

INVESTMENT OPPORTUNITY

THE 1 BILLION TREES PLANTATION PROGRAM



PREPARED BY

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Acknowledgements

SMARTGREENINVEST | THE 1 BILLION TREES PLANTATION PROGRAM

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Dear Reader,

We are thrilled to have you join us in our mission to tackle climate change and promote sustainability. As a supporter of this program, you are making a tangible impact on reducing CO2 emissions and contributing to the preservation of our planet.

In this program, the plantation of trees and associated NFTs are unique as they represent verified carbon offsets. By joining us, you support projects that actively remove or reduce CO2 emissions, such as reforestation initiatives, renewable energy projects, and sustainable agriculture practices. These projects are crucial in mitigating climate change and protecting our environment for future generations.

The NFTs will be tradable in the voluntary carbon market and provide a mechanism for individuals and companies to take proactive steps towards forest conservation and carbon offsetting. It enables them to support projects with a positive environmental and social impact, contributing to the global efforts to combat climate change and protect our natural resources.

As part of this community, you can connect with like-minded entrepreneurs, stay updated on the latest developments in sustainable investment projects, and contribute to the ongoing efforts to create a more sustainable future.

We encourage you to actively engage with the community, share your ideas, and learn from each other's experiences. Together, we can significantly impact and drive positive change in the fight against climate change.

Thank you for being part of this program and joining our community. Your action is a statement of your commitment to a greener and more sustainable world. Let's work together to make a difference!

Warm regards,
SmartGreenInvest Team,

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INTRODUCTION

Addressing climate change is paramount, and reforestation and afforestation are vital in mitigating its impacts. Forestation and afforestation are two terms related to the establishment and growth of forests, but they differ in their context and purpose.

- **Afforestation** refers to establishing a forest by planting trees in an area previously devoid of trees or allowing natural regeneration. It involves deliberate human intervention to create a forest without any forest cover. Afforestation is typically carried out in areas that have experienced deforestation and land degradation or have been designated for reforestation. Afforestation aims to create new forest ecosystems, increase tree cover, and restore ecological balance.
- Conversely, **reforestation** involves replanting or regrowing trees in areas that have been deforested or where the forest cover has been significantly reduced. It focuses on restoring forests that have been previously established but have been degraded or lost due to human activities, such as clear-cutting, logging, or wildfires. Reforestation aims to replenish the tree population, restore biodiversity, and recover ecosystem functions in areas where forests once thrived.
- The amount of carbon dioxide (CO₂) that a tree can absorb during its lifetime varies depending on various factors, such as the species of tree, its age, environmental conditions, and growth rate. On average, a mature tree can absorb around 48 pounds (22 kilograms) of CO₂ annually. Over its lifetime, which can span several decades, a single tree can absorb and store several tons of CO₂. It's important to note that younger trees absorb CO₂ faster than older trees. As trees grow, their rate of carbon absorption may slow down, but they continue to provide other valuable ecosystem services, such as improving air quality, providing shade, and supporting biodiversity. Trees also release oxygen as a byproduct of photosynthesis, further contributing to the reduction of greenhouse gases in the atmosphere.

Both afforestation and reforestation are essential strategies for addressing deforestation, conserving biodiversity, mitigating climate change, and promoting sustainable land use. They involve planting trees and restoring forest ecosystems, which provide numerous environmental benefits, including carbon sequestration, soil conservation, water regulation, and habitat creation. These practices contribute to the overall health of ecosystems, enhance resilience to climate change, and support the well-being of both human and natural communities.

DEFORESTATION IN FIGURES

The world is off track to stop deforestation by 2030. Below are the main alarming critical indicators of Forest[1]:

- 6.6 million hectares deforested in 2022. The majority (96%) of deforestation occurs in tropical regions.
- 4.1 million Hectares of Tropical Primary forests were lost in 2022.
- Gross emissions from deforestation increased by 4 billion metric tons of CO₂ (+6%) compared to 2021. Forest carbon is released when trees burn or decay after death due to old age or wildfire.

MASSIVE FORESTS FIRES



[1] Forestdeclaration.org, OFF Track AND Falling Behind.

1 BILLION TREES PROGRAM

Planting a billion trees is a global initiative to combat climate change and promote environmental sustainability. The concept involves the collective effort of individuals, communities, small to large organizations, and governments to plant one billion trees worldwide. The goal is to mitigate the impacts of climate change by increasing the Earth's forest cover, which helps absorb carbon dioxide, provide habitat for wildlife, and improve air and water quality. Planting trees also contributes to biodiversity conservation, soil conservation, and the overall well-being of ecosystems. This ambitious initiative demonstrates the commitment to environmental stewardship and the recognition of trees' crucial role in mitigating climate change.

GOALS

This program aims to address climate change through two levers: reforestation and afforestation. Both are vital in mitigating its impacts.

Here's why:

- 01 Carbon Sequestration:** Reforestation and afforestation involve planting trees, which are natural carbon sinks. Trees absorb carbon dioxide (CO₂) from the atmosphere during photosynthesis and store it in their biomass, including the trunks, branches, leaves, and roots. By increasing the number of trees through reforestation and afforestation efforts, we can effectively remove CO₂ from the atmosphere, helping to mitigate climate change.
- 02 Reduced Greenhouse Gas Emissions:** Climate change is primarily driven by the accumulation of greenhouse gases (GHGs) in the atmosphere, such as CO₂. By planting more trees, we can reduce the concentration of CO₂ in the atmosphere, as trees act as carbon sinks. Reforestation and afforestation projects can help to offset GHG emissions from various sources, including industry, transportation, and deforestation.

- 03 Biodiversity Conservation:** Forests are home to many plant and animal species, contributing to biodiversity conservation. Addressing climate change involves preserving ecosystems and protecting biodiversity, which is crucial in maintaining ecological balance. Reforestation and afforestation efforts help create habitats and provide shelter, food, and breeding grounds for numerous species, contributing to their survival and overall ecosystem health.
- 04 Water Cycle Regulation:** Forests play a significant role in regulating the water cycle. They help maintain the balance of rainfall, evaporation, and transpiration, which is essential for the availability of freshwater resources. Trees in forests transpire water vapor into the atmosphere, contributing to cloud formation and rainfall. Reforestation and afforestation can enhance the soil's water-holding capacity, improve water infiltration, and reduce the risk of floods and droughts.
- 05 Soil Conservation:** Trees in forests contribute to soil conservation by preventing erosion. Their roots anchor the soil, reducing the risk of landslides and soil degradation. Forests also help to retain moisture in the soil, enhancing its fertility and supporting agricultural productivity. Reforestation and afforestation efforts can help restore degraded lands, improve soil quality, and promote sustainable land use practices.
- 06 Climate Resilience:** Increasing the global tree cover through reforestation and afforestation can enhance the resilience of ecosystems and communities to climate change impacts. Forests act as natural buffers against extreme weather events like hurricanes, storms, and heatwaves. They provide shade, reduce heat island effects in urban areas, and regulate local climates, creating more livable and resilient environments.

Addressing climate change is a collective responsibility, and reforestation and afforestation are potent tools in our efforts to combat it. By restoring and expanding forest ecosystems, we can reduce carbon emissions, conserve biodiversity, regulate the water cycle, protect soils, and enhance the resilience of communities and ecosystems. It is crucial to prioritize and support these nature-based solutions to mitigate climate change and create a sustainable future for generations.



THE VOLUNTARY CARBON MARKET

The carbon market refers to a system that aims to reduce greenhouse gas emissions and mitigate climate change by putting a price on carbon dioxide (CO₂) emissions. It operates on the "carbon trading" principle. The market provides both an economic incentive for entities to reduce their emissions and a mechanism to reduce emissions at the lowest cost. It also encourages the adoption of cleaner technologies, promotes energy efficiency, and supports the development of renewable energy projects. The carbon market can operate at various levels, from regional to international, and it is a critical tool in global efforts to address climate change and transition towards a low-carbon economy.

The voluntary carbon market for forests is a segment of the carbon market that focuses specifically on reducing emissions and promoting sustainable practices in the forestry sector. It provides a platform for individuals, organizations, and companies to voluntarily offset their carbon emissions by investing in projects that conserve, restore, or sustainably manage forests. In the voluntary carbon market for forests, projects are typically implemented in areas with high ecological value and high potential for carbon sequestration, such as tropical rainforests. These projects can involve avoiding deforestation, reforestation, or afforestation degraded land and implementing sustainable forest management practices.

When individuals or organizations participate in the voluntary carbon market for forests, they purchase forest carbon offsets. These offsets represent the reduction of greenhouse gas emissions achieved through the forest project. The purchased offsets can be used to compensate for their emissions or to meet sustainability goals. The voluntary carbon market for forests allows entities to take responsibility for their carbon footprint beyond regulatory requirements. It enables them to support projects that have additional environmental and social co-benefits, such as biodiversity conservation, community development, and ecosystem restoration.

By investing in forest carbon offsets, participants preserve forests vital for carbon sequestration, climate regulation, and biodiversity conservation. The voluntary carbon market for forests plays a role in combating climate change and promoting sustainable land use practices.

CARBON MARKET SIZE EVOLUTION

The current forest-based market is booming and is expected to reach US\$ 25 billion annually by 2030[2]. Also, according to the median estimates of several net zero scenarios, 10 billion tons of CO₂ will likely need to be removed from the atmosphere annually by 2050. That will create a new global market size of three trillion US\$, where the price of one-tone CO₂ neutralization is estimated to value from 300 US\$ up to 1000 US\$.

CARBON CERTIFICATES AND NFT

Non-fungible Tokens (NFTs) differ from cryptocurrencies like Bitcoin or Ethereum in several ways.

Here are the key differences:

- 01 Unique Representation:** NFTs are unique digital assets representing something specific, such as artwork, collectables, or certificates, while cryptocurrencies like Bitcoin or Ethereum are fungible, meaning each unit is interchangeable and holds the same value. NFTs have distinct characteristics, properties, or ownership, making them non-interchangeable.
- 02 Indivisibility:** NFTs cannot be divided into smaller units like cryptocurrencies. Each NFT is a whole and cannot be broken down into fractions. In contrast, cryptocurrencies can be divided into smaller units, such as satoshis for Bitcoin or wei for Ethereum, allowing for microtransactions.
- 03 Ownership and Authenticity:** NFTs are designed to prove ownership and establish the authenticity of a digital asset. They utilize blockchain technology to provide a decentralized and immutable record of ownership, ensuring that the digital asset is unique and cannot be duplicated or tampered with. Cryptocurrencies, on the other hand, establish ownership through the transfer of units within the blockchain network.

[2] Center For Global Development (GD) , Forest-Based Carbon Markets Pitfalls and Opportunities

04 Functionality: NFTs are primarily designed for specific use cases like digital art, collectibles, virtual real estate, or unique digital assets. They often include metadata that describes the asset's attributes, provenance, and ownership history. Cryptocurrencies like Bitcoin or Ethereum, on the other hand, are primarily designed as mediums of exchange and stores of value.

In summary, NFTs are unique digital assets representing something specific and indivisible. At the same time, cryptocurrencies like Bitcoin or Ethereum are fungible digital currencies that can be divided into smaller units. NFTs establish ownership, authenticity, and value for specific digital assets, while cryptocurrencies serve as mediums of exchange and stores of value.

TREES AS NFTS

Representing trees and CO2 certificates with Non-Fungible Tokens (NFTs) can be an innovative way to track and verify these assets' ownership and environmental impact.

Here's a general process of how it can be done:

- 01 Identify the Trees and Certificates:** Determine the specific trees or forest areas one wants to represent as NFTs, along with their corresponding CO2 certificates. These certificates are typically issued to acknowledge the carbon offset provided by the trees.
- 02 Create Digital Artwork:** Design or commission digital artwork that visually represents the trees or the concept of carbon offset. This artwork will be associated with the NFT and serve as its visual representation.
- 03 Tokenize the Assets:** Use a blockchain platform that supports NFT creation, such as Ethereum or Binance Smart Chain, to tokenize the trees and CO2 certificates. This involves converting the assets into unique digital tokens with specific attributes and metadata.
- 04 Smart Contract Development:** Develop a smart contract that defines the properties and functionalities of the NFTs. This contract should include information about the trees, CO2 certificates, ownership details, and additional features like transferability or royalties.

- 05 Mint the NFTs:** Use the smart contract to mint the NFTs, creating unique tokens representing each tree or CO2 certificate. This process assigns ownership and generates a unique token ID for each NFT.
- 06 Metadata and Verification:** Attach relevant metadata to each NFT, including details about the tree species, location, carbon offset, and other pertinent information. Anyone interested in the NFT can access and verify this metadata.
- 07 Marketplace Integration:** Integrate the NFTs into a marketplace or platform that specializes in environmental or sustainable assets. This allows users to easily buy, sell, or trade the NFTs, providing liquidity and fostering a community around these digital assets.
- 08 Transfer and Verification:** When a tree or CO2 certificate is sold or transferred, the ownership of the NFT should be updated accordingly on the blockchain. This ensures a transparent and immutable record of ownership and helps track the environmental impact of the assets.
- 09 Education and Awareness:** Promote using NFTs to represent trees and CO2 certificates to raise awareness about the importance of carbon offsetting and sustainability. Educate users about the environmental benefits of owning these NFTs and encourage them to participate in initiatives that protect and restore forests.



PRIVATE SECTOR ENGAGEMENT

Companies can benefit from joining reforestation programs in several ways:

- 01 Carbon Offsetting:** Reforestation programs offer companies the opportunity to offset their carbon emissions by investing in projects that remove CO₂ from the atmosphere. By participating in these programs, companies can demonstrate their commitment to environmental sustainability and take proactive steps towards mitigating their carbon footprint
- 02 Enhanced Corporate Social Responsibility (CSR):** Engaging in reforestation programs aligns with corporate social responsibility goals. It showcases a company's dedication to environmental conservation and sustainable practices, which can enhance its reputation and brand image among consumers, investors, and stakeholders.
- 03 Regulatory Compliance:** In some jurisdictions, companies are required to meet certain environmental regulations or carbon reduction targets. Joining reforestation programs can help companies meet these obligations and avoid potential penalties or legal issues related to non-compliance.
- 04 Access to Additional Revenue Streams:** Reforestation programs often generate additional revenue streams through the sale of carbon credits or timber products. Companies involved in these programs can benefit from the potential financial returns associated with sustainable forestry practices.
- 05 Biodiversity Conservation and Ecosystem Services:** Reforestation programs contribute to the protection and restoration of vital ecosystems, which in turn support biodiversity conservation and provide various ecosystem services such as water purification, soil erosion prevention, and habitat creation. By participating in these programs, companies can contribute to the preservation of natural resources and help maintain the balance of ecosystems.
- 06 Stakeholder Engagement:** Joining reforestation programs allows companies to engage with local communities, indigenous groups, and other stakeholders. Collaboration in these programs can foster positive relationships, promote social inclusiveness, and generate shared value for all involved parties.

Participating in reforestation programs allows companies to address climate change, demonstrate environmental leadership, and positively impact local communities and ecosystems. These benefits not only contribute to long-term sustainability but also align with the evolving expectations of consumers, investors, and society as a whole.

REPUTATION AND BRANDING IMAGE

Engaging in reforestation programs can be highly beneficial for a company's reputation and brand image for several reasons:

- 01 Environmental Stewardship:** Companies demonstrate their commitment to environmental stewardship and sustainability by participating in reforestation programs. This showcases a proactive approach to addressing climate change and mitigating the environmental impact of their operations. Such actions are highly valued by consumers, investors, and other stakeholders who prioritize companies responsible for their environmental footprint.
- 02 Social Responsibility:** Reforestation programs contribute to the well-being of local communities, biodiversity conservation, and the restoration of ecosystems. By actively engaging in these programs, companies demonstrate their social responsibility and dedication to making a positive impact beyond their core business activities. This resonates with stakeholders who increasingly expect companies to operate in a socially and environmentally responsible manner.
- 03 Differentiation and Competitive Advantage:** In today's competitive marketplace, companies need to differentiate themselves from their competitors. Engaging in reforestation programs allows companies to showcase their commitment to sustainability, setting them apart from their peers. This can lead to a distinct competitive advantage by attracting environmentally conscious customers, investors, and partners who prefer associating themselves with responsible and ethical businesses.

- 04 Consumer Perception and Loyalty:** Consumers are becoming more environmentally conscious and are actively seeking products and services from companies that align with their values. By participating in reforestation programs, companies can enhance their reputation as environmentally responsible and gain the trust and loyalty of consumers who prioritise sustainability. This positive perception can increase customer satisfaction, brand loyalty, and, ultimately, higher sales.
- 05 Investor Confidence:** Investors increasingly consider environmental, social, and governance (ESG) factors when making investment decisions. Engaging in reforestation programs demonstrates a company's proactive efforts to address climate change and environmental risks. This can boost investor confidence, attract socially responsible investors, and improve access to capital and investment opportunities.
- 06 Regulatory Compliance:** Governments and regulatory bodies worldwide are implementing stricter environmental regulations and carbon reduction targets. Companies showcase their commitment to compliance and ecological responsibility by actively participating in reforestation programs. This can help them avoid penalties, legal issues, and reputational damage associated with non-compliance.

Engaging in reforestation programs allows companies to build a positive reputation, enhance brand image, differentiate themselves from competitors, attract environmentally conscious consumers and investors, and demonstrate their commitment to environmental and social responsibility. These benefits contribute to the company's long-term sustainability and align with the expectations of stakeholders and the broader society.

FINANCIAL INCENTIVES

Companies are encouraged to offset their carbon footprint and to participate in the new voluntary carbon market. Today, planting a tree and issuing the NFT certificate cost ten US\$.

- 01** In the worst-case scenario (one CO₂ ton equal 300 US\$), one tree can neutralize 0,8 Tons of CO₂ worth 240 US\$ (ROI x 24).
- 02** In the best-case scenario (one CO₂ ton equal 1000 US\$), one tree can neutralize 0,8 Tons of CO₂ worth 800 US\$ (ROI x 80).

HOW THE PROGRAM WORKS

- 01** Companies subscribe to either silver or gold subscription services.
- 02** SmartGreenInvest prepares the Key Investment Document. This document defines the following:
 - Financial analysis Indicators.
 - Company's ESG actionable indicators.
 - CO2 footprint reduction target.
- 03** The company is advertised on social networks as an ECO Friendly and Sustainable company.
- 04** Companies decide how many Trees they want to plan.
- 05** SmartGreenInvest organizes the plantation of the trees with its local partner.
- 06** The tokenization of the trees works with a bundle of 100.000 trees. Companies are getting their NFT certificate within the next 12 months.
- 07** A company may trade their NFT certificate in the Marketplace after the third year of the tree plantation.

CALL TO ACTION

- 01** Individuals can participate in this program by planting ten trees per year.
- 02** Companies can participate in this program by subscribing to the Silver subscription (600 US\$ per month).
- 03** All citizens should subscribe to the SmartGreenInvest News Letter at <https://www.smartgreeninvest.store/>

CONCLUSION

The One Billion Trees program aims to engage citizens and responsible companies in sustainability development.

- 01** We highlighted the two levers for climate protection: forestation and afforestation.
- 02** We showcase the opportunity to join the Carbon voluntary market where the company can plan trees and get NFT certificates.
- 03** Citizens can invest as little as 100 US\$, whereas companies can invest 600 US\$ via a monthly subscription.
- 04** Participants in the Carbon market may expect an ROI from x 24 up to x80.