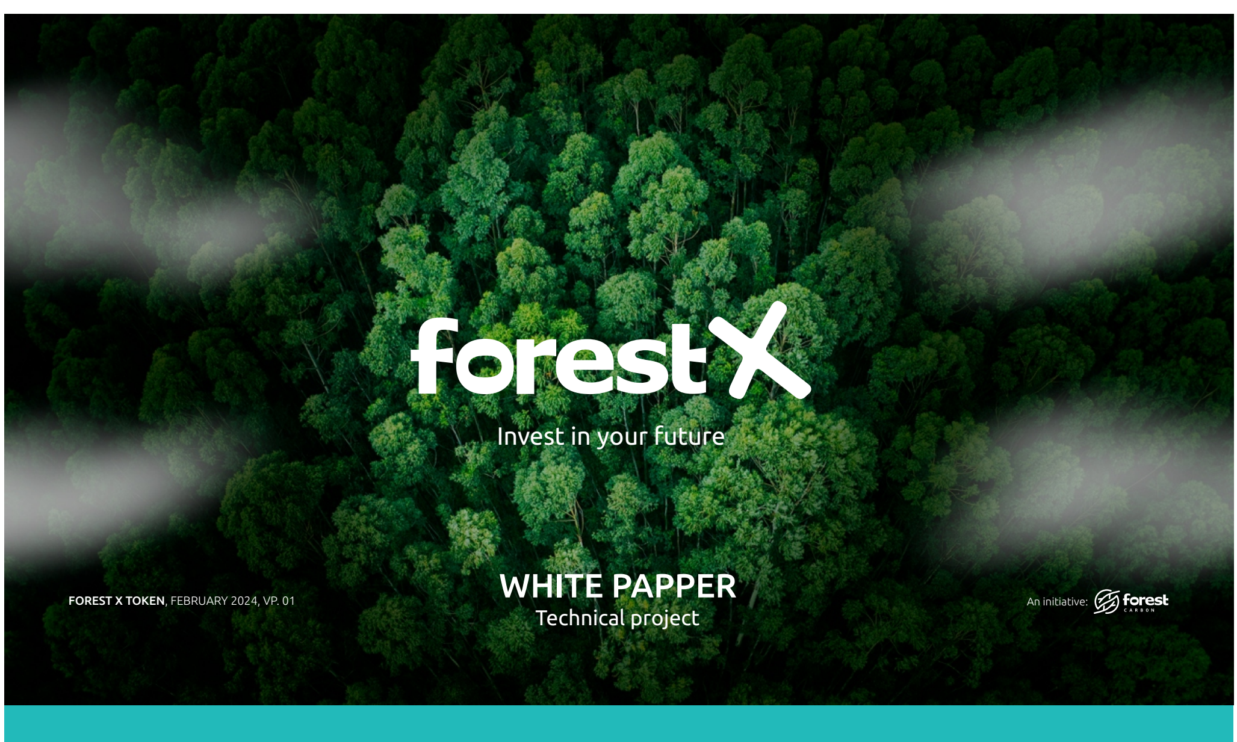


FOREST X TOKEN, FEBRUARY 2024, VP. 01

WHITE PAPPER
Technical project

An initiative: forest CARBON

The medicine to save the planet

We are born driven by the undeniable urgency to promote a significant transformation, guided by the conviction in a new global agenda that seeks to restore the climatic stability of our planet. At our core is the burning desire to preserve and ensure a clean ecosystem, caring for the unique biodiversity of our precious Amazon rainforest — recognized as the lungs of the world — for future generations.

We are deeply committed to go beyond mere words, translating our mission into concrete actions. We seek not only to contain damage but to effectively regenerate and strengthen our natural environment. We believe that every measure to protect the Amazon not only resonates locally but has global implications for the sustainability of our planet.

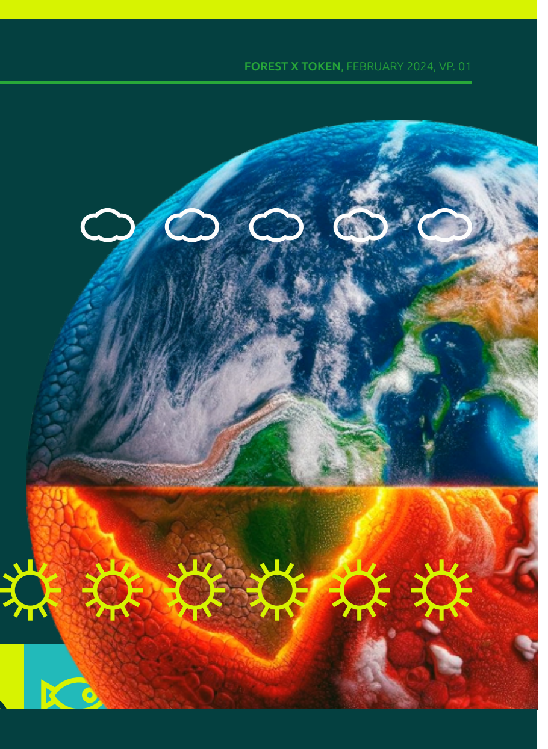
Furthermore, we are attentive to market trends and innovations in clean technologies that celebrate sustainability and social responsibility. We see these trends not only as business opportunities but as powerful tools to drive positive change. By adopting innovative practices and aligning our operations with the highest environmental standards, we aim not only to meet market expectations but to exceed them, leading the way toward a more sustainable future.

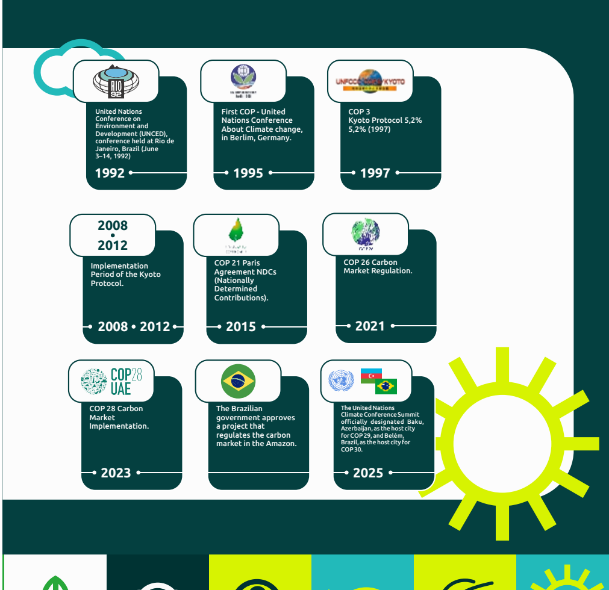
Our journey is fueled by an unwavering commitment to being catalysts for positive environmental change. We will continue to explore, innovate, and collaborate, bringing solutions that not only address the demands of the present but also pave a lasting path toward a healthier and more balanced planet.

The risks to our planet

The fight against climate change is the great challenge of our time, as we witness a series of natural disasters intensifying due to the rise in global temperature

According to the United Nations (UN), the increase in temperatures on the planet is causing various environmental impacts, such as increased drought, higher and more severe storms, warmer and expanding oceans, loss of species, threats to food security, health risks, and an increase in poverty levels.





Annually, the Conference of the Parties (COP) takes place, which is the meeting of the United Nations Framework Convention on Climate Change, attended by representatives from various countries with the aim of discussing climate change, finding solutions to environmental problems affecting the planet, and negotiating agreements. The first COP was held in 1995 in Berlin, Germany.

A milestone in the debate on climate change was the signing of the Kyoto Protocol during COP 3 in Kyoto, Japan, in 1997. This agreement established binding emission reduction targets for industrialized countries, introducing flexible mechanisms and marking a significant advancement in global efforts.

The Kyoto Protocol holds great significance as it was the first international treaty to control the emission of greenhouse gases into the atmosphere.

Among the goals, the Protocol established a 5.2% reduction in emissions of pollutants, especially by industrialized countries, compared to 1990. One of these goals determined a 5.2% decrease in greenhouse gas emissions during the period from 2008 to 2012, in relation to 1990. Additionally, the Protocol encouraged the creation of sustainable development practices for environmental preservation.

The global concern is with global warming due to the emission of greenhouse gases (GHGs), substances capable of absorbing infrared radiation reflected by our planet after the absorption of solar radiation. The consequence of this property is the increase in Earth's surface temperature, which allowed the development of life on our planet. However, anthropogenic action has increased GHG concentrations uncontrollably, generating adverse climatic effects, including global warming.

Greenhouse gases (GHGs) are diverse, with carbon dio xide, methane, and nitrous oxide being prominent. When of human origin, they are produced through industrial processes, burning of fossil fuels, agricultural practices, use of fertilizers, and waste decomposition, among other forms. The production of these gases must be controlled, with incentives for clean and renewable energy, as well as the development of public policies that slow down their production.

Greenhouse gases (GHGs) are substances capable of absorbing infrared radiation reflected by our planet after the absorption of solar radiation. The consequence of this property is the increase in Earth's surface temperature, which allowed the development of life on our planet. However, anthropogenic action has increased the concentration of GHGs uncontrollably, generating adverse climatic effects, including global warming.

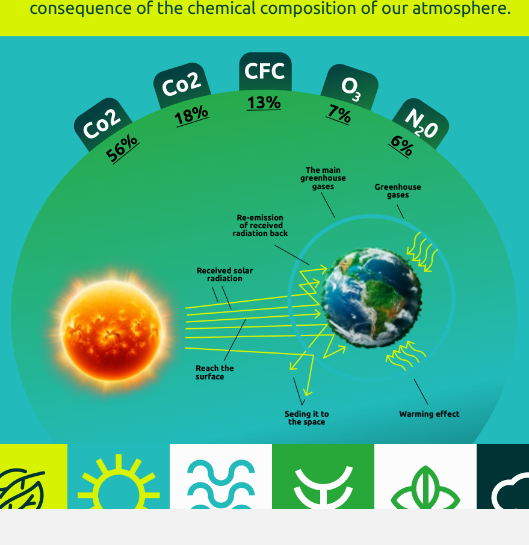
There are various gases that can cause the greenhouse effect, but among the main ones are:

Carbon Dioxide (Co2): It is responsible for about 60% of the greenhouse effect and can persist in the atmosphere for up to 1000 years. It originates from wildfires, deforestation, and the burning of fossil fuels (such as diesel, gasoline, aviation kerosene, natural gas, coal, etc.). The loss of vegetation is impactful, as it has the capacity to absorb CO2 from the air.

Metane (Ch4): The main component of natural gas is responsible for 15 to 20% of the greenhouse effect and can persist in the atmosphere for up to a decade. Oil and gas extraction, coal mining, and landfills account for 55% of anthropogenic methane emissions. A total of 32% of these emissions can be attributed to ruminant animals, such as cows and sheep, that ferment food in their stomachs. Manure decomposition and rice cultivation are also agricultural activities that contribute to CH4 emissions. Methane is 80 times more potent than CO2 as a cause of global warming.

Nitrous Oxide (N2O): It is responsible for approximately 6% of the greenhouse effect, persisting for approximately 120 years in the Earth's atmosphere. Emissions originating from human practices are primarily attributed to agriculture. Bacteria present in soil and water naturally convert nitrogen into nitrous oxide; however, the use of fertilizers and runoff have added even more nitrogen to the environment. Nitrous oxide is also present in emissions from the burning of fossil fuels. It is 280 times more potent than CO2 as a contributor to global warming.

Greenhouse gases (GHGs) are capable of absorbing the infrared radiation reflected by our planet, re-emitting it in all directions. This causes the average temperature to rise. It is worth noting that this is a natural and essential process for terrestrial life, a consequence of the chemical composition of our atmosphere.



The ability of greenhouse gases (GHGs) to absorb infrared radiation is linked to the vibrational movements of molecules. When the vibration of molecules has wavelengths close to those of the infrared radiation emitted by the Earth, compounds have the capacity to absorb this radiation, preventing it from being radiated back into outer space.

In 2015, during COP21 in Paris, the Paris Agreement was approved. It is a global treaty with a single objective: to reduce global warming. It was discussed among 195 countries and officially entered into force on November 4, 2016.

The Paris Agreement is an international treaty that presents the commitment to reduce global warming, with efforts to limit the increase in the Earth's average temperature by the end of the century to safe levels.

The main goal of the Paris Agreement is to reduce greenhouse gas emissions to limit the average global temperature increase to below 2°C by the end of the century (if possible, to a limit of 1.5°C) when compared to pre-industrial levels.

The Agreement stipulates that each of the member countries must submit its Nationally Determined Contribution (NDC), which should include the emission reduction target that the country deems fair and appropriate to contribute to global efforts to avoid dangerous temperature increases (Global Temperature Goal).

Solution: Carbon Market

As concerning as the climate situation on our planet may be, if we join forces, we can control greenhouse gas (GEE) emissions, mitigating the risks of a climatic collapse on Earth.

A good alternative is the conservation and maintenance of the Amazon rainforest. Keeping the forest standing will drastically reduce the amount of CO2 released into the atmosphere.

With the forest standing, we have the absorption of CO2 through the process of photosynthesis, and there is also a reduction in CO2 emissions due to the prevention of forest fires.

Through REDD+ projects, we can ensure a decrease in CO2 emissions on the planet, reducing global warming.

REDD+ stands for Reducing Emissions from Deforestation and Forest Degradation, and it is an international initiative developed to address climate change, conserve biodiversity, and promote sustainable development. This approach focuses on reducing greenhouse gas emissions resulting from deforestation and forest degradation in developing countries.

The main objectives of REDD+ include:

Emission Reduction: The primary focus is on reducing greenhouse gas emissions from activities related to deforestation and forest degradation.

Biodiversity Conservation: REDD+ also aims to promote biodiversity conservation, as forests are essential habitats for many species.

Sustainable Development: By encouraging sustainable forestry practices and providing economic benefits to local communities, REDD+ seeks to integrate forest conservation with sustainable development.

Participation of Local Communities: A fundamental characteristic of REDD+ is to involve local communities in decisions and benefits associated with forest conservation, recognizing their rights and encouraging sustainable practices.

Methodology REDD+

R **eduction** of
E **mission** originating from
D **esforastation** and
D **engradation**

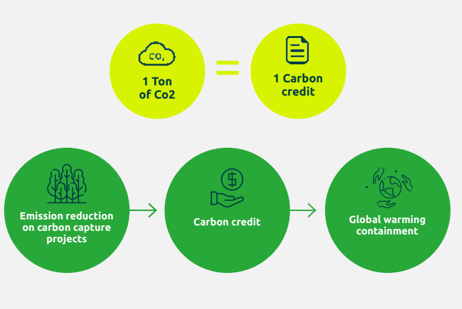
\+ **conservation** of forest carbon stocks
sustainable forest management
increase in forest carbon stocks

The REDD+ operates through the creation of mechanisms and financial incentives for developing countries that adopt sustainable forest management practices, avoiding deforestation, and promoting reforestation. These countries can then receive carbon credits or international funding as compensation for the environmental services provided by forest conservation. REDD+ is an important part of global efforts to address climate change and conserve valuable ecosystems.

The carbon credit generated through REDD+ (Reducing Emissions from Deforestation and Forest Degradation) is a form of financial compensation for countries or communities that implement successful projects to reduce greenhouse gas emissions from deforestation and forest degradation.

In turn, the carbon credit is a unit of measurement representing the reduction, removal, or prevention of a certain amount of greenhouse gas emissions (GHG), usually expressed in metric tons of carbon dioxide equivalent (tCO2e). Thus, 1 ton of CO2 is equivalent to 1 carbon credit.

Carbon credits play a crucial role in carbon markets, where stakeholders such as companies or countries can buy and sell these credits, representing a significant market trend. These markets were established as part of global efforts to mitigate climate change, allowing entities that cannot achieve their emission reduction targets to compensate for their emissions by purchasing credits from others who have exceeded their goals.



THERE ARE TWO MARKET CARBON

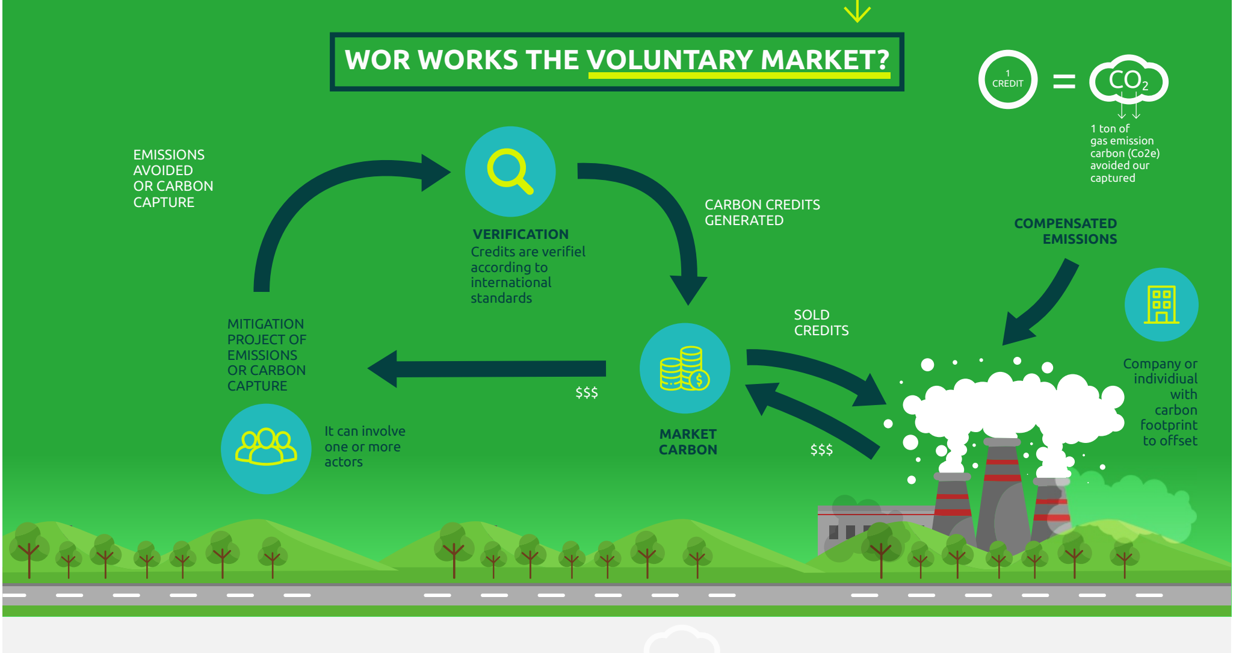
REGULATED

- Company, organization and individuals
- Regulator-set price - \$ per tCO_2e
- Restricted to specific locations or sectors
- 39 COUNTRIES already adopt or have plans to adopt emissions trading systems, including the European Union, Brazil, Canada, Mexico, and China.
- There is an obligation to reduce emissions or offset.

VOLUNTARY

- Company, organization and individuals
- Prices negotiated in contracts according to projects - \$ per tCO_2e
- Various types of projects
- Global trend already in operatation

WOR WORKS THE VOLUNTARY MARKET?



The Lungs of the World: Legal Areas for Preservation.

The Amazon Rainforest, considered the lungs of the world, hosts around 60 thousand species and absorbs between 1.5 and 2.2 billion metric tons of CO2 annually. This capacity is crucial for mitigating climate change, as CO2 is one of the main gases responsible for global warming.

Located primarily in Brazil, the Amazon Rainforest covers approximately 3.3 to 4 million square kilometers, playing a vital role in climate regulation and global biodiversity. However, deforestation and human activities have impacted the area, emphasizing the importance of conservation and sustainability.

The mission of Forest Carbon is to preserve the Amazon Rainforest, highlighting the value of intact areas. We commit ourselves through partnerships and strategic investments, such as the São Francisco project, expected to generate around 170 thousand carbon credits annually and improve the quality of life for local communities.

Forest X Token

Sustainability is the priority of this generation, with all sectors collaborating to combat climate change. Major companies, such as Apple, aim to make their products carbon-free by 2030. In this scenario, the green economy is on the rise, and Forest Carbon, aligned with the democratization of the carbon market, introduces the Forest Token X to the general public.

Technology plays a crucial role in Forest Carbon's projects, seeking to revolutionize the carbon credit market through tokenization. Now, anyone can acquire fractions of carbon credits, making the process accessible and innovative. Considering a carbon credit price of \$16.00 as a reference, each Forest Token X would be valued at \$0.016. The purchasing process is simple and swift, offering flexibility for investment or offsetting.

A carbon credit represents the reduction of one ton of CO2 emitted into the atmosphere. By acquiring a Forest Token X, the investor is actually buying the equivalence of one kilogram of CO2. To effectively offset one carbon credit, the investor will need to obtain a thousand Forest Tokens X. This approach allows for fractional and democratic investment to contribute to the protection of the planet. It's important to highlight that by choosing to offset the tokens into carbon credits, these tokens become unusable, ensuring the integrity of the environmental offsetting process.

The outlook for the carbon credit market is promising, with an estimated revenue potential of up to \$120 billion by 2030 in Brazil. Forest Carbon, through the Forest Token X, provides an innovative and accessible approach for everyone seeking to contribute to a more sustainable future.

The Forest Token X is backed by blockchain technology, innovatively incorporated into Forest Carbon's operations. This approach serves as a distributed and decentralized ledger, ensuring secure and transparent transactions. Blockchain technology plays a crucial role in the tokenization of carbon credits, allowing the division of these assets into smaller units, making them accessible to investors and providing greater liquidity to the carbon market. This integration contributes to transparency, traceability, and reliability in the process of purchasing and managing these tokens, aligning with Forest Carbon's principles of sustainability and innovation.

Sustainable Blockchain

The Forest X represents the intersection of technology and sustainability. Every stage of this project has been meticulously studied, from the selection of areas to the tokenization process. In this regard, we chose Polygon as the blockchain, based on environmental security and resilience.

To start, what is the Tokenization process?

It is the process of breaking down a real asset into digital fractions with the aim of being easily traded. In our case, we are collateralizing based on the generation of carbon credits (REDD+).

Welcome to the Green Economy

By acquiring a Forest Token X, the investor is actually purchasing the equivalent of one kilogram of CO2. To effectively offset one carbon credit, the investor will need to obtain a thousand Forest Tokens X. This approach allows for fractional and democratic investment, actively participating in the protection of our planet and a new market trend.

Carbon-Neutral Blockchain

Polygon Matic is a network that operates as a parallel layer to Ethereum, the second-largest blockchain in the world. In practice, Polygon's technology enables faster transactions on the network and also serves as a foundation for the creation of other projects that interact with Ethereum.

In the universe of cryptocurrencies, various blockchain networks, known as 'blockchains,' function as decentralized databases. In this system, it is feasible to conduct transactions of digital assets, such as documents and cryptocurrencies, without the need for intermediaries, enabling transparent operations from anywhere in the world.

The pioneer and most recognized blockchain is that of Bitcoin. Ethereum, conceived in 2013 and officially launched in 2015, represents an evolution compared to Bitcoin's blockchain as it is programmable and allows for the creation of projects within its structure. This characteristic has propelled the rapid emergence of other cryptocurrencies. Currently, 60% to 80% of cryptocurrency projects are developed on Ethereum, with a focus on initiatives related to decentralized finance (DeFi).

The term DeFi refers to a set of financial products and services that operate within a blockchain. These solutions use algorithms and smart contracts to enable anyone connected to the blockchain to send and receive resources without the need for intermediaries. The Ethereum network is the primary platform where most DeFi applications are located.

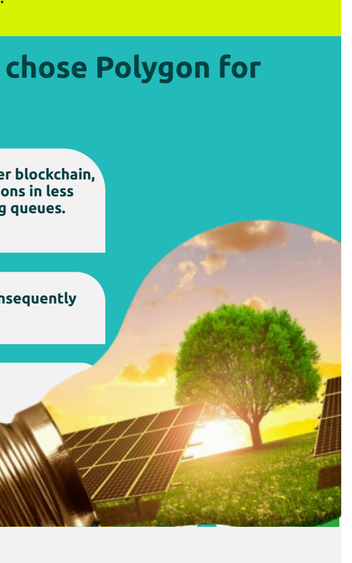
The Polygon network is created on the second layer of Ethereum to increase the speed of transactions within the network, with lower costs and reduced energy consumption in the proof-of-work process, making it more sustainable in the market.

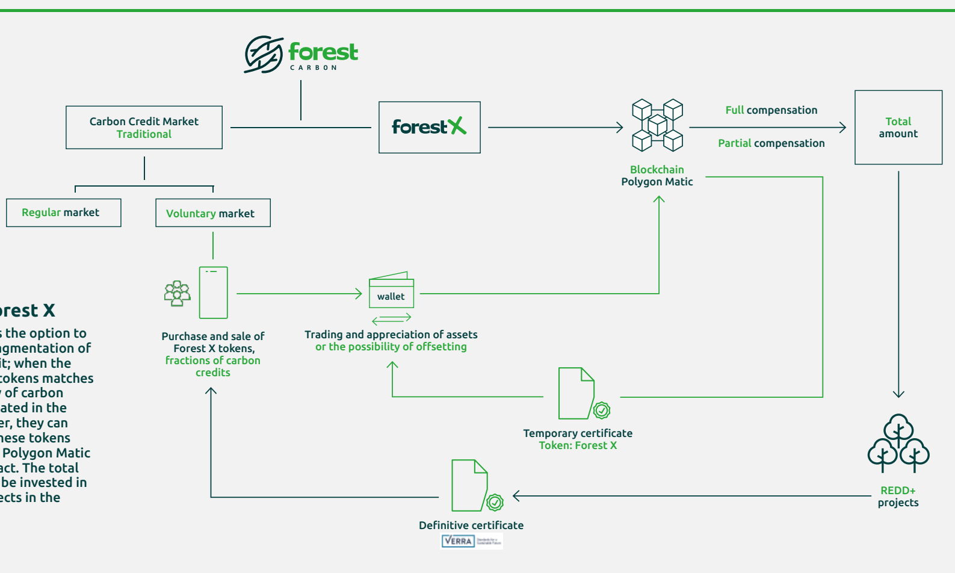
Summarizing, we chose Polygon for three reasons:

Scalability
Being faster than Ethereum's Ether blockchain, Polygon processes more transactions in less time, resulting in fewer processing queues.

Fees
Due to having fewer queues, it consequently has lower fees.

Sustainability
Polygon is carbon-neutral.





Token Forest X

The user has the option to acquire a fragmentation of carbon credit; when the quantity of tokens matches the quantity of carbon credits indicated in the serial number, they can neutralize these tokens through the Polygon Matic smart contract. The total amount will be invested in REDD+ projects in the Amazon.

Methodology

Forest Carbon ensures the certification of its carbon credits by Verra, a renowned international organization in emission mitigation. Following rigorous procedures, our credits are internationally recognized, reinforcing global quality and reliability. This commitment highlights our seriousness in emissions reduction and sustainable practices.

By investing in tokens or credits, investors engage with a company committed to transparency and integrity, seeking reliable partnerships. Forest Carbon demonstrates its commitment to providing sustainable investment opportunities that contribute to the environment.

In the areas under our management, we have implemented an advanced monitoring system, including cameras and a forest surveillance center, ensuring preservation and integrity. We keep investors informed in real-time through an exclusive app and strengthen our capabilities with satellite monitoring, reinforcing our commitment to sustainability.

VERRA Standards for a Sustainable Future

With the goal of preserving over 500 thousand hectares of the Amazon Rainforest, we plan to annually register more than 5 million carbon credits. This initiative not only safeguards the unique biodiversity but also significantly mitigates climate change, offering abundant opportunities for our investors.

We believe that the protection of the Amazon Rainforest is a shared responsibility. In addition to passive preservation, we implement sustainable management practices, involving local communities and promoting reforestation, contributing to a sustainable and resilient future.

This white paper serves as an informative guide, flexible to meet market demands. There is no need to communicate any changes in advance. We guarantee the delivery of carbon credits, highlighting our agile and responsible dedication. Additionally, we aim not only for preservation but also for the construction of a solid and reliable investment environment for all stakeholders involved.

Each carbon credit represents the reduction of one ton of CO2 emitted into the atmosphere. By acquiring a Forest X token, the investor is, in fact, purchasing the equivalence of one kilogram of CO2. To effectively offset one carbon credit, the investor will need to obtain a thousand Forest X tokens. This approach allows for fractional and democratic investment to contribute to the protection of the planet. It is important to note that by choosing to offset the tokens with carbon credits, these tokens become unusable, ensuring the integrity of the environmental compensation process.

FOREST CARBON GOALS

We have set the goal of preserving 10% of the Amazon Rainforest, aiming to protect its unique biodiversity and make a significant contribution to climate change mitigation. Our ambitious initiative envisions the annual registration of over 67 million carbon credits, creating a substantial reserve. This provides ample opportunities for trading and compensation for our investors.

Carbon credits not only represent a sustainable business opportunity but also an effective way to reward those who actively support our conservation efforts. By providing investors with a reliable source of carbon credits, we strengthen not only the economic viability of our projects but also encourage a virtuous cycle of sustainable investment.

+ 2 BILHÕES DE DÓLARES
BY 2030

6.7 MILLION HECTARES

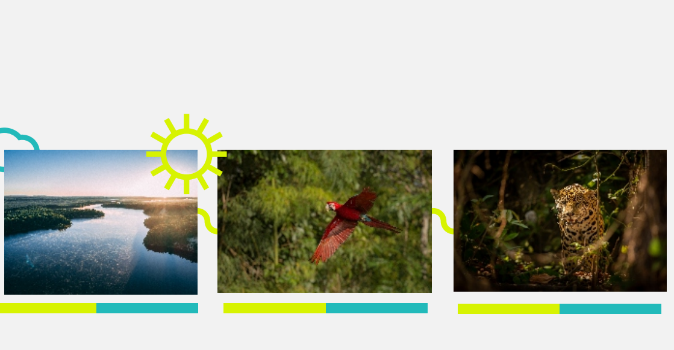
67 MILLION CREDITS PER YEAR

FOREST CARBON OBJECTIVES

- Environmental conservation
- Biodiversity protection
- Mitigation of climate change
- Sustainable development of communities
- Token Issuance
- Certified Carbon Credits
- Maximization of Environmental Assets
- Sustainable and Profitable Digital Economy

Agenda 2030: Sustainable Development Goals

Our objectives are aligned with the United Nations Sustainable Development Goals (SDGs), positively contributing to **the fight against climate change, poverty eradication, sustainable communities, responsible consumption, life on land and below water, and promoting peace and social justice.**



In the Agenda 2030, the Sustainable Development Goals (SDGs) are a collection of 17 global targets set by the United Nations General Assembly.

SOCIAL RESPONSIBILITY

Forest Carbon is firmly committed to raising awareness in local communities as an essential part of reducing deforestation and strengthening environmental conservation. We recognize that real change occurs when communities tangibly understand that the collective benefit of preserving a tree significantly outweighs the sale of wood. This understanding drives substantial advancements in the conservation and preservation of the Amazon.

To facilitate this shift in mindset, we invest in the education and well-being of communities. Through educational programs highlighting the economic, social, and environmental benefits of forest preservation, we aim to create a positive synergy between sustainable development and environmental conservation.

CONTRIBUTE TO THE FUTURE, INVEST IN THE AMAZON, AND SAVE THE PLANET

SUSTAINABLE DEVELOPMENT

SOCIAL RESPONSIBILITY

We commit to allocate 10% of our projects to social investments directly in local communities and indigenous peoples near each forest area managed by Forest Carbon. This initiative aims to strengthen social structures, promote sustainable development, and improve the quality of life for these communities. We believe that by supporting these communities, we contribute not only to environmental preservation but also to the construction of a sustainable model of coexistence between humans and natu.

By joining efforts in awareness, education, and social investment, Forest Carbon seeks not only to protect the Amazon but also to cultivate a harmonious and beneficial relationship between local communities and the ecosystem in which they are embedded.

HERE, MONEY GROWS ON TREES.

forestX

An initiative: forest CARBON