Save Planet Earth

OFFICIAL WHITE PAPER v4

The Cryptocurrency Response to Reversing the Effects of Climate Change

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Save Planet Earth

A worldwide carbon sequestration crypto project

1.0 Mission Statement

SavePlanetEarth (SPE) is a legally registered company in the UK and a global initiative dedicated to developing an array of different programs to combat global warming and climate change. To slow and eventually reverse the effects of global warming, we need to develop realistic carbon sequestration targets, employing various activities including afforestation, reforestation, renewable energy, soil regeneration, recycling, and enhanced marine climate management. We will achieve these projects by utilizing enhanced public interest, corporate interest, and innovativefinancing mechanisms. We will offer the SavePlanetEarth cryptocurrency ($SPE) directly to investors by taking advantage of blockchain technology. Once certified, we will create a carbon credit market, opening $SPE as an investment for companies and individuals to offset their carbon footprint. They can accomplish this by purchasing carbon credits from us and redeeming them on the blockchain, making everything transparent and verifiable.

Vision

The vision of SavePlanetEarth is to offer simple, affordable, and effective mechanisms to enhance carbon sequestration and institute effective emission control systems. These projects will help fight against global warming and assist in keeping climate change at manageable levels. SPE will be running initiatives worldwide to avert global warming, expanding carbon sequestration efforts, and aiding the international adoption of $SPE. SavePlanetEarth will be completely self-sufficient, as we will fund our environmental programs and reward our investors (see section 12.0) using the profits we generate from various activities, such as selling certified carbon credits, revenue from initiatives, trees produce, merchandise sales, and corporate use of our tree tracking application. We view blockchain technology as the future because it brings the world together and helps to create a unified, efficient global economy. Unfortunately, a lot of blockchain technology still relies on carbon-emitting energy sources. One of our ambitions is to neutralize the carbon emissions from blockchain technology completely. We are also in the early stages of developing a green blockchain to aid in this endeavor, which will be carbon negative and primarily used for certified carbon credit offsets to be verified, and an environmentally friendly way to transfer funds globally.

2.0 Team Biographies

Imran Ali

Founder and Director

"My main motivation for starting this project? The answer is simply my love of the environment, and being duty bound to work towards carbon abatement and the same goes for all of my team."

Imran Ali is a qualified Prince II Practitioner and MBA. He has over ten years of experience in a senior management role with external audit and in-house financial management experience gained in high-growth organizations, including Citibank, National Health Service UK, and various foreign government institutions.

Imran has been working in the waste management and environmental sectors for over 14 years. He is experienced in creating partnerships with health, environmental, and economic ministries around the world. He has provided the expertise and machinery to combat landfill sites, clinical waste and revolutionize recycling initiatives. Mr. Ali's reputation has grown throughout the waste and recycling industry, especially with the increasing need to recycle and manage waste responsibly. He has aided in this endeavor by providing equipment manufacturing and supplies, including balers, compactors, shredders, and advanced waste-management technology. This has been accompanied by regulatory measures imposed through governmental legislation and European directives.

Mr. Ali has worked with colleagues worldwide to develop renewable energy technologies such as solar, hydro, and wind power, capable of arresting carbon emission build-up and offering dynamic solutions. The team has been active in these pursuits for over three decades and has been mentored by great minds worldwide. Including Dr. Priyantha and his mentors: Sir Arthur C. Clarke, the Science Visionary, David S. Freeman, the Energy Advisor for the Carter Administration and Mr. Neville Williams, the energy pioneer who founded the Solar Electric Light Fund Nonprofit that effectively provided solar power for hundreds of unlit homes in Africa and Asia.

Dr. Priyantha Wijesooriya

[Senior Technical Advisor] - LinkedIn

A USA and Sri Lanka trained energy engineer (B.Sc and M.S in Energy Engineering, Ph.D. in Resource Economics and Inter-generational Equities). Dr. Priyantha Wijesooriya is a Rotary Foundation Scholar at the University of Massachusetts who has been pioneering renewable energy projects and sustainable development for years. He is a lifelong member of different clean energy advocacy associations, including being the founding president of the Solar Industries Association of Sri Lanka (SIA-SL), the Energy Forum (EF), and the Sri Lanka Energy Managers Association (SLEMA). Dr. Wijesooriya is also an accredited consultant to the Sustainable Energy Authority (SEA) and the lead design engineer for the 100-MW Utility-scale Solar Photovoltaics Park for the Government of Sri Lanka in Siyambalanduwa, Sri Lanka. Other previous experience includes being the CEO of SELCO Sri Lanka under SELCO USA (Maryland) to provide rural solar electrification across the entire country. He has also worked as township engineer of the University of Sri Jayewardenepura, solar bid design engineer for the IoM (affiliated to the United Nations) for war-affected civilians in northern Sri Lanka, consultant for World Bank outreach program, worked with Soluz and Enersol US Solar Program in the Caribbean, consultant for outer island Wind and Solar Electrification, and finally with the Asian Development Bank, ADB. His current pursuits include Solar PV storage, biomass power, and since 2018 he has been engaged in reforestation activities with Imran Ali (SavePlanetEarth Founder) in the endangered Knuckles Mountain Range, Sri Lanka.

Prof. Mohan Munasinghe

[Carbon Consultant] – Official Website

Former Vice-Chairman of the Intergovernmental Panel on Climate Change (IPCC) that shared the 2007 Nobel Peace Prize with former Vice-President of the United States Al Gore. He is also the Founder Chairman of the Munasinghe Institute for Development (MInD) and MInD Group.

Sanith de Silva Wijeyeratne

[Carbon Consultant] – LinkedIn

Director and CEO of the Carbon Consulting Company. After assuming responsibility for the company's overall management and strategic direction, Sanith has guided it to become the most recognized provider of carbon assessment, mitigation, and offset solutions. His company is also known for its expertise in a diverse array of sustainability solutions.

Aseef Khan

[Head Developer] - Linkedin

Software engineer with more than five years of industry experience specializing in mobile development (Android Native and Flutter), front-end web development UI design, project management, and software architecture. Aseef is capable of programming with Java, Dart, Python, C++, NodeJS, PHP, Ajax, JQuery, Bootstrap, NodeJS, Firebase, Express, and several others. He also has experience working with microservices, performance optimization, development life cycles, content delivery, server architecture, service delivery management, and more. Over the years, he has led various projects with teams ranging from 5-15 software developers and engineers. He was always keen to learn something new and adapt to the ever-evolving software industry. He started his entrepreneurial career at the age of 20 by co-founding an IT services organization that serves over 20 clients across the globe in various software industry sectors, from healthcare to hospitality to social media.

Sajid Salih

[Product Manager] – LinkedIn

Sajid is Director - Administration, and Projects at The Lumos Lab (Pvt) Ltd. He has experience in corporate finance, project management, eCommerce, and mobile platforms with startups since 2016. He is also an experienced marketing manager with a demonstrated history of working in the hospitality industry, business planning, project management, financial accounting, and marketing.

Chris Brooke

[Recycling Director] – LinkedIn

Mr. Brooke has over 40 years of experience in the recycling and renewables industry. With his experience as a technical engineer and industry advisor for a multitude of materials recovery and segregation facilities, he is the in-house SPE recycling and renewables guru. Chris is a Level 4 WAMITAB Hazardous Waste specialist and has worked on over 150 environment-related projects across the globe.

Prof. Rahula Attallage
[Technical Advisor] – LinkedIn

Having been awarded the Outstanding Research Award and Presidential Awards for Scientific Publications multiple times, Prof. Rahula Attallage holds a Ph.D. in Energy Engineering from Ecole Nationale Superieure des Mines de Paris, France. He is a Senior Professor in Mechanical Engineering in the Dept. of Mechanical Engineering at the University of Moratuwa.

Dr. Iftikhar Bokhari
[Technical Advisor]

With over 25 years of experience in project management and a recognized track record of delivering multi-million-pound contracts for urban regeneration and project engineering within the UK, Dr. Iftikhar Bokhari specializes in energy production from waste systems, integration of renewable technologies for domestic and commercial applications, research and strategic planning.

Dr. Graham Walwyn
[Technical Advisor] – LinkedIn

Mr. Walwyn is a Senior Project Engineer specializing in electrical design, costing, and procurement. He has worked on various multi-million-pound developments, which range from medical, commercial, and domestic systems. He is also specialized in the design, installation, and maintenance of renewable energy technology.

Prof. Waqar Ahmed
[Technical Advisor]

With over 30 years of industrial and academic experience in engineering and science, Prof. Waqar Ahmed leads the Experimental Nanophysics Group focusing on Renewable Energy Technology and Sustainability.

3.0 Abstract

The effects of global warming have rapidly emerged during the last century with noticeable devastation, including disappearing glaciers, rising ocean levels, increasing ocean acidity, widespread extinction, and rapidly elevating carbon dioxide levels. This deterioration of the natural environment accelerates, with commercial interests almost always coming out ahead of ecological concerns. Implementing activities to support afforestation, reforestation, conservation, and overall environmental safeguarding is the only way to reverse this dire situation.

Carbon sequestration involves naturally capturing atmospheric carbon dioxide (CO_2) back into the earth to slow or reverse CO_2 pollution and mitigate climate change. This process offers incredible hope in the war against global warming because trees, mangroves, corals, and other natural structures sequester carbon all the time. However, humanity has destroyed many of these valuable ecosystems, and the rate of destruction has increased dramatically during the last hundred years. We must initiate carbon sequestration projects now; they can no longer be a vague future 'plan.'

Adequate financing and support will play an essential role in supporting the carbon sequestration processes. People worldwide are searching for new ways to contribute to the war on global warming, slowing the ongoing climate change, and improving conservation efforts. However, traditionally the fight against global warming has been left up to large bureaucratic institutions and governments, which have little to show for all the money spent at taxpayer's expense.

The environment is not a thing to be left at the behest of the donor community, and it certainly cannot beg for its survival. We must seek to institute proactive methods to sustain the natural environment for our survival and the survival of our children. Current carbon-based revenue systems and taxes on polluters must be strengthened and adapted to the 21st century.

The need for innovative financing seems to have found its niche in the burgeoning cryptocurrency market that allows institutional and private investors to make wholesome investments to fight against global warming. This framework of innovative financing and our capacity to achieve grassroots-level action inspired SavePlanetEarth to utilize blockchain technology in our fight against the devastating effects of climate change.

Through strategic partnerships, academic backing and a strong budding cryptocurrency community, we plan to significantly change the Earth's landscape through carbon sequestration in coordination with international aid organizations and the general public alike. Our overall goals include enhancing worldwide tree cover, better marine management and lobbying for more meaningful legal controls. The existing commercial market needs to wake up and face real costs of climate change because it affects everyone from polluting mega corporations to sustainable subsistence communities across the planet.

It is no surprise that more people are starting to take the troubles of climate change seriously and are already adapting to some measures in altering their lifestyle to reduce their carbon footprint. These decisions have a "hit or miss" sort of influence that may prompt people in their circle — such as family members, friends, neighbors, and co-workers — to do the same. It is always positive news when more people turn to experts, trusted sources, and fact-based studies and plan to do their part on minimizing their carbon footprint, ultimately reducing greenhouse gas (GHG) emissions.

4.0 Global Warming and Formation of SavePlanetEarth

The effects of global warming appear everywhere, including rising ocean levels, acid rain, sudden and unpredictable weather extremes, as well as the most powerful cyclones and hurricanes ever experienced. We cannot take these effects lightly; they deserve enhanced public attention, and most importantly, action. The impact of global warming affects current society and will only be compounded upon future generations if nothing gets done.

Some efforts to combat global warming and climate change have been initiated, but the majority either think it is somebody else's problem to solve or simply claim they will do something later; meanwhile, the pollution is at record highs and is not slowing down. Unfortunately, it has been far too little, and if humanity waits much longer, it will be far too late. Lack of action on climate change is often attributed to a lack of necessary total funding and funds being entrapped in bureaucratic processes and not reaching projects promptly. We need new and innovative financing to support strategies that combat carbon emission build-up. This includes funding projects directly and also developing innovative funding mechanisms. The emerging cryptocurrency market is an effective international currency system that can help to combat these funding issues and help aid in the sequestration processes to combat global warming.

Addressing these climate challenges is why we founded SavePlanetEarth (SPE). Our road map is straightforward, utilizing strategic partnerships, academic backing, technical knowledge, and focusing on a solid and budding cryptocurrency market worldwide. We will be able to fight against global warming through carbon sequestration projects around the world. Our goals include all forms of afforestation and reforestation to reclaim devastated and ruined land patches. We also aim to impose more legislative controls to preserve the marine climate and ecosystems. We shall work with discerning private investors, non-governmental organizations, and governments worldwide to support our war against global warming.
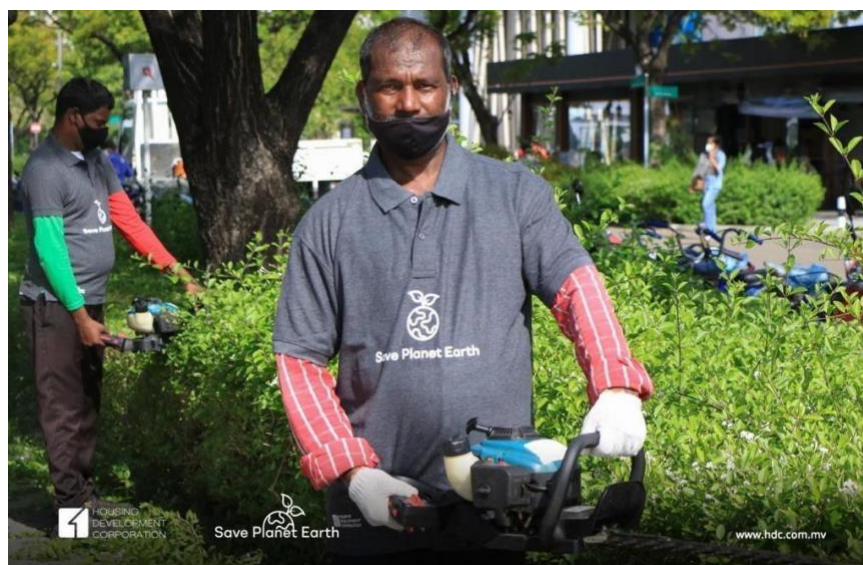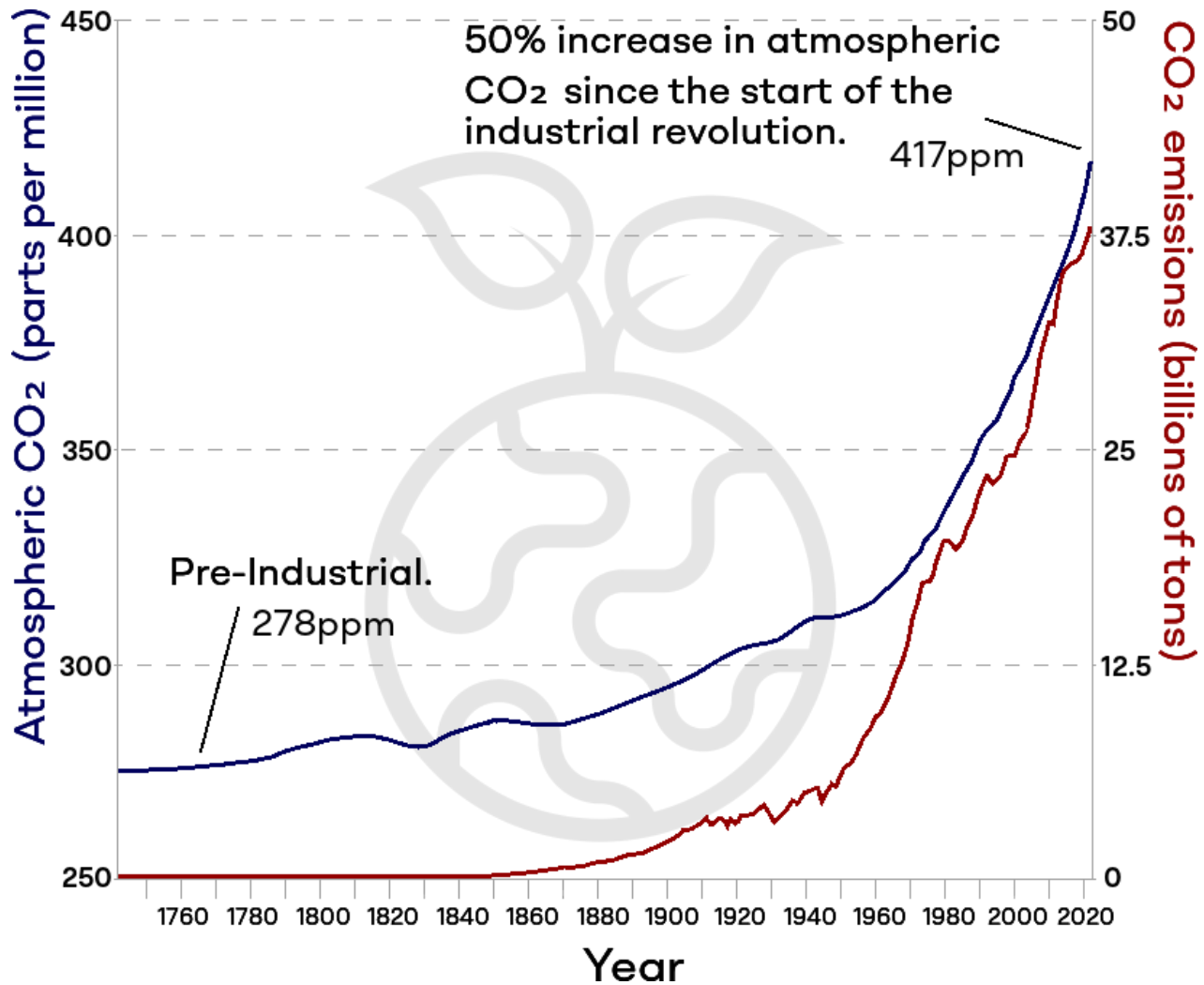
5.0 Insights on Global Warming, Climate Change, and Carbon Sequestration

It is unanimous amongst the scientific community that human activities are contributing towards damaging Earth's climate. Globally, experts are conducting studies that continuously find more evidence connecting extreme climate change to humanity's increasing usage of fossil fuels and industrial development. While helping humankind in various ways, these industrial practices have done so at the expense of drastically increasing carbon dioxide and other greenhouse gases in the environment. This has resulted in progressively higher air and sea temperatures. If left unresolved for much longer, the negative impact on Earth's ecosystems will become irreversible.

Almost two hundred nations have signed the Paris Climate Agreement, a commitment to limit Earth's temperature from rising by 2°C this century. Experts believe that even surpassing 1.5°C could be a point of no return for our environment. Unfortunately, Earth has already warmed by 1.2°C and is not showing any signs of slowing down. Less than 20% of the emissions created during the last year were offset. Reducing our emissions as a species is of paramount importance before it is too late. Carbon reduction and sequestration are critical if we are to have any hope of reversing these harmful effects.

50% increase in atmospheric CO_2 since the start of the industrial revolution.

417ppm

Pre-Industrial. 278ppm

Since the beginning of the Industrial Revolution, humans have been rapidly changing the balance of gases in the atmosphere. The burning of fossil fuels, like coal and oil, releases carbon dioxide (CO_2) and other greenhouse gasses. CO2 is the most common greenhouse gas. Atmospheric CO2 amounted to about 280 parts per million (ppm) before the Industrial Revolution. As of 2017, carbon dioxide levels in the atmosphere were at 406.5 ppm (406.5 molecules of CO2 in the air per every million air molecules), their highest levels in 650,000 years (Source: United States National Aeronautical and Space Administration). In 2021, it exceeded 417 ppm and is in a continuous upward trend. CO_2 levels have not been this high since the Pliocene epoch, which occurred between 3-5 million years ago.

Global warming does not just imply the warming of the planet, which is part of the reason why "climate change" has become the more commonly accepted term among researchers and policymakers. The overall increasing global temperature can impose devastating and often irreversible environmental damage on ecosystems, both on land and oceans. There are diverse ways to observe this, including melting ice caps, sea level increase, loss of marine life, depletion of aquatic food chains, acid rain, weather extremes, devastating cyclones, and other devastating climatic changes. Furthermore, the planet is experiencing rapid desertification, severe impacts observed on photosynthesis and food yield forms, and the rapid annihilation of natural ecosystems. Salient features of information are listed below:

- The average global temperature has been rising since 1880.
- The minimum expanse of Arctic summer sea ice has declined 13.3% per decade since the 1980s.
- Land ice has declined at the poles by 286 giga-tons a year since 2002.
- Global sea levels have risen 7 inches (176 millimeters) in the past century, directly threatening low-lying countries such as the Maldives and the Netherlands.
- Solving climate change will require significant shifts in energy production, from fossil fuels to less carbon-intensive renewable sources.

CO_2 makes its way into the atmosphere through a variety of routes. Burning fossil fuels releases CO_2 and is by far the largest source of these emissions. According to the EPA's 2015 report, fossil fuel combustion (including electricity generation) in the United States alone released over 5.5 billion tons (5 billion metric tons) of CO_2 into the atmosphere. Other processes, such as non-energy use of fuels, iron and steel production, cement production, and waste incineration, boost the total annual CO_2 release in the USA to almost 6 billion tons. Shockingly, this is just one nation. The world as a whole is releasing ever steadily increasing amounts of CO_2 every year.

Deforestation is also a significant contributor to excessive CO_2 in the atmosphere. It is the second-largest anthropogenic (human-made) source of CO2. When trees are logged or burnt, they release the carbon they have stored due to photosynthesis. According to the 2010 Global Forest Resources Assessment, deforestation releases nearly a billion tons of carbon into the atmosphere per year.

Protecting forests is a solution to stop rising greenhouse gas emissions since forests remove CO_2 from the atmosphere. Managing sustainable forestry is critical to reducing emissions and maintaining a 1.5ºC world. Tropical forests are significantly impacted by these commercial logging operations, as they account for more than 60% of the forest loss in Latin America and Southeast Asia. This is usually a permanent loss since these forests rarely get replanted.

Animal agriculture is also a significant source of climate change, generating more greenhouse gas emissions (CO_2, methane, and nitrous oxide) than all combined vehicle (land, water, and air) emissions. The Food and Agricultural Organization (FAO) estimates that animal agriculture is responsible for 14% of all greenhouse gases emissions. However, this estimate includes assumptions such as a long half-life for methane. It does not account for the negative opportunity cost of removing forests, which act as carbon sinks, grazing land, and producing animal feed. According to the WorldWatch Institute, animal agriculture generates 51% of greenhouse gas emissions.

Methane comes from cows and is 70 times more impactful than CO_2 emissions on global warming. Nitrous oxide emissions arise from the vast amounts of fertilizer used to grow genetically engineered corn and soy, fed to animals raised in concentrated animal feeding operations (CAFOs). Nitrous oxide pollution is even worse than methane and is 200 times more damaging per ton than CO_2.

Animal agriculture is a leading cause of deforestation and species extinction. Nearly 80% of agricultural land is used for grazing and growing animal feed. The Earth is in the midst of the sixth mass extinction of life. Scientists estimate that between 150-200 species of plant, insect, bird, and mammal become extinct every 24 hours. This is 1,000 times the natural or background rate of extinction and is more significant than anything the world has experienced since the demise of the dinosaurs nearly 65 million years ago. Animal agriculture is also the number one source of ocean dead zones as fertilizers eventually get into our waterways, further damaging the environment.

Some of the most immediate impacts of global warming lie beneath the waves. Oceans also act as a carbon sink since they absorb dissolved CO2. While this carbon sink is not bad for the atmosphere, increased amounts of CO2 can have disastrous effects on the marine ecosystem. When CO_2 reacts with seawater, it leads to a decline in pH, known as ocean acidification.

Increased acidity eats away at the calcium carbonate shells and skeletons that many ocean organisms depend on for survival. These include shellfish, pteropods, and corals.

Coral reefs are home to at least a quarter of the entire biological diversity of the oceans. Coral reefs serve as essential habitats to as many as 3 million species, including more than 25% of all marine fish species. Species feed, reproduce, shelter, and survive in the vast 3-dimensional framework offered by coral reefs. The combined pressures of increasing acidity and global warming lead to coral reefs becoming nothing more than eroded rock structures.

Additionally, millions of tonnes of plastic are polluted into our seas every year. A large quantity of it breaks down into microplastics. When humans eat seafood contaminated with microplastic particles, we ingest many chemicals they carry, such as neurotoxins, endocrine disruptors, and carcinogens. Exposure to these chemicals increases the risk of cancer, hormone interference, and congenital disabilities.

THE PLASTIC YOU USE ONCE TORTURES THE OCEANS FOREVER

6.0 Future Outlook on Global Warming and Climate Change Issues

A growing number of business leaders, government officials, and private citizens are concerned about the worldwide implications of global warming and are proposing steps to reverse the trend. While some argue that "the Earth will heal itself," the natural processes for removing this human-caused CO_2 from the atmosphere works on the timescale of hundreds of thousands to millions of years. Earth's self-recovery will not occur quickly enough to preserve our cultural institutions and societal systems as they are.

There is no question that global warming needs to be restrained or reversed. Despite the vast amounts of public funds and effort expended since the Earth Summit in Rio de Janeiro during the last 30 years led by the United Nations Organization (UN), the World Bank (WB), the Asian Development Bank (ADB), the African Development Bank (AfDB) along with others, yet the war on global warming is yet to be won or even slowed down. Nothing scheduled within the near future seems to offer much to tip the balance in favor of slowing down carbon emissions.

Looking at all the available evidence, we can make two deductions:

- The rate at which global warming occurs due to anthropogenic and other factors is far greater than human efforts to combat the problem.

- The funds and resources spent to avert emissions buildup and promote carbon sequestration do not reach grassroots levels sufficiently or promptly.

A close examination of these two factors reveals that the current status quo may have influenced both aspects to some extent, where the current rate of global warming is mainly unaffected today due to the inefficiencies inherent in various institutional complexities.

Many researchers and engineering industries have developed outstanding technological designs to capture CO_2 buildup through mechanical means. These 'Carbon Capture and Storage (CCS)' methods are engineering marvels due to their inherently bold efforts to sequester huge volumes of CO_2 from the air. However, a closer examination reveals that these proposed CCS models are generally prototype technologies with no broad prospects to aid humankind in the sequestration processes. The level of CO_2 being released is so overwhelming that no mechanical system could be employed to sequester enough. Therefore, CCS mechanical methods may simply not work, given modern industry and society's colossal volume of emissions.

In this context, it is clear that a systematically grown tree canopy is critical for sequestering carbon adequately. Marine management processes are also a crucial part of the tree-growing initiative. Oceans naturally absorb CO_2 through acid rain and dissolved CO_2. However, ocean management towards marine carbon sequestration might be out of reach for most people and institutions, so it is best to start work on the land first. Nevertheless, ocean and marine management are essential to any proper carbon sequestration proposal.

Staying Below 2 Degrees of Global Warming
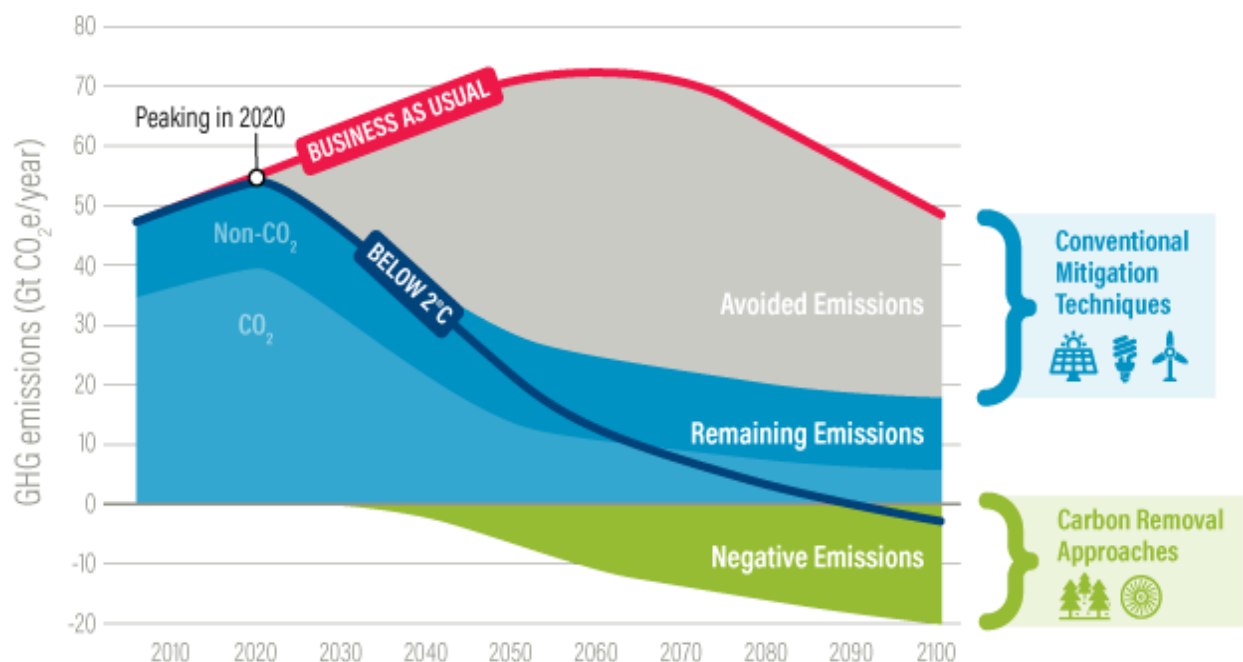
As explained on the graph above, reaching net negative emissions consists of having a green part (removing emissions) more important than the blue part (remaining emissions). However, organizations first need to avoid emissions (the grey part) to achieve net zero-emission (when the blue line crosses the 0-axis).

7.0 Growing Tree Canopies

We have begun to create a movement through SavePlanetEarth, which involves sequestering carbon through afforestation or reforestation. The methodology used is commonly thought of as:

- Inexpensive (cost-efficient)
- Clean (also provides other ecosystem services)
- Proven (many countries have the legacy of tree growing)
- Effective (can see immediate results in a short amount of time)
- Efficient (less resource and energy consumption)
- Sustainable (can be incorporated in a multi-functional forest providing timber production and other benefits for local communities)
- Economical (can provide economic incentives for sustainable forest management)

Trees absorb CO_2 from the atmosphere through photosynthesis and use light energy to run enzyme-catalyzed reactions. Cellulose production consumes most of the carbon absorbed by trees, but some CO_2 gets released into the air through respiration. The absorbed carbon forms above-ground biomass stem wood, branches, leaves, and roots.

Carbon accumulated in leaves is released back to the atmosphere after a relatively short period when the fallen leaves decompose. However, carbon in wood is stored for many years, depending on time-dependent factors such as tree species, growing conditions, forest management, and various uncertain occurrences such as forest fires or diseases. 50% of dry wood is formed from carbon. A widely held assumption is that forests approach carbon saturation at maturity and that when trees reach this pinnacle level, they stop sequestering carbon. With a continuous cover, forests could act as long-term storage of carbon. When trees die, carbon remains stored in the soil, acting as a long-term carbon sink.

We cooperate with various NGOs, Ministries of Environment and Climate Change, and other similar partner organizations worldwide. We will be releasing our financial accounting periodically onto the website SavePlanetEarth for full transparency. The revenue deployment will be visible, and we regularly update our blog with all the projects undertaken. We will tackle climate change on a global scale with like-minded action groups around the world.

8.0 Tree Planting and Monitoring

We will be working with relevant scientists and planting trees native to Sri Lanka, the Maldives, and other areas across the globe. We will ensure that no invasive species affect the native flora and will also be adhering to the existing biodiversity with trees such as:

PEPPER • TEA • JACKFRUIT • DURIAN • BREADFRUIT • BANANA • BANYAN • MANGO • COCONUT • RUBBER • CINNAMON • IRONWOOD • KUMBUK • KITUL

A database compiling each CO_2 absorption rate of each tree will be made freely available on SavePlanetEarth.io
Why do we plant these types of trees?

- Revenue generation provides more funds towards our projects and helps the local community meet their household expenses.
- Continued monitoring in person due to the symbiotic relationship between the community and tree life cycle.
- Local growing expertise and cultural usage for non-consumable products from the biomass of the species, such as boatbuilding, woven mats, wood ornaments, and more.

We are currently developing a revolutionary application that utilizes satellite technology, AI, geospatial algorithms, and drones to monitor green canopy cover (an indicator of tree health and carbon sequestered) where these projects occur.

Procurement for the technology and equipment is being tendered. Once SavePlanetEarth's nurseries are open in Sri Lanka and the Maldives, we will plant a lot more and faster as each nursery will hold over 100,000 saplings in stock at any given time. We will be replicating this model in many other countries. We are very close to finalizing deals with more nation-states and NGOs that will be economically feasible and sustainable for SPE for years to come. The future is green.

9.0 Tokenomics

We used a popular battle-tested open-source code for our token and modified some parts for additional security. As seen in the 100% perfect score from our Certik audit, this paid off. We launched SPE on April 9th, 2021, onto the Binance Smart Chain (BSC), although we will be developing our green blockchain in the future. We started with a max supply of 1 quadrillion, although we adjusted the initial quantity and burned 400 trillion tokens. We have also done some manual burns whenever we have hit milestones or wanted to reward community engagement. Additionally, we will apply burn mechanics to the token in the future related to our carbon credit use case (See section 10.0).

Below is an explanation of our tokenomics and initial distributions.

- **1,000,000,000,000,000 Max supply**

  Actively up to date APIs:
  Max supply: Initial quantity minted; no more can be created.
  Total supply: Max supply - Burn address.
  Circulating supply: Total supply - Locked addresses.

- **400,000,000,000,000 Initial burn**

  Burn address

- **250,000,000,000,000 Presale + 5,000,000,000,000 DxSale Presale fee**

  DxSale PreSale Page │ DxSale Contract Address │ SPE Token Contract Address

  Any tokens that did not sell during the presale are permanently locked inside this DxSale address (unofficially burned).

- **200,000,000,000,000 PancakeSwap initial listing pool**

  SPE's PancakeSwap Address │ DxSale Locked Liquidity Contract
  The liquidity was locked until April 9th, 2026.

- **145,000,000,000,000 Locked team wallet**

  DxSale Team Wallet Address | DxSale Vesting Contract

  We initially locked this address until June 1st, 2021, but the team has re-locked it until February 24th, 2024. The $SPE we locked inside the DxSale address will be unlocked at a slow pace of 1% every 10 days for 1,000 days. Any tokens the address earns from redistributions are permanently locked in the address (unofficially burned) due to the terms of the DxSale smart contract. Only the 120 trillion tokens that we originally sent can ever be released from the address. The team wallet has various uses, including liquidity for exchange listings, marketing, promotions, and manual burns. We intended to use this address primarily for SavePlanetEarth's carbon sequestration initiatives. Nevertheless, up to now, SavePlanetEarth's partnerships and projects have been funded by its directors (including the founder Imran Ali) investing profit from their other businesses.

  The smart contract includes two inherently brilliant ideas borrowed from other projects:

  Reflective Holding Rewards

  $SPE investors will receive passive rewards through static reflection on each transaction; 2% of every transaction gets redistributed proportionately depending on how much $SPE they possess, implementing auto-staking.

  Automatic Liquidity Providing

  The liquidity pool is an integral part of decentralized finance; that is why we decided to redistribute 5% of every transaction into our locked liquidity pool. As a result, the price will become more stable as time goes on. Thus, more significant transactions can occur without a high price impact, benefitting everybody involved.

SPEC, SPE's Green Blockchain

A carbon neutral/negative blockchain native to SPE has been added to the roadmap in this latest version of the whitepaper. It will be a green blockchain powered entirely by renewable energy sources. The SPE Chain (SPEC) will be primarily used for our certified carbon credit ecosystem and as an environmentally friendly way for people to send funds anywhere in the world at a low cost. Reasonable transaction fees will be used as addition funding towards our environmental initiatives. The SPE blockchain is still in the early development stages; we will release more details in the whitepaper v5.

10.0 Carbon Credit Exchange

One of the primary utilities of the $SPE cryptocurrency is to be the exclusive currency of the carbon credit exchange we are developing. Both individuals and organizations alike will be able to use $SPE to buy certified carbon credits from SavePlanetEarth and other companies that choose to exchange their carbon credits on our market. The exchange will have two levels.

The first level will essentially be a carbon credit broker, similar to buying from an online store. Users will buy SavePlanetEarth certified carbon credits directly from us using this section; This will also be where investors can buy other companies' carbon credits after being approved by environmental regulators. In return for being able to list on our exchange, they will pay a listing fee and a percent out of each sale which will go towards funding our environmental projects. It will only be possible to buy carbon credits on our exchange using $SPE.

When purchasing the carbon credits from us, the transaction will work as follows:

● A percentage of every sale will be sent to the burn address, making SPE deflationary.
● The staking pool will receive a percentage, rewarding our investors.
● A percentage will be used to fund SPE projects when SPE carbon credits are sold.
● In the case that other companies' carbon credits are sold on our platform, a percentage of the transaction will be used to fund SPE projects.

The second level will be an open market in which anybody can exchange their certified carbon credits. Suppose an investor has purchased a carbon credit certificate from our store but does not desire to offset their emissions. In that case, the investor will be able to sell it on our open market for whatever price they set it as. People will be able to use our platform to invest in the carbon credit market, intending to sell in the future when the value of carbon credits has risen as is projected. Of course, like the first level, the exclusive currency for the exchange will be $SPE. When exchanging the carbon credits from us, the transaction will work as follows:

● As with the first level, a percentage will be sent to the burn address, but much smaller as the majority is for the seller.
● The staking pool will also receive a portion of level 2 transactions.
● A smaller percentage than level one will be allocated to fund SPE projects.
● The vast majority of level 2 carbon credit exchange transactions will be sent to the seller, and the certified carbon credit will be sent to the buyer.

(Exact percentages of allocations regarding the SPE Carbon Credit Exchange will be determined at a later date, and are subject to modifications).

$SPE earned from carbon credit sales and fees will be sold on our platform, allowing investors to purchase $SPE using their fiat bank cards or by exchanging other cryptocurrencies. We will then use these funds to invest in environmental projects that will sequester more carbon, resulting in us producing more carbon credits to sell, effectively making SavePlanetEarth self-sustaining.

11.0 Carbon Credit Certificates

The carbon credits, which will only be purchasable using $SPE, will be designed similarly to NFT's and will become certificates on the blockchain. We will only be able to mint carbon credit certificates backed by certified carbon credits we have earned. We will also mint carbon credit certificates for other companies that want to sell their carbon credits on our platform. However, they will be required to verify that their carbon credits are adequately certified. We will achieve carbon credit certification by getting regulators to approve our various environmental projects, including renewable energy, planting trees and mangroves, recycling, cleaning beaches and oceans, and more.

SPE has recently partnered with "the Carbon Consulting Company," which will help us certify each carbon credit we have earned. Corporations will offset their carbon footprint by sending their carbon credit certificates to the offset address on our blockchain (which will essentially be a burn address). Each carbon credit will equate to one ton of carbon emissions being offset. Every carbon credit they offset will be traceable back to their wallet address as it is all tracked on the blockchain, making everything transparent and legally verifiable.
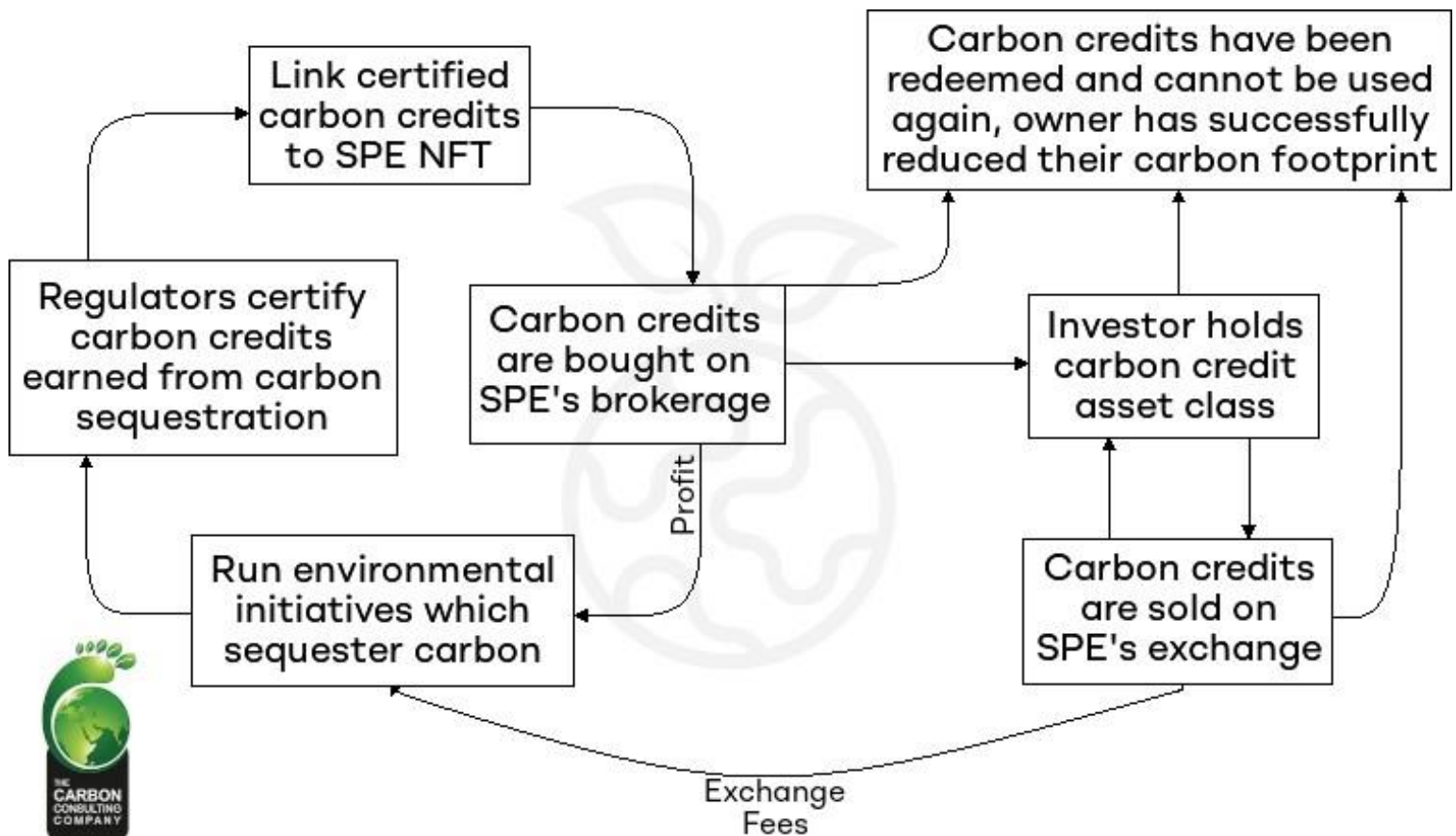
Strategic Outline for SPE Carbon Credit Certificates

Phase 1: VER

Voluntary Emissions Reduction (VER): A carbon offset exchanged in a voluntary market for credits.

Voluntary offset markets function outside of compliance markets and enable companies and individuals to purchase carbon offsets voluntarily. For example, individuals seeking to offset their CO_2 emissions and companies that want to become climate neutral can buy equivalent carbon credits to "neutralize" their carbon footprint. We will include a carbon calculator on our website and app to determine this footprint, and offsetting can occur through the purchase of SPE in the online portal.

We have ways to register the trees and zones with governments and calculate the quantity of carbon sequestered per 'block' of trees in said zone. We can then dedicate NFTs (minted on a carbon-neutral blockchain until SPE's blockchain is up and running) to these carbon offsets, which our application can consult (currently in development). The VER carbon credits will be purchasable by individuals or companies to help offset their carbon footprint.

In the case of carbon credits produced by trees, these tokenized CO_2 certificates contain:

- Plot location

- Boundaries

- Vertices

- Central coordinates

- Tree species

- Measurement methods

- The total amount of CO_2 offset

Phase 2: CER

Certified emissions reduction (CER) are emission units (or credits) created through a regulatory framework (SPE Tree Application and monitoring tool) to offset a project's emissions. The main difference between the two is that there is a third-party certifying body that regulates the CER. Currently, an ongoing high-level discussion is taking place between the in-house SPE technical advisors and certification bodies. Some of the work in progress is listed below:

- Demonstration to the community of a carbon-neutral crypto (SPE).
- Demonstration to the community of an NFT based offsetting structure.
- Scalable CO_2 certificate model offered to nations, enterprises, and institutions to tokenize new environmental projects like planting, algae, and coral and register them as CO_2 certificates on SPE's blockchain.
- Tokenization and archiving of singular trees.
- Large tree registries for scalable offsetting through SPEs Tree monitoring app for tracking for companies.
- Staging of supplementary action areas. NFT based tree tracking for institutional agriculture and forest conservation under our "Trees Saved" initiative.

$SPE will be stapled to each carbon credit certificate we produce that will be tradable in carbon exchanges, providing a means for our clients and partners to integrate into the SPE blockchain and cryptocurrency sector and integrate the process into a global exchange platform.

With these carbon credits, we shall first offset our own electricity 'footprint' and that of our clients worldwide. We will also offset the emissions footprint of our flights to the various countries we have been traveling to, creating partnerships. Our carbon arrangement will also add better value for our investors, both as an investment (leveraging green projects like tree growth and emission reduction technologies) and a carbon credit exchange.

"The World Bank calculates that carbon prices need to be in the range of US$40-$80 a ton by 2020, and between $50 and $100 a ton by 2030 to achieve the temperature goals in the Paris Agreement."
https://www.reutersevents.com/sustainability/global-race-put-credible-price-carbon

An individual or company's carbon footprint is the total amount of greenhouse gases (GHG) (including carbon dioxide and methane) generated by all activities undertaken.

The average carbon footprint for a person in the United States is about 16 tonnes, one of the highest rates in the world. In the United Kingdom, it is around 8 tonnes. Globally, the average is about 4 tons. To have the best chance of avoiding a 2℃ rise in global temperatures, the average global carbon footprint per year needs to drop under 2 tons per person by 2050.

Lowering an individual's carbon footprint from 16 tons to 2 tons does not happen overnight. Luckily, minor alterations to our actions, like reducing meat consumption, fewer flights or journeys by car, and hang-drying our clothes, can all add up and start making a big difference. This same solution also applies to organizations and corporations, but not to a large enough extent.

Since companies constantly demand carbon offsets, continuous revenue will flow into the SavePlanetEarth ecosystem, leading to more carbon being sequestered from the atmosphere.

Carbon Offsets

Offsets represent emission reductions that have been achieved outside of the capped sector.

Company A needs to meet its emissions cap

Company A invests in carbon credits from Company B

Investment

Carbon Credit Certificate

Carbon Offset

Company B earns carbon credits for its certified offsets

Company B uses Company A's investment to fund more carbon offset programs which can include: Reforestation, renewable energy, methane capture/combustion etc.

1 carbon credit = 1 tonne of greenhouse gas emissions offset

Carbon Insetting

Working with The Carbon Consulting Company (CCC), SavePlanetEarth will quantify the emission reductions that will result from the diverse portfolio of projects that SPE will facilitate, from tree planting to renewable energy generation and so on. Using globally recognized methodologies, CCC will submit each project to be independently verified per ISO 14064-2, which verifies the reductions of greenhouse gases. The Sustainable Future Group will carry out the verification and certification; they are the first body to be accredited to issue both parts of this standard in South Asia.

Individuals will be able to generate carbon credits from their own homes and gardens using our tree monitoring app, and our application can verify those carbon credits using specific criteria. The individual can then sell the credits to others for offsetting. Users will get paid in $SPE for what has been sequestered. AI can check the species and foliage of the plant or tree to determine the carbon sequestration values.

Further Carbon Abatement Process

Another carbon abatement and instant carbon offset initiative will be located on the SPE website, a personal and corporate Carbon Footprint Calculator. The output displays the number of trees required to offset this tCO_2e value.

To offset immediately, purchase carbon credits using SPE, and a Carbon Certified Reduction NFT (unique carbon sequestration details) is issued and burnt. Taking into account transaction emissions and minting attached NFT emissions. The general consumer will find purchasing carbon credits very easy using this method, and we expect retail investors and individuals to use this feature primarily. However, companies can use this feature too.

The world is digitizing; pollution and greenhouse gases are no exception. SPE's blockchain will provide a comprehensive and scalable platform for organizations to calculate, track and report their carbon reduction initiatives. Furthermore, they can sell their carbon credits on our platform and buy SPE carbon credits to cancel their carbon footprint.

12.0 Revenue Staking Pool

We will be implementing staking once our green blockchain and carbon credit exchange have been fully developed and are available for public use and we start generating revenue from our various initiatives. We love having a feature like the reflection function of our smart contract (auto-staking) that rewards $SPE investors for holding. We have decided to provide an additional feature on top of the rewards from auto-staking, but in a way directly connected to SPE's initiatives, and in a way prohibitive of selling tokens but without having to send to a staking platform.

$SPE investors will have the ability to earn dividends from SavePlanetEarth's revenue streams simply by holding $SPE tokens in their wallet and not selling. Dividends will be provided from a percentage of our profits from our real-world projects such as recycling, waste, renewables, produce, and other revenue we generate. The dividends will be paid in $SPE proportionate to the amount of $SPE held in the wallet, and available for claim on a quarterly basis for those who have not sold during the previous three months. There will be a fixed percentage of how much of SPE's profit is siphoned into the staking pool; therefore, there will be a higher return if fewer people opt to hold without selling and claim rewards.

Traditionally, to stake a token, one would have to send tokens to a staking platform and lock them. Due to the tokenomics and 7% transaction tax of $SPE, staking traditionally is not the best option. A holder would get taxed 7% to stake, and then another 7% to unlock tokens, for a total of 14%, not to mention that rewards from reflections would be lost. Also, another negative aspect of staking pools is that they are more vulnerable to hacks rather than thousands of investors holding in their own wallets. SPE team is presenting an innovative new approach to this dilemma and will be creating a smart contract which can scan and track a wallet's transactions, and then decide whether it qualifies for staking rewards.

Each claim of rewards will occur in 2 phases. In phase 1, all investors are welcome to use the platform to claim rewards. The smart contract will detect if the solicitor qualifies, and in the affirmative case, distribute the corresponding tokens to the investor. Phase 2 will only be available to investors who claimed rewards in phase 1, and all tokens that were not claimed in phase 1 will be in this pool. Phase 2 will most likely be the most lucrative as the remaining pool will be divided between a substantially lower number of investors. Any tokens not claimed in phase 2 will be burned, increasing the scarcity of $SPE.

We see yet another use for this staking pool to stimulate the community and benefit the cause. Investors of $SPE that qualify and participate in claiming their tokens in both phases will have the

ability to vote on governance and where additional SPE environmental work will occur (exclusive to our current ongoing projects). Potential premises for votes can be filed with admins at any time as well and will be included in the phase 2 smart contract for those who qualify to decide.

13.0 Introducing the "SPEPad" Concept

While SavePlanetEarth continues to engage in a global struggle to combat climate change via traditional carbon sequestration efforts alongside the innovative prowess of blockchain technology, it is also setting its sights on an opportunity in fostering it's very own environmentally oriented IDO launchpad community - the SPEPad - for other crypto-based startups aiming to make their impact on global warming. This creates yet another use case for $SPE and will reward holders with access to private sales of each project launched by us.

IDO is an abbreviation of "Initial DEX Offering" (the DEX stands for Decentralized Exchange) and is the lucrative crowdfunding model in the cryptocurrency market based on the approval of the market community and other like-minded traders. Ideally, it builds up and expands the legitimacy of the up-and-coming project's coin or token through the public eye, without any third parties affecting its implementation.

SPE will insert itself into this "green launchpad" as a guide operating in due diligence to verify that the new entries have a proper use case and a good roadmap, as well as a fair launch and allocation of tokens. The entries will be vetted through multiple tiers, safeguarding the prevention of any instances of potential rug-pulling (having liquidity removed from a DEX liquidity pool) or scams. Currently for each project and token, first there will be a private sale accessible only to holders of $SPE, and then a fair presale held in coordination with the SPEPad team on any one of several IDO platforms. Ultimately, SPE will be harnessing the community trust for these new coins/tokens to guarantee better performance and results.

We will be implementing the SPEPad aspect of our project immediately using third-party IDO platforms. This is because since very recently we already have several reputable environmental projects who have come to us asking for help to launch tokens, and we don't have a native IDO platform as of yet. These projects want to launch before we would be able to have a native platform developed so in the meantime, we will be using trusted third-party platforms for the presales. We are already having discussions with several solutions for a native IDO platform, and this will be implemented in the future.

Private Sale Access and Tiers for $SPE Holders

(Subject to modification at any time)

Until we have our own IDO platform for SPEPad, private sale access will be limited to addresses with more than 250 billion $SPE. When we have our own smart contract handling the offering, the access will be extended to holders of 50 billion or more $SPE. Holders on CEXs are not eligible.

There will be tiers ranging from 250 billion $SPE to 1 trillion $SPE. The more $SPE one holds, the more they are allowed to buy into the private sale. For each project the amount allocated for the private sale will vary, and each tier will have it's own limit on how much a holder can invest. This will be calculated as a multiple of minimum investment. Holders of $SPE that meet requirements have guaranteed allocations to private sales.

Tier 1: Holders with 250 billion $SPE -   1x minimum investment
Tier 2: Holders with 500 billion $SPE -   2.5x minimum investment
Tier 3: Holders with 1 trillion $SPE -   6x minimum investment

For example, if the minimum investment for the private sale is $500, holders could invest as follows:

Tier 1: $500
Tier 2: $500-$1250
Tier 3: $500-$3000

Holders of $SPE who do not meet requirements will have an opportunity to take part in the presale of the launch, however allocation is not guaranteed as presales tend to fill very quickly.

$SPE already has several projects lined up for launch, for updates join the SPEPad Announcement Channel here: https://t.me/SPEPad_Announcement_Channel

14.0 Why blockchain? Doesn't bitcoin mining use a lot of electricity?

Blockchain technology is an innovative solution to the issues in centralized banking. We chose blockchain technology because of its worldwide accessibility and because it makes everything transparently verifiable for everybody involved, which is an excellent feature for regulators and our investors alike. While it is not mature yet, many practical blockchains are being developed, an exciting new technology.

By using the blockchain, we become instantly accessible to anyone around the globe. There is immense growth potential once blockchains become more widely adopted. Also, the NFT system itself allows for innovative mechanisms for carbon credit binding. Planted trees can be monitored and bound to an NFT, making it essentially a form of carbon credit. We are currently actively working with accredited agencies and governing bodies on developing the certification for these carbon credit NFTs.

We understand that certain blockchains use a large amount of energy, resulting in a sizable carbon footprint. Bitcoin mining has recently become a hotly debated topic, garnering attention worldwide because of Elon Musk's tweets about the environmental impact. For example, the CBECI (Cambridge Bitcoin Electricity Consumption Index) reports that electricity consumption for Bitcoin operation is anywhere from 45 to 500 Terawatt-hours. We should note that this is still less than the current commercial banking industry, although exact numbers are difficult to estimate.

These problems are inherent with Bitcoin, though, and we want to make it very clear that $SPE is currently on the Binance Smart Chain (BSC). BSC is not on the Bitcoin blockchain and operates quite differently due to how transactions are verified on the blockchain. BSC uses consensus algorithms or consensus mechanisms.

While a deep dive into the software aspects is outside the scope of this discussion, there are many different types of consensus mechanisms. For example, Bitcoin uses Proof of Work (PoW), in which computers that have the blockchain software installed (a bitcoin "node") use computing power electricity to solve complex algorithms (a "hash"). When the algorithm is solved, transaction blocks are validated on the blockchain, and new bitcoins are minted. This process causes the Bitcoin network to require a large amount of electrical power to operate effectively.

Proof of Stake (PoS) is a different type of consensus mechanism. Instead of computing power, a node can stake a certain amount of an asset and be selected to help validate transactions on the blockchain. Validators are selected arbitrarily depending on the blockchain's consensus algorithm,

and the reliance on arbitrary election versus Proof of Work significantly reduces energy consumption.

The BSC uses a hybrid system called Proof of Staked Authority (PoSA). The specifics of how PoSA works are similar to PoS, with some changes. This mechanism allows BSC to operate much more energy-efficiently than other blockchains and is one of the reasons we chose to launch on BSC. We also chose BSC because of its popularity and ease of access to the average investor. It is a worldwide ledger system, allowing access to anybody without sluggish, overbearing centralized banking authorities. In the future, we will be bridging over to our, green blockchain which will be ultimately carbon negative.

How Can I Help? "Rights of the unborn" and "inter-generational equity" are fundamental. Please check the information below on how you can be part of this movement, whether you are an individual or a corporate or educational institution. For some time now, governments worldwide, development agencies, the private sector, non-profit organizations, and like-minded individuals have all been doing many things to impart some relief to avert the build-up of greenhouse gases in the atmosphere. Together we can make a difference before it is too late.

The unprecedented rise of greenhouse gases, undoubtedly caused mainly by anthropogenic acts in the name of development, leads to global warming. Large amounts of carbon dioxide (CO_2) emissions that have caused atmospheric temperatures to go up to unprecedented levels have been accelerated by climate change. The increase in atmospheric temperatures and reduced sunlight to Earth's surface causes crop cover, habitats, and biodiversity loss. At the same time, it is responsible for causing severe weather events such as thunderstorms and cyclones with increased regularity and impact on a scale never experienced before. Global warming is also rapidly melting polar ice caps and causing an alarming rise in ocean levels. This process could see humankind approach a slow and lingering end unless something is done right now.

Island nations like the Maldives and many Pacific islands may well be the first to feel the incoming attack from global warming, as the rising ocean levels will soon engulf these small low-lying island states and make them uninhabitable. The recognition of these perils against such island countries is embodied in the themes and declarations adopted by forums hosted by organizations such as the United Nations, the Climate Change Secretary, and others. However, unfortunately, little action has been taken yet. There has been a sharp rise in CO_2 levels, increasing from about 280 PPM to over 400 PPM in the last century or so, similar to the levels prevalent in the Pliocene Epoch millions of years ago.

However, this unnatural process can be directly attributable to modern human lifestyles using high amounts of electricity and other unrenewable energy forms. The electricity needed for today's society is vast and can only be appeased by large thermal power stations that operate on coal, diesel, and natural gas. A typical coal power generating station can consume more than 5 tons of coal per minute, thus emitting tons and tons of CO_2 every day. In addition to global warming, the use of limited petroleum fuel stocks to appease today's need for energy leaves an irreparable opportunity loss cast on future generations and the birth of an intergenerational equity gap that will heavily affect future generations.

We all have been expecting this catastrophe for some time now. It would be fair to say that most of us, being responsible citizens, would have adopted many personal and corporate measures within our means to reverse the global warming trends and thus make the earth a better place. Some of us have pursued efforts to seek simple lifestyles with lower emission footprints. Corporate Social Responsibility (CSR) and Good Governance have all become buzzwords. All this is good, but it will not be enough to save the earth from the impending tragedy where all ecosystems will soon be in danger.

Why? We cannot simply undo the level of emissions already released in the atmosphere in tonnage and weight by switching to green energy alone, carpooling, energy management, saving the corals, and other trendy adoptions that are going on at this late stage. This is the eleventh hour, and more vigorous or aggressive undertakings to reverse the global warming trends are needed. It is known that CO_2 is a stable molecule that can remain in the atmosphere for over 100 years, and hence undoing what is already in the air should also become part of our master plan of restoring environmental normalcy. In other words, it seems that CO_2 must be removed from the atmosphere and safely sequestered for generations to come.

Today, many proponents are doing good programs in renewable energy management, enhancing efficiency in public transport, changing fleets, revolutionizing naval, air travel, and more. All these efforts are attempting to arrest the level of CO_2 and other emissions into the air. While these programs to offset CO_2 and other emissions are great, what needed is to aggressively take on new activities to draw back the CO_2 into the soil and convert this to a large tree or canopy cover, that will in turn store the carbon in tree leaves, bark, stems, and roots. Enhanced climatic health and a livable environment will soon dawn upon us. Reforestation stands out as a simple and economical method to arrest global warming and absorb the CO_2 back into the Earth, known as carbon sequestration. Carbon Capture and Storage (CCS) is a different method using vessels or containers to trap carbon in underground tanks. However, these methods themselves require energy in sizable demand. However, anyone can engage in carbon sequestration by growing tree

cover without sophisticated equipment and significant expenditure.

In our pursuit to effectively sequester carbon with enhanced tree cover, we have activated a brand-new mechanism using a cryptocurrency-supported program called SavePlanetEarth. A deep-rooted motivation for this was drawn from a famous Dr. Seuss' book SPE's founder read as a child, called The Lorax, which says, "Unless someone like you cares a whole awful lot about the environment, nothing is going to get better. It's not."
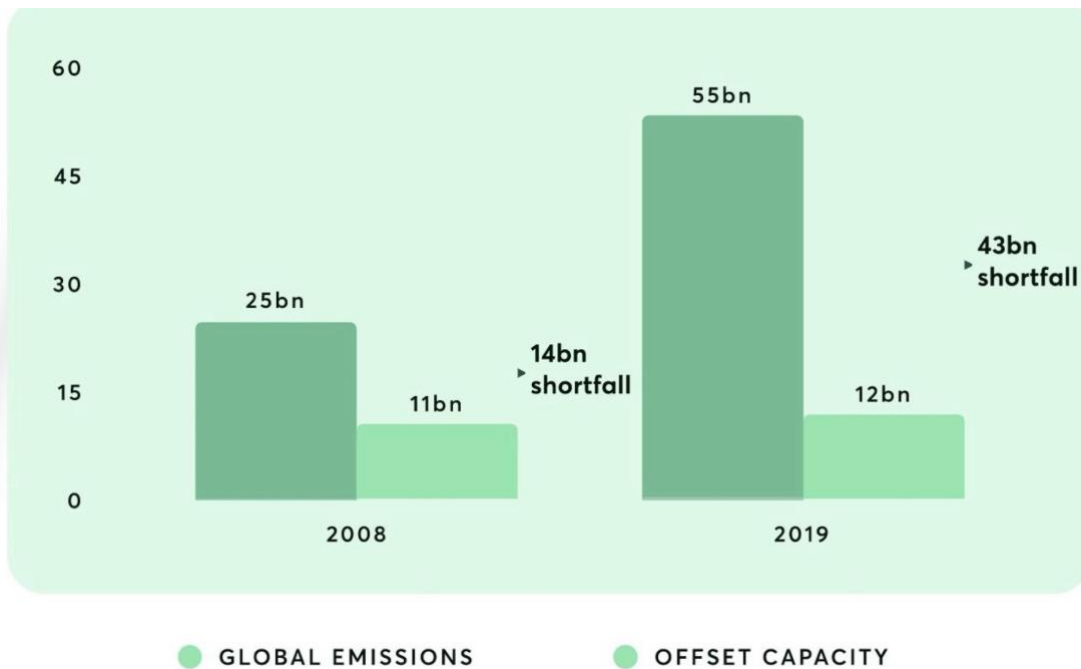
SavePlanetEarth targets to plant a billion trees worldwide in at least twenty-five countries within ten to twenty years using partnerships formed with concerned action groups in each country. If one medium to large tree sequesters one ton of carbon in forty years, the amount of carbon sequestered will be huge. SavePlanetEarth is setting up a brand-new process unlikely any similar programs that have already been developed in parts of the world.

We believe in bringing everyone together in carbon sequestration to fight the common challenge of global warming using new funding methods. We are running out of options and need to act now. It may be a small move that can be made through supporting SavePlanetEarth, but its impact will be far-reaching to the world out there and will signal hope to the rest of the world.

15.0 Carbon Credit Market Speculation

GLOBAL EMISSIONS   OFFSET CAPACITY

https://www.bloomberg.com/news/articles/2020-11-19/the-world-is-running-out-of-carbon-credits-the-un-wants-to-help

"With global carbon prices set to increase further in the future, minimizing the GHG emissions of a portfolio should not only contribute to the fight against global warming, but it should also lead to better risk-adjusted returns in the long run."

https://am.jpmorgan.com/hu/en/asset-management/institutional/insights/market-insights/market-updates/on-the-minds-of-investors/carbon-pricing-implications/

"According to the OECD, a price of $147 a tonne is needed by 2030 if the world hopes to reach net-zero carbon emissions by 2050, almost triple the current price in the EU's Emissions Trading System of around $59 a tonne.."

https://www.reuters.com/business/sustainable-business/asset-owners-managing-6-trln-call-global-carbon-price-2021-07-05/

"Exxon believes there will be a $2 trillion market for carbon capture by 2040 and recently announced a $3 billion investment over the next five years in new carbon capture and storage (CCS) projects."

https://www.forbes.com/sites/daneberhart/2021/03/09/oil-giants-bet-big-on-expected-2-trillion-carbon-capture-market/?sh=122602813e8a

16.0 Roadmap

Our roadmap sections are based on quarters since SavePlanetEarth's inception.

Q1 - April 9th - July 8th, 2021

☑ **DxSale Presale**

DxSale fair presale took place with 125 BNB hard cap and 1 BNB maximum buy-in.
https://dxsale.app/app/pages/defipresalev1?saleID=841&chain=BSC

☑ **Launch to BSC MainNet**

The initial fair launch to BSC MainNet took place on April 9th, 2021.
https://bscscan.com/tx/0x6be6bf2c2472a8fe9994c0aee778659da84e24c4c4dd05f5cfffec98c04d80d1

☑ **Liquidity Lock**

Liquidity will be locked until April 9th, 2026, via DxSale, making the token rug-pull free and safe.
https://dxsale.app/app/pages/dxlockviewv1?id=841&add=0&type=lpdefi&chain=BSC

☑ **Renouncement of Ownership of the Smart Contract**

Ownership of the smart contract will be renounced, guaranteeing modifications to the code cannot happen, making SPE more secure.

https://bscscan.com/tx/0x79fea031c3d8390864830b31d8717bde09518a5f5e906112cad31454bf9eee01

☑ **Multiple Audits**

Smart Contract Audits will be applied for and completed by several auditing groups.
https://saveplanetearth.io/SavePlanetEarth-Audit-TechRate.pdf
https://saveplanetearth.io/SavePlanetEarth-Audit-SafeFairMoon.pdf
https://www.certik.org/projects/saveplanetearth

☑ **CoinGecko and CoinMarketCap**

We will apply to multiple listing services, including CoinGecko and CoinMarketCap.

☑ **Exchange Applications**

We will apply to multiple exchanges including, but not limited to WhiteBIT and BitMart.

Q2 – July 9th - October 8th, 2021

☑ **Development/Release of v1 SavePlanetEarth Android/iOS App**

Development and launch of the first SavePlanetEarth app with various basic initial features available on iOS and Android. **Updates ongoing.**

https://play.google.com/store/apps/details?id=io.saveplanetearth.app
https://apps.apple.com/in/app/save-planet-earth/id1566900243

☑ **Development of revolutionary v2 SavePlanetEarth Android/iOS App**

The development of v2 of the SavePlanetEarth app will continue until its launch in early Q3. The app will have many revolutionary features, mainly regarding reforestation and carbon sequestration/credits, **currently in development.**

☑ **Carbon Sequestration Partnerships with Nation-States**

Partnerships with specific countries and their governments and NGOs to bring lasting solutions to fight climate change, rising sea levels, and other environmental perils.

Sri Lanka – 100,000,000 Tree initiative.
Sri Lanka State Plantations Corporation, JEDB, Kotagala Plantations PLC, Maturata Plantations, Forestry Department, Sri Lanka Military, Central Environment Authority, UNDP Sri Lanka.

Maldives – 1,000,000 Tree initiative + Recycling plastics from ocean/beach clean-up.
HDC Maldives, MITDC Maldives, Save The Beach, Advocating Rights for Children (ARC).

Turkey – 5,000 Tree initiative.
Turkish Rugby League, Our World Foundation.

(**Ongoing discussions with other nations and NGOs**)

☐ **SavePlanetEarth Merch**

$SPE merch will be available in Q2 with a store on the website. Plastics recovered from beach and ocean cleaning activities will be used for the merchandise long term. Still, until then, we will use environmentally friendly third-party suppliers, from which the profits will be reinvested into the project. In progress.

☑ **Exchange Listings**

SavePlanetEarth will list on several exchanges in Q2.
Bitmart - WhiteBIT - CoinTiger - Hotbit - BitGlobal (BithumbGlobal)

Q3 - October 9th - January 8th, 2022

☐ **SavePlanetEarth will be Trademarked.**

The application process is **currently ongoing**.

☐ **SavePlanetEarth will launch SPEPad.**

The application process is **currently ongoing**.

☐ **Launch of Revolutionary v2 SavePlanetEarth Android/iOS App**

In early Q3, SavePlanetEarth plans to launch the next version of the $SPE Android/iOS app. Including all of the features from the v1 app, plus a wide array of new and revolutionary aspects of which the world has never seen, mainly regarding extremely detailed reforestation metrics and carbon sequestration/credits calculations and certifications, currently in development.

☐ **Tier 1 Exchange Listings**

SavePlanetEarth will list on multiple tier 1 exchanges.
(Gate.io, Huobi, Kucoin, Binance, Coinbase have all been applied to, **contact ongoing**)

☐ **Carbon Credit Certification**

SavePlanetEarth will apply to several carbon credit certification bodies to register $SPE to be utilized as carbon credits. Corporations could then use $SPE to offset their carbon footprints. This is an ever-growing market that will be worth trillions of dollars soon. Currently ongoing.

☐ **Offset Incentives**

After certification, companies and individuals can offset their carbon footprint by donating to plant trees and receiving a Carbon Neutral/Negative Virtual NFT certificate. NFTs will be minted on a carbon-neutral/negative blockchain TBA in Q3 as technology is rapidly evolving.

☐ **Minting of original NFTs**

We will commission known artists for pro bono NFT auctions in which profits will be reinvested into the carbon sequestering aspect of our project. NFTs will be minted on a carbon-neutral/negative blockchain TBA in Q3 as technology is rapidly evolving. Long term, we will only use our green blockchain, but we will use another for the meantime until ours has been fully developed and is up and running efficiently.

☐ **Continued Carbon Sequestration and Ever-Expanding Partnerships with Nation-States**

We will continue planting trees, nurseries, and recycling around the world. We will add many more

countries and NGOs to a growing list of partnerships, and we will continue making a dent in climate change together.

Q4 - January 9th - April 8th, 2022

☐ **Strategic Connections**

Coordinate with crucial entities in the recycling industry involving metal, plastics, municipal solid waste, and other components that can potentially cause pollution. For example, potential cadmium and heavy metal intoxication from metals need to be strategically planned out so that climate change solutions themselves un-thoughtfully instituted will not bear additional burdens in the fight against Global Climate Change.

☐ **Global Adoption**

Worldwide partnerships with non-profits, nation-states, and world-renowned entities active in averting waste pileups and combating climate change.

☐ **Future Trading Mechanisms**

Innovative technology implemented in the renewable energy sector to tackle waste, pollution, and use of resource materials will inevitably give rise to unwelcome (new) pollution streams. For example, at the end of their lifecycle, solar cells can easily give rise to the build-up of metal poison and other toxins in the soil. These new pollution streams will give birth to a new era of clean-up processes and legislation in which SavePlanetEarth will be at the forefront of creating opportunities with future trading mechanisms.

☐ **More Tier 1 Exchange Listings**

Applications and listings to tier 1 exchanges will be an ongoing process.

☐ **Carbon Exchanges**

As we become certified, we will also apply to and list on Carbon Credit Exchanges.

☐ **$SPE Green Blockchain**

At this point, our focus will be to complete the development of our green blockchain. This will be where our carbon credit ecosystem will be located. However, until it is developed, we will use other blockchains (not exclusive to BSC).

☐ **$SPE Carbon Credit Exchange**

We will develop our carbon credit exchange, allowing companies and individuals to buy and exchange carbon credits. This will provide the majority of SavePlanetEarth's funding, which will be

reinvested into sequestering more and more carbon, thus creating a sustainable model for fighting global climate change.
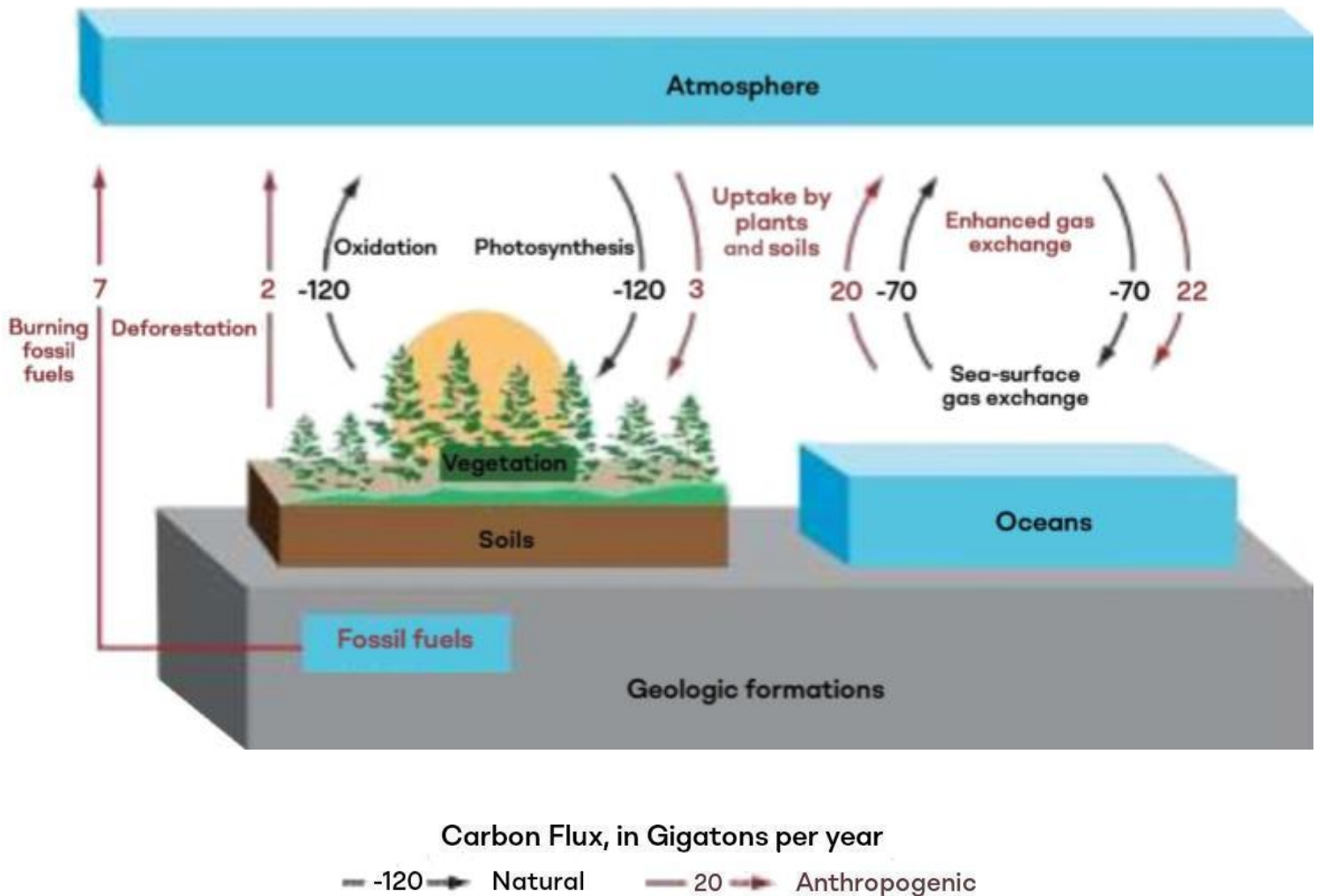
☐ **$SPE Game**

We will be developing a game that consumes $SPE. Details are still to be decided.

(Above is subject to change)

17.0 Research

Carbon Sequestration Methodology of SPE

Carbon Flux, in Gigatons per year
— -120 → Natural   — 20 → Anthropogenic

Various research institutions have developed a good number of carbon sequestration methodologies. SPE uses a process referenced mainly from the US Department of Energy (1988 Version), namely 'Method for Calculating Carbon Sequestration by Trees in Urban and Suburban Settings.' However, SPE also uses other databases to assist with carbon sequestration.

SPE has assigned an in-house practitioner to follow up on each sequestration inquiry we get and using the general algorithm described below. Using this approach, SPE can develop carbon sequestration values for any type of tree in any part of the world.

18.0 General Methodology for Computing Carbon Sequestration

Determination of Tree Species Characteristics: List each distinct tree species included in the sequestration project by the year involved. List trees of a different age separately, even if they are of the same species (e.g., list one-year-old red cedars on a separate row from two-year-old red cedars).

- Determinant of tree age benchmarked to the year of measurement (reporting year).

- Enter the total number of trees of particular tree species and age category initially planted as part of the project.

- Enter the survival factor from literature for the Particular Tree Species or using the reference shown.

- Enter the number of trees surviving at the end of the reporting year.

- Annual Sequestration Rate: Determine from given literature.

- Determiner Carbon Sequestered (Multiply the number of trees surviving by annual sequestration rate from literature).

Some other databases are:

A Compendium of Carbon Enhancing Technologies, Approaches and Practices for African Soils, March 2019 World Agroforestry

Carbon Capture and Storage Database, published by National Energy Technology Laboratory https://netl.doe.gov/coal/carbon-storage/worldwide-ccs-database

A National Carbon Sequestration Database and Geographic Information System (NATCARB) https://digital.library.unt.edu/ark:/67531/metadc787969/

19.0 Fuel Cost Determination – LCoE Approach

In the general industry or the marketplace, energy pricing is often benchmarked to what is known as the LCoE (Levelized Cost of Energy) method.

LCoE is considered the unit energy cost of a particular fuel type concerning all lifetime costs when used to generate energy. In a fossil fuel generator, the LCoE is arrived at by consideration to the following:

- Fossil fuel and energy costs

- Fuel costs per volume or weight or energy unit

- Generator operating costs

- Erection and decommissioning costs

- & M (Operations and Maintenance) costs

- The following costs, called externality costs, are generally not considered or added to the energy costs from a fossil fuel generator:

- Social displacement costs from having to move people or communes due to the generator siting.

- Health costs from emissions from generation.

- Environmental costs from Emissions inclusive of Impacts from global warming and climate change

While the externality costs (shown above) are accurate for almost all fossil fuel generators (nuclear fuel included), these are hardly factored into LCoE costs in day-to-day energy pricing. This makes modern-day energy pricing much lower than its actual costs, relative to costs towards humanity.

Renewable Energy (RE)

When it comes to costing environmentally friendly renewable fuels or energy, the following cost elements are generally applicable,

- Equipment Erection and Decommissioning Costs

- O & M Cost

- Fuel Costs: Considered almost zero as renewable energy is involved.

However, the externality costs shown above cannot be so factored into renewable energy systems due to their environmentally benign nature compared to those in fossil fuel-driven energy systems.

This yields a different LCoE value system when it comes to renewable energy costing.

For this reason, LCoE Costs are not a good measure to view fossil fuel and renewable energy on a side-by-side (or comparative) basis.

This is inherent in the manufacturing costs of many production systems, including cryptocurrencies, where the manufacture of cryptocurrencies using fossil fuels is more expensive than even what is shown. If renewable energy can be used for this process, the costs would be definitively lower, provided the capital costs of the RE equipment are also sufficiently low. This is one of the highlights of SPE's research.

Future Generational Value Systems: This is a crucial area of SPE's ongoing research, and more highlights of this area will be provided shortly. SavePlanetEarth is for the future generations that do not yet have a say on the damage being done to the environment.

20.0 Publications / Research Papers

Entropy *vis a vis* Blockchain Paradox:
SPE's Coins Launches New War on Global Warming

Dr. Priyantha Wijesooriya

The thermodynamic term 'Entropy' defines the amount of disorder made in, for example, when burning fuels produce ash. Here, entropy (disorder) products would be mainly ash and carbon dioxide (CO_2) coupled to other emissions. Established scientific principles state that disorder, hence the ash and emissions formed, can never be reversed to its original elements. This is indeed bad news for the world associated with unprecedented degrees of Global Warming and Climate Change, triggered by heavy doses of CO_2 and emissions in the air. These emissions are released from processes that rely on burning fossil fuels to support the ostentatious living styles of humankind. The emissions made can never be reversed or re-generated as the starting fuels from a thermodynamic standpoint. At the same time, global temperatures are rising. It is frightening.

The good news is there is a novel way to convert the enormous amounts of CO_2 in the atmosphere by a simple method, known as Carbon Sequestration, very effective in storing carbon in trees. However, sequestration can also include storing carbon on mangroves, corals, and so on. These natural systems sequester carbon all the time if given a chance to do so without being meddled by humankind.

The problem is that there is not enough tree cover to go around or bubbling mangroves or marine life observed anymore, and we have to increase the relative volume of each type. Lands have been de-logged excessively, mangroves are almost all gone, and coral reefs are now a dying breed. Present CO_2 levels in the air exceed 400 ppm (parts per millions), whereas over 150 years ago, it was below 250 ppm during the early days of the industrial revolution.

It is clear that global warming has broadened its span and that the climate is now warming up faster. Oceans levels have risen, and small island states are not safe anymore, global temperatures have shot up, climate change disasters have changed lives forever.

One would ask why human-induced carbon sequestration activities in the few decades gone by have not worked? Why have CO_2 levels in the atmosphere remained more or less the same? Why do we observe more frequent climate hazards of untold force and destroying power? Why have governments not delivered to the mandated levels expected by the People? Has it been a case of far too little, far too late?

Thankfully, a new organization, namely SavePlantEarth, SPE has come up with a worldwide plan for Rapid Deployment of Carbon Sequestration to build a Global Tree Canopy. SPE does so by developing its revenue stream based on the blockchain, a name for a massive infrastructural labyrinth well understood by financiers, hospitals, and other services. The heart of the action is the emergence of a crypto coin, in this instance benchmarked to be SPE's new eco-token.

Cryptocurrencies have a reputation of being more energy-intensive in the making than the desired end product, that is, the tons of carbon saved or sequestered. The answer lies in how the marketplace interprets energy costs on the two main fuel types; fossil fuels and renewable energy, namely solar, wind, hydropower, and so forth.

A careful analysis reveals that energy costs per se, typically expressed in LCoE (Levelized Costs of Energy), conveniently treats expenses and benefits from these two energy systems using the same yardstick that disfavors costing for renewable energy and makes it appear as of higher cost, often always.

To illustrate, in the case of fossil energy, its LCoE costing is based on a one-time fuel per generation event that produces instant energy, emissions, and water vapor. Undesirable side effects from fossil use, called externalities, namely the environmental, health, and social costs, are not captured in LCoE costs. Hence, LCoE costs for fossil fuels look so impressively lower in today's markets that they increase the propensity towards increased (fuel) consumption (thus more Global Warming).

Another cost factor is removed in fossil fuel costs, perhaps due to natural resource economics being left out. These are related to the 'opportunity costs' of removing fossil fuels from the earth's crust. Entropy states that fossil fuels, once removed, will not be reformed, not in this millennia at least; the damage done to the interests of future generations in terms of their resource share is not captured in today's fossil fuel costing quite, unfortunately. Hence on a generation cost per se, the costing of fossil-fuel energy in the marketplace is suppressed or looks lower than its actual reading.

Hence comparing fossil fuel-energy costs with their underlying negative externalities and against renewable energy costs is like comparing apples and oranges or ballets to jazz dances. In the writer's opinion, the existing energy costing system declared to the world by the marketplace is lopsided.

Unfortunately, it is also the basis on which energy-use statements are frequently made. If trees are being sequestered in more extensive measures, as targeted in the SPE's Global Program, then there is the likelihood that renewable energy costs would shrink even lower. In the case of a tree-canopy developed to be a carbon sink, this will be a boon towards setting up more biomass power and other renewable energy-based energy generation scenarios.

Also, given that renewable energy features in the broad energy mix within grids in most countries to about 24% compared to about 85% fossil fuels, the cost of energy production processes should be adjusted to reflect the actual costs of fossil fuels. In this background, it is proposed that actual fossil fuel and hence energy costs be revised and expanded by a factor of at least two-fold whenever a more significant proportion of fossil fuels are inherent in an electrical grid.

As an illustration, if the generalized energy costing for a production process says, USC 10/kWh in a fossil-fuel dominated grid in any location, the actual costs of energy should read close to at least double, at USC 20/kWh given the environmental externalities to be cast into the fossil fuel-based costing equation. These need carefully formulated cost calculations.

The SPE team is fully aware of this costing paradox that disfavors renewable energy. The associated costs would be admirably lower if a crypto currency is made purely from a renewable energy process. Hence the claim that cryptocurrency would be expensive to make would meet a head-on challenge. Nevertheless, current infrastructural systems do not offer a way of doing this.

The above sums up the costing of SPE's climate coins and the value systems it is leveraged on. SPE is tapping country partners across the world for a broad-scale carbon sequestration initiative. SPE crypto is only one of the many in its arsenal for carbon sequestration. Carbon sequestration programs initiated by SPE are diverse that could use crypto investments or grants, or donations. Well-wishers and donors are welcome to join SPE's Fight against Global Warming and Climate Change.

Further information can be found at:
SavePlanetEarth.io