROUND
CLOSED

KYOTO MERCH
STORE LIVE

Q1 2024
NEW CHIEF EXECUTIVE
APPOINTED

NODE NFT
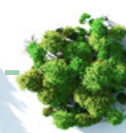ISSUED

KYOTO MAINNET
LIVE

KYOTO ECOSYSTEM
LAUNCH

PUBLIC MIGRATION TO
KYOTO BLOCKCHAIN

INITIAL CENTRALISED
EXCHANGE LISTINGS

QUYOTO
RELEASE

MAIN PARTNERSHIP
DISCLOSED

ICO2 PRIVATE
OFFERING

ARBORETUM TOKEN
LAUNCH

KYOTO DAO
INTEGRATED
WITH FOUNDATION

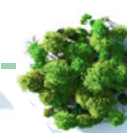OPEN CONSULTATION
KYOTO DIGITAL
CARBON STANDARD

KYOTO EVENT
CALENDAR RELEASED

DYNAMIC NFT
PROTOCOL

Q2 2024
KYOTO CARBON EXCHANGE
TEASER RELEASE

KYOTO SWAP
V3 UPGRADE
LIVE

FIRST ROUND
OF IMPACT
GRANTS

MYCELIUM
MONEY
LAUNCH

KYOTO DIGITAL
CARBON STANDARD
PUBLISHED
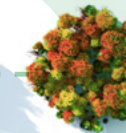
DMRV PROOF
OF PLANTING

25M TREES
PLANTED

Q3 2024
DMV WHITEPAPER

ZERO
KNOWLEDGE
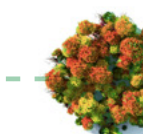KYC UPGRADE

ECOSYSTEM
GRANT
ROUND 3

Q4 2024
ICO2 LIVE

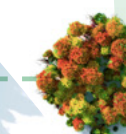KYOTO CARBON
EXCHANGE LIVE

KYOTO STABLE
COIN LIVE (KUSD)

ETHERSCAN
EXPLORER
UPGRADE

Q2 2025
YEUGEN UPDATE LIVE

Q1 2025
ZKP BASED BRIDGE (BETA)

SERIES A INVESTMENT
ROUND COMMENCES

RECURSIVE ZKP
INFRASTRUCTURE

IMPACT GRANT
ROUND

MEET THE
KYOTO TEAM

FOUNDERS

ASHTON HUNT
CO-FOUNDER

Ashton began his career as a trader before becoming an early adopter of Web3 in 2016. Since then, he has advised a broad spectrum of businesses in blockchain, OTC and fintech.

FRANK MOREY
CO-FOUNDER

Frank is an entrepreneur and investor focused on projects that make a positive environmental impact. With a background in security, risk and compliance he has carried out due diligence on behalf of governments.

JONATHAN JEPSON
CO-FOUNDER

Jon is a serial entrepreneur with over 30 years' experience in start-up growth businesses. He was formerly senior partner and investment director at Northwood Infrastructure Capital.

LEADERSHIP

STARTING JAN 2024
CHIEF EXECUTIVE OFFICER

The new CEO has been at the forefront of environmental markets for 17 years and was formerly the CEO of Gold Standard.

YEN-LING TAN
CHIEF OPERATING OFFICER

20+ years of international experience in finance and business management. Formerly, COO at Archilyse, Algomi and UBS.

DUNCAN ROSS
CHIEF TECHNOLOGY OFFICER

Duncan was formerly Sony's youngest-ever technology lead, he also ran Nintendo's R&D team, as well as the tech offering at Soonami.io and Chelsea

TEAM

RUPERT REID
HEAD OF INVESTOR RELATIONS

Rupert started his career as a British Army Officer before moving into Finance. He then ran the alternative asset strategy for a family office where he started his journey into Web3. Since then, he has led many new projects in the sector.

GEORGIANA FOSTER
HEAD OF MARKETING

Georgiana combines strategy with creativity to raise Kyoto's profile and attract new users and investors. She started her career at global agency Gyro, before joining Keystone Law where she helped lead the firm through a successful IPO.

KONRAD FALTYN
SENIOR BLOCKCHAIN DEVELOPER

Konrad Faltyn is a dedicated software developer and blockchain enthusiast. His expertise lies in crafting scalable and robust software solutions. Konrad has contributed to a variety of innovative projects leveraging decentralized technologies.