WHITE PAPER

Garden Fleet: Regenerative Solution for Coastal Restoration and Waste Management

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This White Paper outlines the operational model at the core of the Garden Fleet (GF) program, which combines low-cost maritime cleanup teams, mobile recycling infrastructure, and education-driven community programs to restore coastal ecosystems. It details how specialized ship teams, modular/mobile CubeSpawn recycling systems, and the EcoSociety public engagement initiative work together to deliver measurable ESG outcomes, removing plastic waste, planting mangroves, and preventing future pollution through education and resilience-building and partnerships with local communities in their areas of operation, including legally recognized indigenous people and communities.

By centering on practical, scalable field operations, this document illustrates how real-world environmental restoration can be achieved with localized implementation and global adaptability.

While Palawan is the starting point, Garden Fleet is designed as a replicable model for other high-risk coastal regions, specially where pollution and beach erosion threaten communities and biodiversity.

In addition to this White Paper, the Garden Fleet program is supported by the following companion documents:

- **Program Cost Overview** – Provides an itemized breakdown of the full $4 million budget, covering fleet operations, recycling infrastructure, and community development over a 2 year period.
- **Yellow Paper** – Details the technical logic of the GF NFT system, including smart contract architecture supporting the ESG verification model to account for positive environmental impact.

Table of Contents

1. Introduction

Plastic pollution and beach erosion are two critical environmental challenges that significantly impact marine ecosystems and coastal communities worldwide. Palawan, often referred to as the "final frontier" of ecological preservation, is home to one of the most biodiverse marine and terrestrial ecosystems in the world. However, this rich natural heritage is under severe threat due to increasing plastic waste accumulation and escalating coastal erosion. In terms of specific rankings, the Philippines is typically listed as the number one country in terms of ocean plastic waste, with estimates suggesting it emits around 356,371 metric tons of plastic into the ocean annually.

- **Plastic Waste:**

The world produces approximately 400 million tonnes of plastic waste annually, a figure that has nearly doubled since the beginning of the century. An estimated 1.7 million tonnes of plastic waste enter the oceans each year, accounting for about 0.5% of global plastic waste. Of the seven billion tonnes of plastic waste generated globally so far, less than 10% has been recycled, leading to significant accumulation in natural environments.

The mismanagement of plastic waste is a pressing concern, with approximately 52 million tonnes entering the environment annually due to inadequate waste management systems. Projections indicate that, without intervention, global plastic waste generation could nearly triple by 2060, reaching a staggering one billion metric tons per year.

- **Beach Erosion:**

Approximately 24% of the world's sandy beaches are eroding at rates exceeding 0.5 meters per year. Between 1984 and 2015, nearly 28,000 square kilometers of permanent land in coastal areas were lost globally, an area roughly equivalent to the size of Haiti. If current trends persist, it is projected that up to 50% of the world's sandy beaches could disappear by the end of the century due to coastal recession driven by sea-level rise.

- **Impact on Indigenous People (IP)**

Plastic waste in waterways, compounded by industrial runoff, disproportionately impacts Indigenous communities that rely on rivers and coastal ecosystems for food security and cultural practices. It contaminates fisheries, undermines livelihoods, and degrades environments of spiritual significance. Despite contributing minimally to plastic generation, Indigenous populations bear some of its most severe consequences.

> Without urgent action, plastic pollution and coastal erosion will cause irreversible environmental collapse, devastating marine life and coastal communities.

2. Regenerative Solution

To effectively address the dual crises of plastic pollution and coastal erosion, our solution leverages a fleet of low-cost ships dedicated to waste collection, recycling, and mangrove reforestation. This initiative introduces a self-sustaining, decentralized model that ensures continuous funding, operational efficiency, and community engagement.

Removing Plastic Waste from Coastal Areas

- Deploying a cost-effective fleet to collect and transport waste from beaches, shallow waters, and nearshore ecosystems.
- Engaging local communities and Indigenous Communities (IPs) to assist in collection efforts, creating jobs while promoting environmental stewardship.
- Sorting, recycling, and upcycling plastic waste into reusable materials, reducing landfill reliance.

Combating Beach Erosion through Mangrove and Coastal Reforestation

- Restoring natural barriers by planting mangroves, which stabilize coastlines, prevent flooding, and enhance biodiversity.
- Partnering with local conservation groups, private firms and government institutions to ensure ecologically sound reforestation practices.
- Monitoring and assessing the impact of mangrove growth on sediment retention and shoreline stability through scientifically sounds examinations of our areas of operation.

Leveraging Blockchain technology for Environmental Impact tracking

- Introducing a Regenerative Finance (ReFi) smart contract that supports cleanup operations via non-fungible tokens as a verification tool for work conducted.
- Providing real-time tracking of impact metrics (e.g., plastic removed, trees planted) to ensure transparency, accountability, and measurable progress in conservation efforts.
- Organizations can purchase impact tokens (NFTs) to directly demonstrate and verify their contributions to ESG goals.

Selling Coastal Cleanup as a Service to ESG compliant stakeholder

- Offering contract-based coastal waste management services to government agencies, tourism businesses, and ESG compliant businesses seeking to improve their social responsibility and environmental standing.
- Providing subscription-based or pay-per-service models for ongoing waste collection and boosting environmental well being .
- Establishing public-private partnerships to integrate cleanup efforts into municipal waste management plans for long-term sustainability.

3. Business Case

The success of this initiative relies on transforming coastal cleanup and reforestation into a scalable, revenue-generating service. By offering coastal waste management as a commercial solution, the project ensures long-term financial sustainability while maximizing environmental impact.

GF will offer *ESG compliance packages* tailored for corporations seeking to improve their Environmental, Social, and Governance (ESG) ratings. These packages will provide companies with verified carbon offset **impact reports**, plastic waste recovery certificates and tree planting certificates allowing them to meet sustainability commitments and regulatory requirements. By directly funding cleanup operations and reforestation projects, businesses can enhance their ESG reporting, fulfill extended producer responsibility (EPR) obligations, and demonstrate measurable contributions to global environmental restoration efforts.

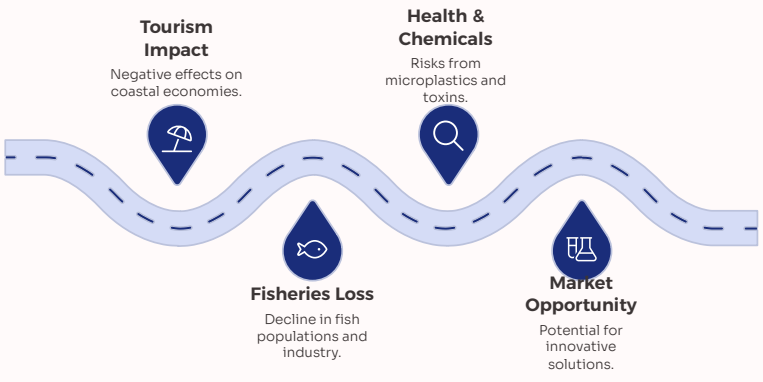
3.1 Market Opportunity

The market opportunity for coastal cleanup and anti-pollution services in the Philippines is substantial, driven by the country's reliance on marine resources and tourism, coupled with the pressing challenges of marine pollution and its negative effects of tourism and biodiversity.

Tourism: In 2016, coastal and marine tourism contributed nearly $3 billion USD to the Philippines' GDP, accounting for approximately 2% of the total GDP, and provided employment to around 900,000 individuals. The presence of plastic debris on beaches has been identified as a key factor deterring tourists, leading to shortened visits or the complete avoidance of certain areas.

Fisheries and Aquaculture: The fisheries and aquaculture sector generated over $2.3 billion USD in 2016, representing about 1.5% of the GDP, and employed approximately 260,000 people. Plastic pollution adversely affects marine ecosystems, leading to reduced fish stocks.

Public Sector: The presence of microplastics in seafood can deter tourists, particularly in coastal areas where marine cuisine is a major attraction. Additionally, microplastics can harm marine life by causing tissue damage and reduced growth, leading to decreased fish populations and affecting the livelihoods of local fishing communities. Addressing microplastic pollution presents a significant market opportunity. Additionally the presence of phthalates in microplastics raises environmental and health concerns since when ingested by marine organisms, these compounds can disrupt endocrine functions, affecting reproduction and development in animals and humans. Moreover, phthalates are known to leach out from microplastics over time, potentially contaminating aquatic ecosystems and entering the human food chain.



These market opportunities exist within various Philippine government agencies, including:

Department of Environment and Natural Resources (DENR)	Oversees environmental protection, pollution control, and reforestation projects.
Department of Tourism (DOT)	Supports initiatives that enhance coastal areas to boost tourism.
Bureau of Fisheries and Aquatic Resources (BFAR)	Focuses on sustaining marine ecosystems and fisheries, which are directly affected by pollution and coastal degradation.
Department of Public Works and Highways (DPWH)	Involved in coastal infrastructure and erosion prevention projects.
Local Government Units (LGUs)	Play a key role in implementing localized environmental programs and enforcing policies.

Beyond economic and environmental concerns, coastal restoration is a critical component of national security. Beach erosion threatens military installations, coastal communities, and vital infrastructure, particularly in regions prone to typhoons and rising sea levels. The Department of National Defense (DND) and the Armed Forces of the Philippines (AFP) recognize the strategic importance of maintaining stable coastlines to prevent land loss, fortify national borders, and mitigate disaster risks.

By partnering with a specialized third-party agent like Garden Fleet (GF), these agencies enhance project efficiency while reducing costs. GF offers a dedicated workforce trained specifically for large-scale coastal reforestation and erosion control.

3.2 ESG Market Opportunity

The ESG and sustainability consulting market is projected to expand from $14 billion in 2023 to over $48 billion by 2028, indicating a compound annual growth rate (CAGR) of approximately 28%. While the ESG advisory market specifically is expected to grow from approximately $15.6 billion in 2024 to nearly $59.6 billion by 2030. These projections suggest a significant profit opportunity for GF to serve as a service to bolster ESG compliance for institutions intending to improve their standing.

Growing public awareness about environmental issues has led to increased demand for cleaner technologies and waste management solutions. Companies are now more inclined to invest in anti-pollution measures to align with consumer expectations and enhance their corporate social responsibility profile

3.3 Value Proposition

The value proposition of GF is centered on delivering economic, environmental, and social benefits through contract-based coastal restoration services. By providing a scalable and transparent solution. The value benefit to each listed stakeholder will be focused on: rejuvenating the ecosystem through trash removal, preventing coastal erosion, the beautification of beaches and providing jobs to the local labor workforce.

Stakeholder Value Propositions

Stakeholder	Value Proposition
Government Agencies & Municipalities	Regulatory Compliance – Helps meet local and international environmental mandates (e.g., SDGs, ESG reporting). Cost-Effective Waste Management – Outsourcing cleanup reduces public sector burden. Disaster Mitigation – Mangroves protect against flooding, storm surges, and erosion.
Tourism & Hospitality Businesses	Enhanced Tourist Appeal – Pristine beaches drive bookings and improve guest satisfaction. ESG & Sustainability Certification – Helps resorts meet sustainability goals and gain eco-friendly branding. Higher ROI – Clean environments increase property value and repeat visitor rates.
Cryptocurrency investors	Measurable Impact – Verified waste removal and carbon sequestration metrics. Token Utility & Staking Rewards – Investors can stake tokens to earn rewards based on environmental impact metrics. NFT Trading & Ownership – Coastal Cleanup NFTs and Tree Planting NFTs provide investment opportunities and exclusive environmental contributions.

3.4 Revenue Model

GF operates as a contract-based environmental service provider, offering scalable, technology-driven solutions to stakeholders in both the public and private sectors and leveraging ESG policies. The Philippine Senate introduced bills requiring all corporations, both stock and non-stock, to submit sustainability reports to the SEC. These bills propose integrating sustainability and financial reports, mandating independent assurance of ESG disclosures, and establishing an ESG Code of Conduct for rating providers.

Revenue Source	Target Clients	Services
Regenerative Finance NFTs	Social Responsibility investors, corporations and donors	NFTs tied to verified cleanup and reforestation efforts that can be used as tax-deductible donations. (Also offered as a physical certificate)
Private Cleaning Contracts	Hospitality firms, hotels and island bars	Paid cleanup and restoration services to maintain pristine shorelines for guests and improve ESG compliance
Government Cleaning Contracts/Partnerships	Environmental Government agencies and municipal governments	Long-term service contracts for regular beach cleaning, pollution control.
Government Forestation Contracts	Environmental Government agencies and municipal governments	Long-term contracts for mangrove reforestation and shoreline stabilization to combat coastal erosion.

ⓘ A Non-Fungible Token (NFT) is a unique digital asset on a blockchain. For coastal cleanup, an NFT can verify waste removed (in tons) or area cleaned (in km^2), ensuring transparency and impact tracking.

Recurring revenue from government and hospitality contracts ensures long-term financial stability for cleanup and reforestation services. Blockchain-based NFTs create a scalable funding stream, allowing corporations to support ESG initiatives while serving as verifiable proof of impact. These NFTs are also used for tax write-offs, as they certify the tonnage of waste removed, the area (km^2) cleaned, and the number of mangroves planted.

Recurring revenue

Government and hospitality contracts ensures long-term financial stability for cleanup and reforestation services.

Blockchain-based Authentication

provides a scalable, transparent funding stream, allowing corporations to verifiably support ESG initiatives while benefiting from tax deductions using NFTs

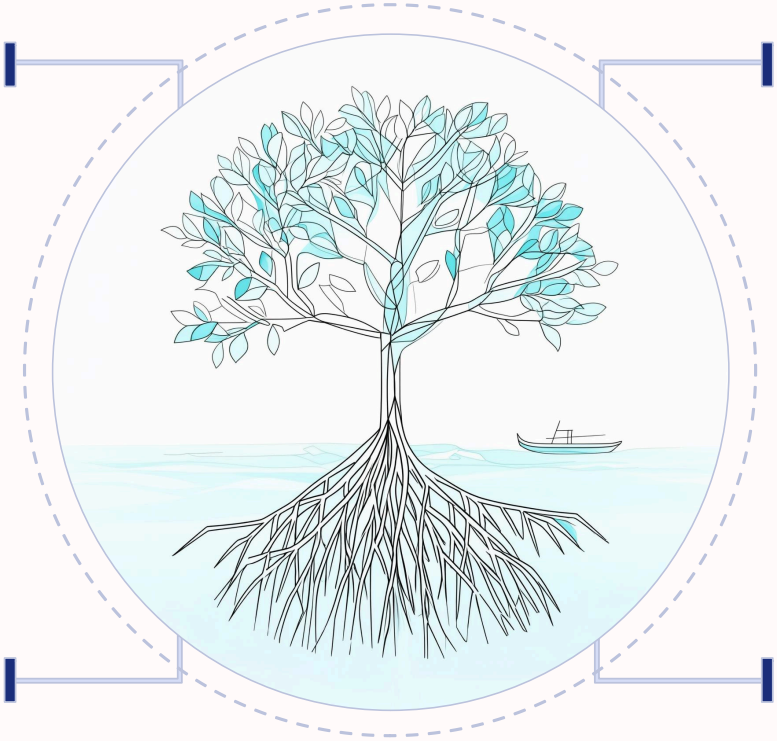
ESG Services & Compliance Support

As ESG adoption grows, GF benefits by offering third-party verification, impact reporting, and compliance consulting to businesses seeking ESG improvement.

3.5 ESG Service Packages

Garden Fleet (GF) offers ESG-aligned environmental restoration services, focusing exclusively on coastal cleanup and mangrove reforestation. By providing transparent, verifiable **Proof of Impact**.

GF enables businesses, governments, and investors to meet their ESG compliance requirements with measurable environmental contributions. Our services are designed to integrate seamlessly into corporate ESG strategies.



Coastal Cleanup

Remove marine debris and plastics. Provide mechanized plastic sorting, processing and recycling into Trash bins

Mangrove Reforestation

Carbon sequestration by restoring mangrove forests that protect shorelines and support biodiversity.

Proof of Impact

Transparent, verifiable environmental metrics of the work conducted by GF

ESG Integration

Enable compliance for businesses by providing a Proof of Impact report to offset their carbon footpring

Verified Coastal Cleanup

Systematic removal of plastic waste and marine debris to maintain pristine coastlines and ensure ESG compliance

Service Offerings:

- Removal of plastic waste and marine debris from beaches and shallow coastal waters
- Sorting and proper disposal or recycling of collected waste to minimize environmental impact
- Blockchain-based tracking and verification of waste removed (in metric tons) for ESG reporting

For:

- Hospitality businesses aiming to keep shorelines clean for guests and maintain a positive brand image
- Government agencies responsible for coastal environmental management and pollution control
- Corporations seeking plastic neutrality and compliance with Extended Producer Responsibility (EPR) laws

Benefit:

- Provides documented proof of plastic waste recovery for ESG reporting and regulatory compliance
- Helps businesses offset their plastic footprint and demonstrate measurable environmental impact
- Contributes to ocean health and biodiversity protection by reducing pollution in marine ecosystems

Coastal Forestation

Rebuilding coastal ecosystems with mangrove forests to prevent island erosion and sequester carbon.

Service Offerings:

- Planting and maintaining mangroves to restore natural barriers against coastal erosion
- Strategic reforestation to enhance shoreline stability and protect against storm surges
- Monitoring and data collection to track tree growth and assess environmental benefits
- Blockchain-backed verification of trees planted and hectares restored for ESG compliance

For:

- Corporations looking to invest in carbon sequestration projects and environmental conservation
- Hospitality businesses protecting beachfront properties from erosion and storm damage
- Government agencies focused on climate resilience and biodiversity restoration

Benefit:

- Verifiable carbon sequestration data to support corporate net-zero commitments
- Reduces coastal erosion, preventing infrastructure damage and habitat loss
- Enhances biodiversity, creating ecosystems that support marine and terrestrial wildlife

3.6 Financial Projections

Garden Fleet's financial strategy is designed to balance scalability, operational efficiency, and long-term sustainability. The initial fleet deployment and growth projections are based on a $1.5M startup fund for the fleet aspect of the program, with expansion contingent upon revenue generation from NFT sales of Impact Reports, private contracts, and government partnerships or grants.

Projection Table:

Year	ESG Services	Gov Contracts	Total Revenue	Total Cost	Net Profit	Profit Margin (%)
2025	$15,000	$0	$15,000	$100,000	$-85,000	0%
2026	$35,000	$50,000	$85,000	$110,000	$-25,000	0%
2027	$70,000	$110,000	$180,000	$135,000	$45,000	25%
2028	$140,000	$260,000	$400,000	$190,000	$210,000	52%
2029	$280,000	$260,000	$540,000	$250,000	$290,000	53%

3.7 Fleet Capital Allocations

Assuming $1.5M to be expended on fleet capital assets based on GF Cost Overview.

Total Fleet Capital Allocation

Category	**Allocations (USD)**
Ship Acquisition	23.3%
Port Construction & Infrastructure	23.3%
Operations	23.3%
ESG Admin, Blockchain & Legal	7.7%
Technology & Monitoring (PHC)	8.3%
Impact Media & Communications	4.7%
Contingency	9.3%

Per Squad Capital Allocation

Each fleet squad (team) consists of two transport ships for crew deployment, one tugboat for carrying equipment and botanical supplies, and a Floating Transport Unit (FTU) for collecting and transporting coastal waste. The estimated minimum cost per fleet is $30,000, but actual costs may vary depending on available funding, which influences the quality of equipment and the operational scope of each team.

Per Squad Capital Allocation Table

Item	Cost (USD)
Transport Ships (2 units)	$2,400
Tugboat	$14,800
Floating Transport Unit (FTU)	$800
Safety	$2,500
Fuel/Energy	$3,500
Equipment & Special Tools	$2,000
Cleaning & Sanitation	$500
Monitoring/Data	$1,700
Crew Essentials	$1,800

ⓘ To ensure crew safety and adherence to maritime nautical standards. **$30,000** is considered the minimum viable investment per team.

4 Social & Environmental ROI

Investors receive blockchain-based **Impact NFTs**, providing transparent, auditable, and regulatory-compliant proof of their social and environmental contributions. These certifications include detailed metrics on:

- **Waste Removal (metric tons)**
- **Mangroves Planted (count)**
- **Restored Coastal Areas (km^2)**
- **Verified Carbon Sequestration by plant biomass**
  - Aboveground biomass (AGB) — trunks, branches, leaves (tree wood).
  - Belowground biomass (BGB) — roots (often estimated as a ratio of AGB).

These NFTs serve as credible ESG documentation, boosting investor confidence and enhancing corporate social responsibility (CSR)reputations.

4.1 How Carbon Sequestration is Measured

When mangroves grow, they act like natural carbon vaults—pulling carbon dioxide (CO_2) out of the air and locking it away in their wood, roots, and the surrounding soil. This process, known as **carbon sequestration**, is how Garden Fleet measures its contribution to climate recovery.

Each mangrove captures carbon in three main areas:

1. **Aboveground biomass (AGB)** – the trunk, branches, and leaves.
2. **Belowground biomass (BGB)** – the root systems that anchor and store carbon beneath the surface.
3. **Soil organic carbon (SOC)** – carbon that accumulates in the mud and sediment, where mangroves naturally trap and preserve it for decades.

To estimate the carbon captured, we use a scientifically accepted formula recognized by the Intergovernmental Panel on Climate Change (IPCC):

> **Tree Biomass × 0.47 × 3.67 = CO_2 Stored**

Where:

- **0.47** = the fraction of biomass that is carbon.
- **3.67** = the ratio to convert pure carbon into CO_2 equivalent.

For example, a small mangrove weighing around **10 kg** (dry mass) stores about **17 kg of CO_2** in its first two years. Averaged out, this means each mangrove absorbs roughly **8–12 kilograms of CO_2 per year** during its early growth phase. As the tree matures, it continues to store carbon at a slower rate but retains what it has already captured in its roots and surrounding soil.

Tree Age	Estimated CO_2 Stored	Description
1 year	~8–12 kg CO_2	Early rapid growth
5 years	~60 kg CO_2	Expanding roots & soil carbon
25 years	~250–300 kg CO_2	Long-term storage in roots and soil

Garden Fleet applies these conservative, IPCC-aligned estimates to ensure credible, measurable, and verifiable carbon accounting. Every planting, measurement, and growth update is logged in the **Project Health Control (PHC)** system and recorded on ESG Impact Reports to provide transparent, auditable data.

This ensures that every mangrove planted by Garden Fleet contributes to both ecological restoration and scientifically valid carbon reduction.

4.2 Financial ROI

Garden Fleet (GF) offers investors attractive financial returns through strategic use of blockchain technology, specifically the GF non-fungible tokens, which serves as the cornerstone of its regenerative finance model and a blockchain based proof of impact certificate.

Its important to note that Garden Fleet does not "sell" fungible tokens or allows investors to purchase shares of tokens on a blockchain. Instead it allows the purchase of NFTs which serve as certificates proving that the owner has invested in ecological restorative work. Each NFT is also embedded with metrics of what sort of work was conducted.

5. Risk Management

Garden Fleet (GF) is dedicated to transparency and proactive management of risks inherent in environmental and blockchain-related projects. The following outlines key risks and GF's strategies for mitigation:

5.1 Operational Risks

Risk	Description	Mitigation Strategy
Fleet Disruptions	Natural disasters, extreme weather, and logistical challenges may hinder operations.	Weather-resistant vessel designs, real-time forecasting, contingency plans, and diversified supply chains.
Safety Concerns	Occupational hazards and maritime risks may affect personnel and operations.	Strict safety protocols, regular crew training, safety gear, and emergency response strategies.

5.2 Financial & Market Risks

Risk	Description	Mitigation Strategy
Cost Management	Rising maintenance, fuel, and operational costs could strain resources.	Conservative financial planning, regular audits, and contingency budgets.

5.3 Social & Community Risks

Risk	Description	Mitigation Strategy
Local Engagement	Resistance or lack of community support may hinder project success.	Transparent communication, community education, local employment, and integrating feedback into planning.

5.4 Regulatory & Compliance Risks

Risk	Description	Mitigation Strategy
Legal Changes	Evolving maritime, environmental, and blockchain regulations may affect compliance.	Engage legal experts, monitor policy updates, and ensure adaptable operational frameworks.
Environmental Standards	Non-compliance with sustainability guidelines may impact reputation and contracts.	Internal audits, third-party sustainability certifications, and adherence to global environmental policies.

6. Blockchain Verification System

Garden Fleet uses blockchain technology as a **verification tool**, not as a speculative token. Instead of issuing tradable cryptocurrencies, GF employs a single smart contract that creates Impact NFTs. Digital certificates proving that verified environmental work has been completed.

Each NFT represents a real, measurable contribution to ecological restoration, such as:

- **Kilograms of plastic removed** from coastlines
- **Mangrove trees planted**
- **Square meters of shoreline restored**
- **Estimated CO_2 captured** by verified plantings
- **Individuals employed** by hours worked

These NFTs serve as immutable records stored on the blockchain, giving businesses, donors, and government agencies transparent proof of the impact they funded.

> It's important to note that Garden Fleet PBC, Inc. does not sell fungible tokens or permit private individuals to invest directly in its projects. Instead, Garden Fleet issues Impact NFTs as verifiable proof of the environmental work it performs. These NFTs serve as impact certifications and provide companies with a method to improve their ESG standing.
>
> **Garden Fleet NFTs are certificates of verified environmental work and do not represent financial securities, profit-sharing, or investment instruments.**

6.1 How It Works

- **Smart Contract Activation**
  When Garden Fleet completes a verified environmental activity (cleanup, planting, etc.), a call is made to the GF Smart Contract on the Celo blockchain.
- **Data Input & Verification**
  Field data (e.g., number of trees planted, tons of plastic collected, GPS location, and photos) are recorded in Garden Fleet's **Project Health Control (PHC)** system.
  Once verified by the ESG operations team, this data is sent to the blockchain for record creation.

- **NFT Creation (Proof of Impact)**
  The smart contract automatically mints an **Impact NFT**, embedding the verified metrics.
  Each NFT includes:
  - Project name and location
  - Date and type of work (cleanup or planting)
  - Quantified results (e.g., 100 kg waste removed, 250 mangroves planted)
  - CO_2 equivalent sequestered based on IPCC standards
  - Blockchain transaction hash of Impact Report NFT for public verification
- **Ownership and Reporting**
  The NFT is issued to the contributing partner, donor, or ESG client as a **digital certificate of environmental performance**. They can be referenced in sustainability reports, ESG audits, and corporate disclosures as traceable proof of impact.

6.2 Impact NFT Series

The Impact NFTs serve as the digital certification system for Garden Fleet's verified environmental activities. Each NFT in this collection is a Proof of Impact Certificate minted on the blockchain, directly tied to measurable ecological outcomes tracked through PHC for public auditing. These NFTs are designed to be collectible, verifiable, and compliant with ESG reporting standards.

▢ OceanGuardian NFT

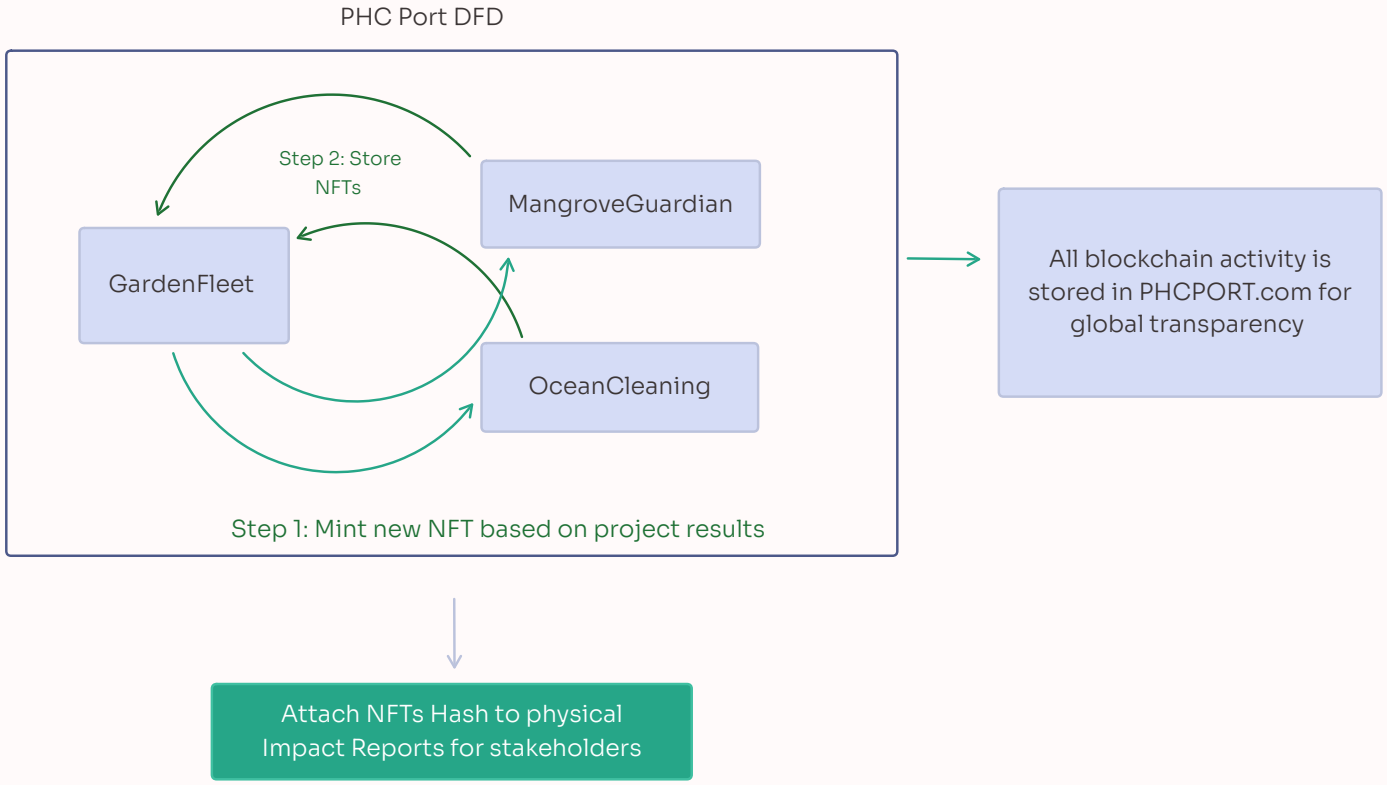
The **OceanGuardian NFT** represents verified ocean cleanup operations conducted,
Each NFT records:

- **Tonnage of plastic removed** (in metric tons or Kilograms)
- **Geolocation and timestamp** of the cleanup area
- **Carbon-equivalent impact** from waste removal and recycling
- **Hours worked** by IP and other stakeholders which benefited local economies
- **GRI & SDGs** impacted by the cleanup operations

▢ MangroveGuardian NFT

The Tree Planting NFT, also called the Mangrove Guardian, certifies verified mangrove planting and coastal forest regeneration.
Each NFT contains data on:

- **Number of trees planted and survival rate**
- **Area restored and GPS coordinates**
- **Estimated carbon sequestration per year**
- **Hours worked** by IP and other stakeholders which benefited local economies
- **GRI & SDGs** impacted by the cleanup operations



6.3 Physical Impact Report

While the blockchain ensures transparent, immutable digital verification, Garden Fleet also produces a Physical Impact Report as a high-quality printed and multimedia package that documents every verified clean up and tree planting operation.

This report provides investors, ESG auditors, and corporate partners with comprehensive, human-readable evidence of the impact achieved. It merges data analytics, blockchain validation, and field media documentation into a single verifiable record. In addition to the NFT Hashes, this report also before and after video and photo media of the operational sites. Each Physical Impact Report includes:

- Data Dashboard (PHC Extract)
  - Beach areas cleaned in square meters
  - Total plastic removed (in metric tons or kilograms)
  - Total trees planted
  - Carbon sequestration estimates
  - Community members employed from IPs and other stakeholder communities
  - Operational hours logged by fleet
  - NFT verification Appendix including the Hash of NFTs generated by the operation
- Visual & Geospatial Verification
  - Before-and-after drone imagery of cleanup and mangrove zones
  - Geotagged photos and maps verifying coordinates of impact
  - QR-linked video documentation showing crews in action

Third-Party Endorsements & Signatures

- Comment from the funder
- Testimonial statements from local stakeholders

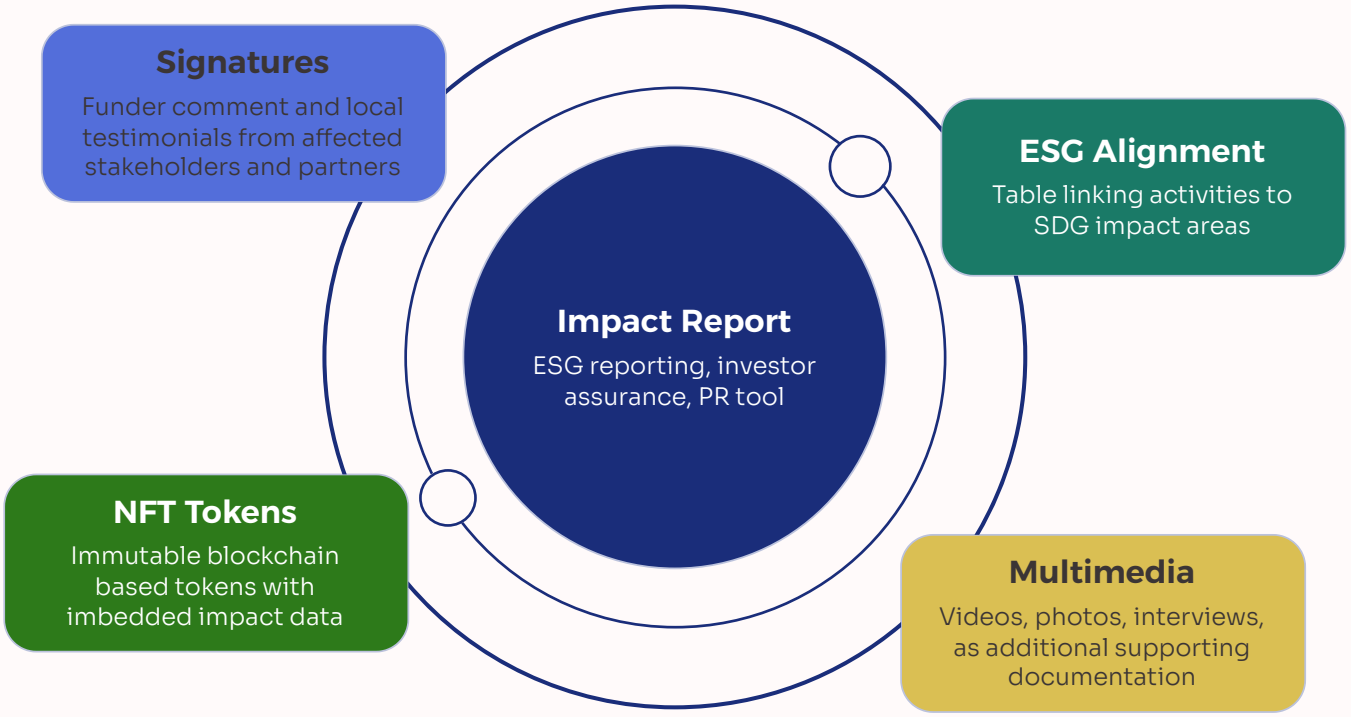
ESG Alignment Table

- GRI 101, 301, 302, 304, 305, 306, 401, and 413 for materials use, emissions, waste, employment, and community engagement
- SDG alignment with Goals 6, 8, 11, 12, 13, 14, 15, and 17, addressing water quality, decent work, sustainable cities, responsible consumption, climate action, marine and terrestrial biodiversity, and global partnerships

Multimedia Integration

- Full-length videos of cleanup and planting operations
- before and after photos of the operational sites
- Interviews with crew members and local partners
- Satellite overlays showing coastline recovery over time

The Impact Report supports corporate ESG reporting, provides investor assurance by linking verified outcomes to capital use, and serves as a public relations and educational tool for conferences and CSR events.



7. Operations Framework

The Garden Fleet operates with a structured approach to maximize efficiency in coastal cleanup and mangrove reforestation. Each fleet is composed of four integral components that work in coordination to execute operations.

- **Two Transport Ships:** These vessels transport personnel to and from cleanup and planting sites. Each ship carries a crew of four, totaling eight personnel.
- **One Tug Boat:** The tug boat serves as the primary hauler of equipment and is responsible for towing the Floating Transport Unit (FTU). It is operated by a three-person crew.
- **Floating Transport Unit (FTU):** This device is a specialized barge floating container designed for collecting and transporting waste materials back to shore. It is towed by the tug boat during cleanup operations.

Each fleet operates with a total of **11 personnel**, ensuring effective execution of tasks, from trash collection to reforestation efforts.

Fleet Component	Function	Crew Size
Transport Ship 1	Personnel transport (4 people)	4
Transport Ship 2	Personnel transport (4 people)	4
Tug Boat	Equipment & FTU towing	3
Floating Transport Unit (FTU)	Trash collection vessel	0
Total Crew	-	11

Operational Workflow

1

Deployment

The transport ships deliver personnel to the designated cleanup or planting site, while the tug boat tows the FTU with necessary equipment.

2

Execution

Crews collect waste and load it into the FTU. Simultaneously, another team plants mangroves or conducts erosion control activities.

3

Retrieval

Once the FTU is filled, the tug boat hauls it back to shore for waste processing and disposal.

4

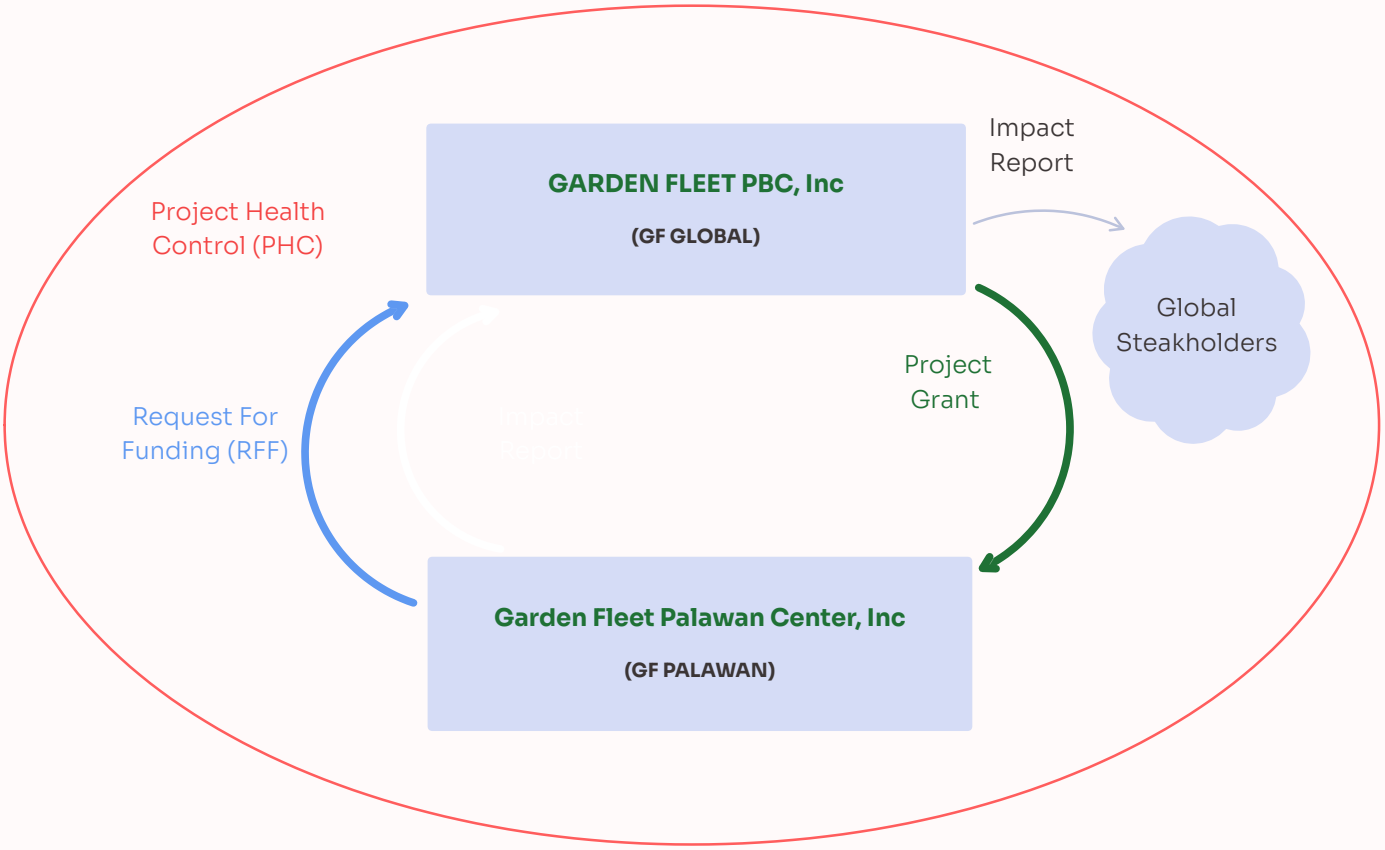
Reset

Equipment is inspected, and the fleet is returned to port and prepared for the next mission.

This fleet configuration ensures efficient, low-cost, and **scalable** operations

8. Garden Fleet Corporate Governance & Team

The organization is structured into two complementary entities: **Garden Fleet PBC, Inc.**, a Delaware-registered social enterprise in the United States, and **Garden Fleet Palawan Center, Inc.**, the operational arm based in Narra, Palawan, Philippines. Garden Fleet PBC (also referred to as GF Global) serves as the fundraising and strategic governance arm, responsible for securing international partnerships and capital. Garden Fleet Palawan (GF Palawan) functions as the domestic implementation hub, carrying out on-the-ground ESG-aligned operations, including coastal cleanup, mangrove restoration, and community engagement across the Philippines.



8.1 Core Leadership Team (GF Global)

Abu-Bakr Harakat

Founder and operations manager of Garden Fleet, with over a decade of experience in military operations, U.S political campaigns, and information systems. A seasoned project management specialist, driven by the purpose of reducing global pollution.

David Winter

An engineering veteran with 30+ years of global experience in Oil & Gas, Rail, and Infrastructure as a Risk Engineer. He pioneered the PHC (Project Health Control) system to provide stakeholders with clear monetary oversight and performance tracking.

Tahira Amir Khan

Technologist (20+ yrs), trained Mathematician, MBA and award-winning Author, she has advised the Singapore & Qatar Gov on e-governance frameworks. As the former President of Mobile Alliance Singapore, an initiative supported by IE Singapore.

8.2 Program Advisors (GF Global)

Aruneshwar Gupta

Senior Advocate of the Supreme Court of India, Aruneshwar brings 40+ years of legal leadership across India, the U.S., and Singapore. He has led major legal reforms, authored over 500 judgments.

Dr. Arini Verwer

International education consultant with expertise in early childhood development, mental health, and community resilience. She leads Garden Fleet's EcoSociety initiatives.

Kari Honkanen

Software veteran whose innovations at Facebook, Yahoo, and VMware have reached hundreds of millions. Now a fintech leader in the UK, he focuses on AI-driven solutions, building on early work in Bayesian networks.

Petros Leivadaros Ph.D

Petros Leivadaros is a Ph.D. candidate in Nuclear Chemistry at the Czech Technical University in Prague, specializing in environmental radioactivity and radionuclide applications in marine systems. With degrees in oceanography, nuclear chemistry, and geotechnology. His research uses isotopic tracers (e.g., 137Cs, 236U, 129I) to study ocean dynamics and ecological impacts.

Remzi Bajrami

Remzi is an entrepreneur, systems thinker, and author of *Common Planet: A New Game of Life*. He is the creator of Creditism, an economic framework. With a background spanning real estate, finance, software, and internet marketing, he brings a multidisciplinary approach to solving complex global challenges. Remzi is passionate about using technology to address structural economic problems and empower communities.

Prof. Jyotirmoy Goswami

Veteran educator and sustainability advocate. He brings grassroots leadership, permaculture expertise, and policy-level insight to support Garden Fleet's regenerative goals.

His initiatives have been recognized by and implemented through local and state government agencies in India. Now focused on building a community-based university in the Himalayas,

8.3 Garden Fleet Palawan Center

Garden Fleet Palawan Center, Inc. functions as the operational division of Garden Fleet, responsible for executing all field activities in the Palawan region. It manages fleet logistics, coastal cleanup, mangrove restoration, recycling operations, and community engagement with LGUs and Indigenous Peoples.

The Palawan unit operates under Garden Fleet's ESG governance and PHC framework, serving as the first on-ground model for replicable regional deployment. It also provides verified data, media documentation, and reporting inputs for the Impact Report.

Core Functions:

- Oversee daily fleet operations and site coordination
- Manage reforestation, recycling, and ecological data reporting
- Lead community partnerships and educational outreach
- Document verified impact through photo, drone, and PHC systems

8.4 Leadership Team (GF Palawan)

Emmanuel Lucasan

Emanuel "Ems" Lucasan is an award-winning Filipino flutist and bamboo flute maker, recognized with the Dungannon Award for Arts and Culture and a member of the UGBOS Musical and Visual Arts Group. He has performed indigenous Filipino music in concerts around the world. Living as an environmental activist in Palawan, Lucasan devotes his time to crafting instruments, preserving ancestral flute traditions, and planting trees in endangered and deforested areas to restore the island’s natural harmony.

Braiden John C. Hermosura

Braiden Hermosura is a Former Datu (Indigenous leader) of the Maharlikan Lumads tribe, and a mission-driven consultant whose 15-year career bridges spiritual advocacy, community governance, strategic marketing, and corporate leadership. Guided by his role as a Vahana Missionary, he integrates spiritual wisdom with practical innovation to promote holistic prosperity, self-reliance, and conscious leadership across both organizational and community development spheres.

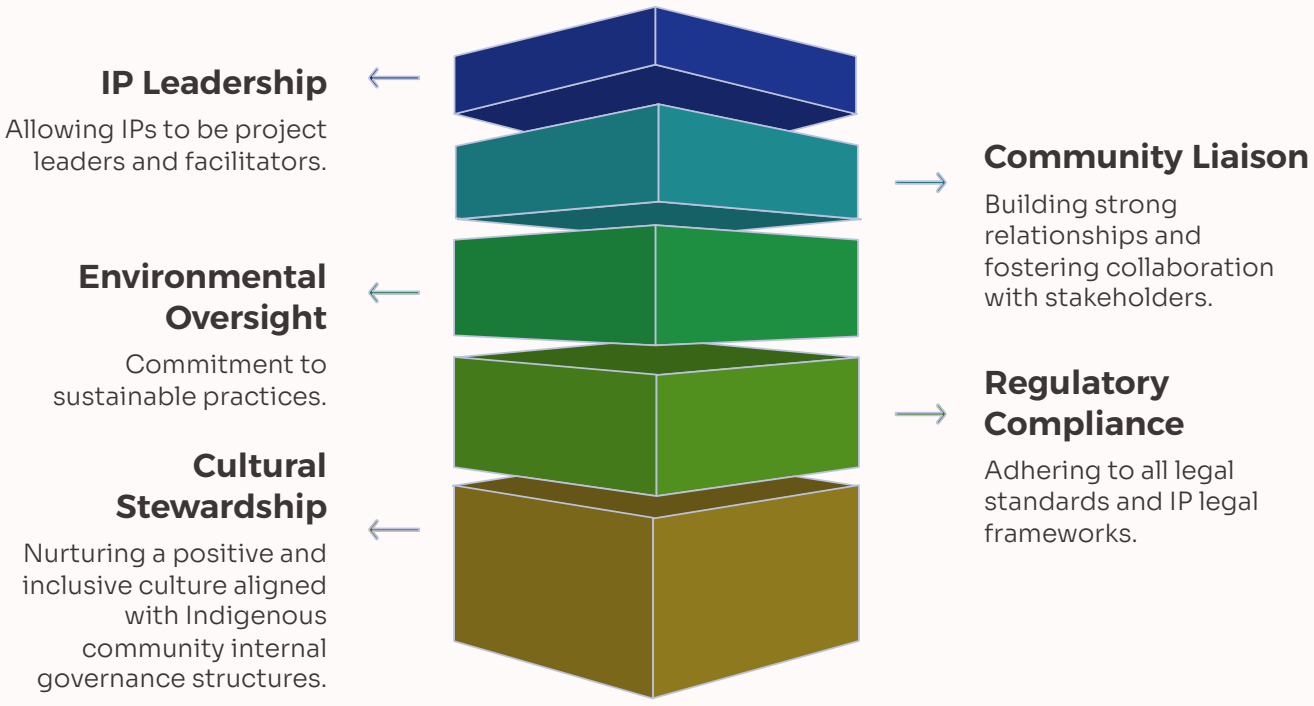
8.5 Garden Fleet Palawan Advisory Committee

To ensure transparency, inclusivity, and cultural alignment, Garden Fleet Palawan Center, Inc. is guided by a dedicated Advisory Committee composed of local government leaders, Indigenous Peoples (IP) representatives, and regional policy advisors.

This committee provides strategic guidance and community oversight for all field operations in Palawan, ensuring that Garden Fleet's activities respect local customs, comply with national regulations, and deliver measurable benefits to the people and ecosystems of the region.

The Advisory Committee supports Garden Fleet Palawan by:

- Providing a liaison with LGUs, government agencies, and regional councils.
- Representing Indigenous and local community interests, ensuring fair participation and equitable benefit-sharing.
- Offering strategic advice on environmental priorities, project siting, and stakeholder coordination.
- Reviewing and endorsing the Physical Impact Reports and ESG data submitted by the Palawan operations team.
- Serving as cultural and ethical stewards of Garden Fleet's mission in the region.



8.6 Legal Incorporation

The Garden Fleet program is operated by two companies, Garden Fleet Public Benefit Corporation, Inc (GF Global) and its child company and operational arm Garden Fleet Palawan Center, Inc (GF Palawan)

8.6.1 GF Global

GF Global is incorporated as a **Social Enterprise** Delaware corporation under the name Garden Fleet PBC, Inc. Ensuring that profits are reinvested into environmental restoration rather than distributed as dividends.

Entity Type: Social Enterprise (SEC-registered)

Business Model: Revenue from ESG contracts, cleanup services, and blockchain-based impact funding

Legal Compliance: ESG reporting requirements, corporate tax filings, and adherence to sustainability laws

As a social enterprise, all profits generated by Garden Fleet will be reinvested into operations and allocated to the Fleet Operations Reserve as USDT. These funds will support the continuous expansion of the fleet, fair compensation for personnel, equipment upgrades, and the development of advanced recycling solutions. This reinvestment strategy ensures the long-term sustainability of the project while maximizing its environmental and social impact.

8.6.2 GF Palawan

Garden Fleet Palawan Center, Inc. serves as the **Philippine operational arm** of the Garden Fleet initiative, focusing on direct implementation, local partnerships, and ESG impact verification. Incorporated in Palawan as a **non-stock, non-profit organization**, the Center acts as the **community anchor** for fleet deployment, education programs, and indigenous engagement.

Entity Type: Non-Profit Environmental Organization (SEC-Registered, Philippines)
Core Function: Local operations management, community coordination, ESG verification, and impact reporting
Governance: Managed by a local Board of Directors including Indigenous Peoples (IP) representatives, environmental scientists, and civic leaders

9. Media & Public Outreach

Garden Fleet leverages transparent, engaging multimedia content to demonstrate measurable ESG impact and maintain public accountability. Our Media and Communications Plan ensures stakeholders, partners, investors, and the public remain continuously informed and engaged.

Garden Podcast

The podcast regularly shares impact stories through interviews with crew members, community leaders, and partners directly involved in coastal cleanup and mangrove reforestation projects. It provides educational insights from ESG experts and environmental scientists, covering essential topics such as impact verification methods and corporate sustainability practices.

The podcast strengthens community relationships and investor confidence, promoting long-term trust and meaningful partnerships.

Projected Podcast Costs

Costs	Allocations
Media Studio Setup	$20,000
Podcasting & Video Gear	$15,000
Digital Marketing	$20,000
Misc Costs	$15,000
Total	**$70,000**

10. Roadmap (2022-2030)

1

2022 Q1

Foundational Field Research & Stakeholder Engagement

Personally traveled to Palawan to conduct site visits, build trust with local communities, and initiate dialogue with key local government officials—laying the groundwork for a regionally grounded, community-informed pilot.

2

2023 Q2

On-Site Organizing in Palawan

Began informal coordination efforts with early supporters, including initial scouting of potential fleet deployment zones and port locations.

3

2024

Concept Development & Technical Papers

Drafted the Garden Fleet White Paper and Yellow Paper, defining the operational model, tokenomics, and ESG integration strategy.

4

2025 Q1

Formal Launch: Incorporation & Team Formation

Incorporated Garden Fleet PBC, Inc., established governance frameworks, and formed initial strategic partnerships across technology, education, and project oversight.

5

2025 Q3

Incorporation of Garden Fleet Palawan Center, Inc

Legally incorporated the operational arm of Garden Fleet and established a board of directors from local IP leaders and professionals.

6

2026 Q1 - Q3

Begin soliciting seed and pre-seed funding from mission-aligned angel investors and Family Offices aligned with our global vision.

7

2027 Q1

Garden Fleet will build its first operational port in Narra, Palawan and officially begin fleet and recycling operations, marking the transition from development to active coastal restoration and ESG service delivery.

8

2030+

Expanding operations to other critical regions heavily impacted by ocean plastic pollution.

11. Partnerships

Garden Fleet is committed to fostering collaborative partnerships with NGOs, public entities, and educational institutions.

11.1 Partnership with Order Efficiency

Garden Fleet (GF) has formed a strategic partnership with Order Efficiency Ltd (OE), incorporating OE's advanced **Project Health Control (PHC)** system. OE supports GF as a sponsor, driven by its strong corporate social responsibility and commitment to environmental and social governance (ESG).

PHC is a comprehensive project management methodology developed by **Order Efficiency Ltd**, designed to monitor, assess, and optimize project performance in real-time. Utilizing key project management metrics and real-time analytics, PHC ensures projects remain aligned with stakeholder expectations, ESG objectives, and regulatory compliance.

- **Real-time Project Oversight:**
  Order Efficiency Ltd PHC's analytics allow GF to continuously monitor fleet operations, coastal cleanups, mangrove planting initiatives, and overall project health, ensuring operational effectiveness and ESG compliance.
- **Risk Mitigation & Early Intervention:**
  PHC identifies project risks early, allowing timely interventions that maintain fleet productivity, environmental objectives, and financial efficiency.
- **Transparency & ESG Reporting:**
  GF utilizes PHC's detailed tracking and reporting capabilities to demonstrate transparent ESG metrics, satisfying regulatory requirements and stakeholder expectations.

As a sponsor, OE supports GF by **pledging 10% of its annualized profits toward social responsibility** initiatives. This funding enables direct financial and resource assistance, including fleet expansion, port infrastructure development, acquisition of safety equipment, and the production of media content such as podcasts and documentaries. OE further enhances GF operations through technology integration and specialized training, ensuring GF personnel effectively utilize PHC tools to achieve peak efficiency, sustainability, and compliance.

Workforce Development:

Garden Fleet (GF) collaborates with Order Efficiency Ltd (OE) and its Project Health Control Consortium (PHCC) to build a professional workforce, positioning GF for future international growth. PHCC provides specialized training in project analytics, risk management, ESG compliance, and operational efficiency through OE's Project Health Control (PHC) methodology.

GF personnel benefit from ongoing professional development, certifications like PMP, and training aligned with global ESG standards. Additionally, PHCC fosters mentorship, peer learning, and continuous innovation, ensuring GF's workforce remains skilled, adaptable, and strategically equipped for global environmental initiatives beyond Palawan.

11.2 Partnership with CubeSpawn for waste Recycling

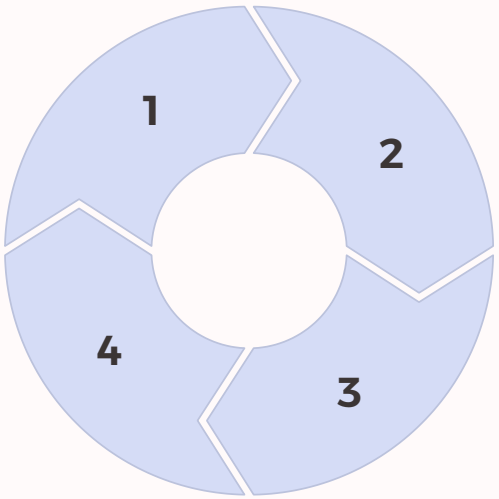
Garden Fleet (GF) partners with **CubeSpawn** to convert recovered ocean plastic into durable, low-cost building materials. These materials will be provided at cost to at-risk communities in Palawan, where homes built from weak materials are often destroyed by storms, leading to loss of life. This initiative reduces plastic waste while strengthening community resilience. **CubeSpawn's modular system is fully transportable, allowing the entire recycling setup to be relocated to new areas of operation.** This design significantly reduces infrastructure costs by eliminating the need to build new facilities in each deployment zone.

Trash Collection

Waste is removed from the ocean and coastlines through the **Ocean Guardian** program.

Recycling

Recycled materials are made available at-cost for sustainable infrastructure, ensuring waste finds a productive second life.



Sorting & Processing

Plastic waste is categorized and prepared for repurposing, ensuring efficient material conversion.

CubeSpawn Integration

Sorted plastic is processed through **CubeSpawn's** modular manufacturing system, transforming it into building materials.

Our recycling and remediation strategies employ responsible, scientifically backed methods to process collected plastic waste, ensuring that our recycling efforts prevent secondary pollution, microplastic release, and toxic emissions.

Our waste remediation framework integrates precise sorting, advanced thermal treatments, and multi-stage filtration technologies to maximize material recovery

Multi-Stage Sorting	Plastic waste is sorted by polymer type (PET, HDPE, LDPE, PP, etc.), contaminants are filtered out, and materials are shredded for efficient thermal conversion and reuse.
Multi-Chamber Secondary Burning	Utilizes high-efficiency pyrolytic combustion in a closed-environment chamber to ensure complete molecular breakdown, preventing microplastic release while capturing heat energy.
Oxygen Deprives Gasification	Plastics are converted into synthetic gas (syngas) through gasification, a process that operates under low-oxygen, high-temperature conditions to break down materials without direct incineration emissions.
Filtration, Capture, & Precipitation	Filtration, gas capture, and precipitation work together to eliminate harmful byproducts. Particulate filtration removes residual solids, gas scrubbing neutralizes airborne contaminants, and precipitation stabilizes remaining compounds for safe

By implementing these remediation and recycling strategies, Garden Fleet, in partnership with CubeSpawn, ensures that plastic waste is permanently removed from the environment

CubeSpawn System Scope

Design and deploy a fully self-contained, solar-powered plastic waste processing and remanufacturing system using a four-container modular architecture. Powered by photovoltaic and heliostat-driven thermal inputs, the system supports local waste reduction, resource recovery, and infrastructure manufacturing.

Key System Components

A comprehensive overview of the core elements.

- Four 20-ft containers
- Heliostat Mirrors: Targeting the thermal receiver for a rotary melt process and central salt loop
- 20 kW Solar PV system with battery storage and integrated power distribution
- Fully off-grid capable with extensibility for future add-ons and to manage operations cost.

Processing Streams

A breakdown of material transformation.

Tier	Type	Processing Method	Final Output
1	Severely degraded or toxic plastics (e.g., PVC)	Pyrolysis or gasification	Safe disposal or inert carbon
2	Partially degraded plastics	Chemical treatment + molding	Waste bins, collection containers
3	Clean plastics	Washing + pelletization	Green/reclaimed plastic pellets
4	Organic Waste	Compost/Disposal	Soil Amendments

Container Roles

Specific responsibilities by container.

- Container A – Intake & Sorting: Material shredding, sensor-driven classification
- Container B – Degraded Plastic Recovery: Plastic blocks for stock to re-use for molded bins
- Container C – Controls and Technical operations: the computers, electronic controls and IT portion
- Container D – Pelletization & Utilities: Clean plastic processing + salt loop plumbing + batteries

$675,000 - $1,500,000

Budget Summary

Total Estimated Cost

Future Roadmap (Optional Extensions)

Expansions and future plans.

Satellite Integration

Expand satellite processing units based on containerized model for additional sites.

Community Integration

Integrate with community infrastructure programs (e.g., water purification, algae-based shoreline restoration)

Scaling to Remote Areas

Develop remote replication kits for scaling impact

Add-on and Purpose

Add-on	Purpose
Aquatic Drones	Net retrieval, floating plastic harvesting, small autonomous scoopers
Floating Debris Traps	Passive plastic interceptors near shorelines
Mobile Satellite Units	Lightweight containerized offshoots manufactured from main site
CubeSpawn Core Node	Full modular fabrication hub for local expansion or export-ready kits
Biomass or algae integration	Expand processingadmin-user scope toward fuel/feedstock cycles or shoreline restoration

The CubeSpawn modular recycling system is in its preliminary design stage. A full engineering and deployment plan will be developed once seed funding is secured, enabling detailed prototyping and component sourcing

Technical Specifications

- Dump hopper – incoming materials
- Pre-sorting and cleaning tables remove organic materials and biofouling from recoverable plastic – process water recovery and cleaning
- Container A – Intake & Sorting: Material shredding, sensor-driven classification
- Container B – Rotary Forge : Plastic blocks for stock to re-use for molded bins
- Container C – Controls and Technical operations: the computers, electronic controls and IT portion
- Container D – Pelletization & Utilities: Clean plastic processing + salt loop plumbing + batteries
- Thermal loop - provides process heat for plastic melting and forming
- Heliostats provide process heat for Melt/Reform/Pellet extrusion Rough Visualization

Power & Thermal Architecture

Energy infrastructure explained.

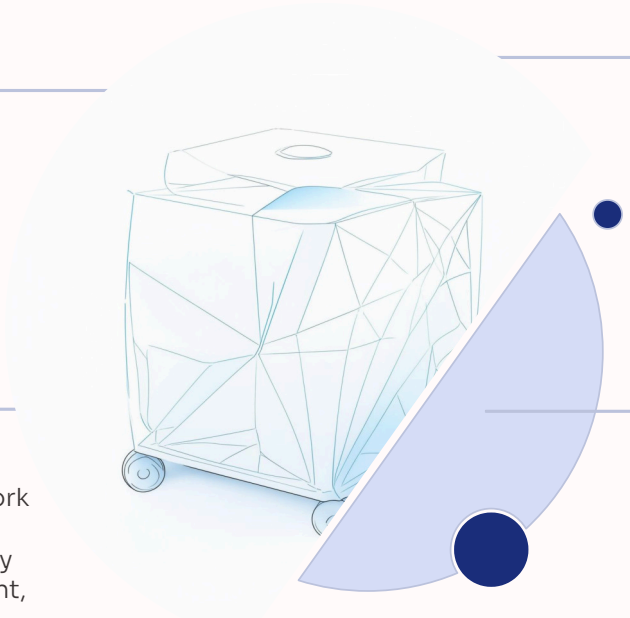
- Solar Power: 20 kW PV system with lithium or lead-carbon batteries
- Thermal: heliostats (Reclaim melt process, Salt Loop,)
- Salt Loop: Centralized molten salt tank for thermal buffering

Deliverables

What the project provides.

- Fully assembled, tested, and documented container system
- Training for local operators
- Remote monitoring and support tools (first 6–12 months)
- Maintenance manual and control documentation

The CubeSpawn platform is a mobile, modular recycling system designed to convert recovered ocean plastics into usable materials without generating harmful byproducts such as microplastics or toxic fumes. Its transportable design significantly lowers infrastructure costs by eliminating the need to construct new recycling facilities at each deployment site.



Zero Emissions

fully converts plastics into clean gases and inert solids through high-temperature gasification.

Thermal Loop

Recycles solar heat to power and sustain plastic recycling, reusing energy for off-grid operation.

Mobile System

Containerized network of modular cubes designed for mobility and rapid deployment, capable of being transported by trucks or sea vessels

Pelletization

Melts and extrudes cleaned plastic into uniform pellets as reusable raw material for molding durable recycled products.

11.3 Partnership with Through The Golden Door

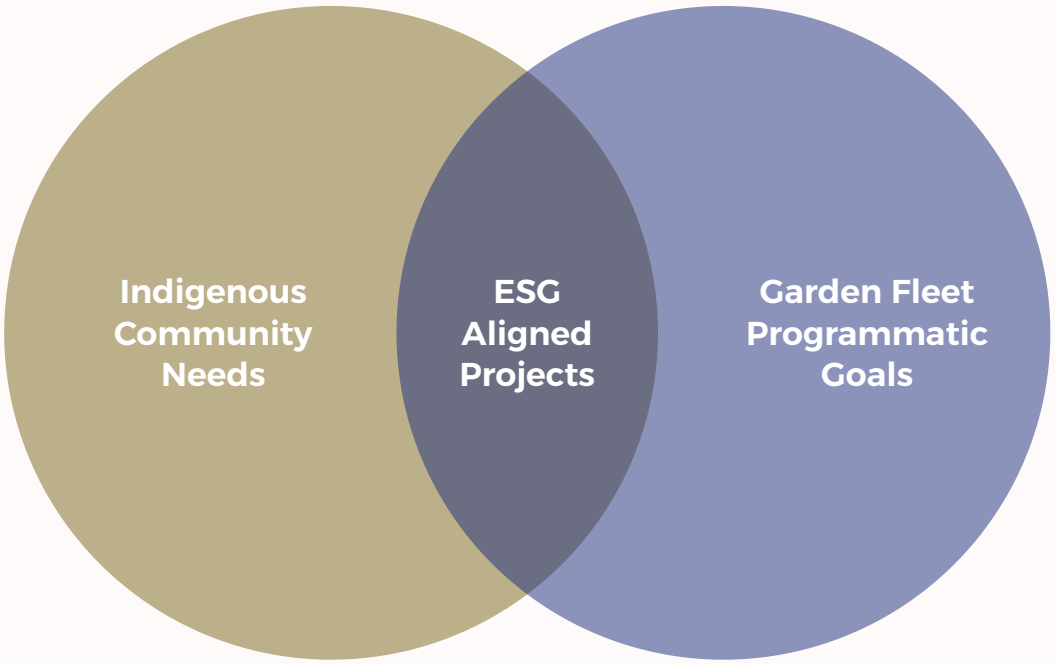
Garden Fleet (GF) is committed to not only restoring coastal ecosystems but also fostering a vibrant community around its operational hub in Palawan. In alignment with this vision and in collaboration with Through The Golden Door (TTGD) to create an immersive experience for stakeholders, investors, and environmental advocates who wish to witness the fleet's impact firsthand.

At the core of this partnership is the creation of a **regenerative community** around GF's port operations, designed to provide a sustainable foundation for both local residents and visiting ESG stakeholders. Key components include:

- **Eco-friendly housing & sustainable agriculture** – Ensuring GF's workforce and volunteers have green living spaces and access to locally grown food.
- **Waste-to-Wealth programs** – Converting recovered plastics into valuable materials to support a circular economy.
- **Educational & mental health facilities** – Providing resources and services for local families to promote long-term community well-being.
- **Accommodations for ESG investors, corporate partners, and eco-tourists** – Allowing guests to witness and participate in GF's ocean cleanup and mangrove reforestation activities.
- **Conferences, governance meetings, and sustainability workshops** – Hosting events focused on ESG leadership, impact investing, and regenerative finance.
- **Eco-tourism experiences** – Offering hands-on participation in beach cleanups, mangrove planting, and other sustainability-focused activities.

11.4 Partnership with Indigenous Communities

Garden Fleet is dedicated to partnering with Indigenous Peoples (IPs) as core stakeholders and collaborators in its regenerative economic restoration initiatives. In alignment with our ESG objectives and GRI 411: Rights of Indigenous Peoples. IP communities form the primary workforce for Garden Fleet Palawan's operations, advancing our commitment to inclusive growth, cultural respect, and sustainable development in support of SDGs 8 (Decent Work), 10 (Reduced Inequalities), 11 (Sustainable Cities and Communities), and 17 (Partnerships for the Goals).



IP Communication Strategy

Garden Fleet Palawan Center, the acting arm of GF, follows a standard format for communicating with IPs to establish a formal relationship of collaboration prior to conducting any ESG Aligned activities on IP land to comply with NCIP rules and regulations concerning ancestral domain rights and to execute respectful collaborative projects.

1

Preparation & Planning Identify barangays prepare consultation Materials, draft invitation letters, and budget

2

Venue & Logistics Setup Arrange venue, food chairs/tables, projector, sound system, materials

3

Presentation by The Garden Fleet to share background goals and environmental vision and emphasize consultation purpose (no partnership agreements at this stage)

4

Synthesis & Agreement on Next Steps Summarize key points, proposed next actions, and assign focal persons for coordination

5

Sending Formal Invitations letters to Barangay Captains, Council Members, and Municipal Representatives

6

Opening of Consultation Registration, opening prayer, welcome remarks by Barangay Captain and introduction of participants

7

Open Forum / Community Discussion to gather insights, issues, local experiences, and suggestions about coastal and marine management

8

Submission of Summary Report to GF Global as part of a Request For Funding (RFF)

This process ensures that IPs needs are properly understood by GF prior to the initiation of any environmental restoration projects. It also ensures that project plans are specific to the IP community and one that addresses their specific needs and takes full advantage of their community involvement. The advantage being the community feels responsible for protecting its coast and engaging in other GF activities as primary stakeholders.

The communication strategy involves drafting letters of introduction to the selected IP's leadership whether at the Barangay (Local government) level or via other LGUs.

1	2	3
Letter of Introduction **Letter of Introduction** Introduces Garden Fleet and its mission, presenting the company profile while formally requesting an initial meeting with community leaders to explore potential collaboration opportunities.	**Presentation of Intent** **Presentation of Intent** A follow-up engagement following the introductory meeting, where Garden Fleet conducts a formal presentation for Indigenous leadership and community members to explain the project in detail and address any questions or concerns.	**Memorandum of Agreement (MOA)** **Memorandum of Agreement (MOA)** A customized agreement co-developed with the Indigenous community to formalize participation in an ESG-aligned project, ensuring shared governance, transparency, and equitable benefit-sharing.

12. Our Process in a Nutshell

Our operating process offers a structured, modular framework to address the intertwined crises of ocean plastic pollution and coastal erosion.

Phase 1: Collection
Fleet teams remove plastic waste from targeted coastal zones using low-cost transport vessels, tugboats, and Floating Transport Units (FTUs). By mobilizing trained local crews and community volunteers, this phase delivers immediate environmental remediation while creating dignified, green employment opportunities.

Phase 2: Forestation (Optional)
In locations impacted by shoreline erosion, mangrove reforestation is deployed to stabilize coastlines, prevent flooding, and restore native ecosystems. This phase is terrain-dependent and executed in collaboration with ecological experts and local stakeholders.

Phase 3: Processing
All collected plastic waste is transported to a CubeSpawn modular recycling facility for advanced sorting, cleaning, and conversion into low-cost construction materials. The modular nature of CubeSpawn allows the entire processing system to be relocated to future deployment areas, reducing infrastructure costs and maximizing scalability.

Phase 4: Reporting & Verification
Each operational milestone is documented through the PHC (Project Health Control) monitoring system and verified via blockchain. Garden Fleet's reporting process includes the issuance of **Impact NFTs** and a detailed quarterly ESG report documenting:

- **Plastic Removed** (in metric tons)
- **Mangroves Planted** (count and coverage area)
- **CO_2 Sequestered** (in metric tons, using IPCC-aligned estimates)
- **Beach Cleaned** (in meters)
- **Jobs Created** (in total man-hours worked)

These verifiable metrics are aligned with SDG and GRI standards, providing corporate partners, donors, and government stakeholders with transparent, audit-ready proof of environmental and social impact.

Compliance with UN Sustainable Development Goals

Garden Fleet's mission and operational model are directly aligned with key Sustainable Development Goals (SDGs) established by the United Nations.

6 - Clean Water and Sanitation	Removes coastal waste and reduces marine pollution
8 - Decent Work and Economic Growth	Creates green jobs in vulnerable coastal communities
11 - Sustainable Cities and Communities	Supports coastal resilience and eco-infrastructure
12 - Responsible Consumption and Production	Promotes recycling and circular economy practices via CubeSpawn
13 - Climate Action	Captures carbon through mangrove reforestation
14 - Life Below Water	Protects marine ecosystems by cleaning coastlines
15 - Life on Land	Restores coastal vegetation and stabilizes shorelines
17 - Partnerships for the Goals	Builds cross-sector partnerships for environmental impact

Compliance with the Global Reporting Initiative (GRI)

Garden Fleet's operations are designed in alignment with internationally recognized sustainability frameworks, including the Global Reporting Initiative (GRI) Standards. By incorporating GRI-aligned metrics into our project tracking and ESG reporting systems, we ensure that all environmental, social, and governance outcomes are measurable, transparent, and globally comparable.

GRI 301 - Materials	Tracks waste recovery and recycling rates
GRI 304 - Biodiversity	Enhances biodiversity through mangrove restoration
GRI 305 - Emissions	Reports carbon drawdown from reforestation
GRI 306 - Waste	Discloses marine waste types, volumes, and destinations
GRI 401 - Employment	Reports on inclusive and green job creation
GRI 403 - Occupational Health & Safety	Ensures safety protocols for crew and volunteers
GRI 413 - Local Communities	Engages local communities in restoration efforts
GRI 419 - Socioeconomic Compliance	Adheres to coastal, labor, and marine regulations

13. Conclusion

The Garden Fleet (GF) project offers a practical and hopeful path toward environmental renewal and pollution reduction by combining sustainable technology, transparent reporting, and community participation to turn ESG principles into measurable action. We address the crises of plastic pollution and coastal erosion and deliver verifiable impact by removing marine waste, restoring shorelines with mangroves, and empowering local communities and Indigenous People to lead long-term environmental change.

Through the Project Health Control (PHC) system, every contribution is tracked and verified, ensuring transparency and accountability from funding to fieldwork. More than restoring coastlines, GF builds local capacity and awareness to sustain progress for generations to come, **standing as a model of how ESG-aligned investment can create both measurable results and lasting hope for the planet.**

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