gaia
Sciences Innovation

# 2024-25 IMPACT REPORT

greensphere

**This is the inaugural iteration of Greensphere's Impact Report for the Gaia Sciences Innovation (GSI) Fund, a £100m technology fund that targets solutions for climate change and nature loss.**

The intention of this report will be to update investors, partners, and the wider venture community on the fund's impact and provide an annual overview of the climate and nature investment landscape. With the GSI Fund still at its inception, this first report will set out our strategic approach to measuring and achieving impact over the life of the fund.

Half of global GDP is dependent on natural capital, so the loss of nature directly undermines economic stability.[1] The GSI Fund will invest in scientifically credible solutions to reduce the economic risks associated with climate stress and biodiversity loss.

[1] World Economic Forum, 2020

## Greensphere Capital

Greensphere has over a decade of investment experience in technology, companies and assets in the renewable energy, agriculture and forestry supply chains, focusing on solving systemic risks to climate and biodiversity. With core values that rank planet and people alongside profit, Greensphere's portfolio is proof that ethical, sustainable, performance-focused investments are achievable without compromising returns.

Greensphere was selected as the first fund manager to the UK government's Green Investment Bank, acting as advisor, and in 2023 launched its third fund, Gaia Sciences Innovation, a climate and nature technology fund for scaling best-in-class businesses that mitigate climate change and biodiversity loss. Founded in 2011 by Divya Seshamani, Greensphere is one of the largest female-owned venture capital firm in the UK.

FOUNDED IN

**2011**

EXCLUSIVE IP PARTNERSHIPS

**12**

exclusive IP partnerships with leading global science institutes

YEARS OF EXPERIENCE

**100+**

years of collective investment experience

CORE CRITERIA

**3**

core thematic investment criteria

MITIGATING RISK

**3**

major risks our investments mitigate

INNOVATION AND INVESTMENT HUBS

**3**

London, York and Norwich

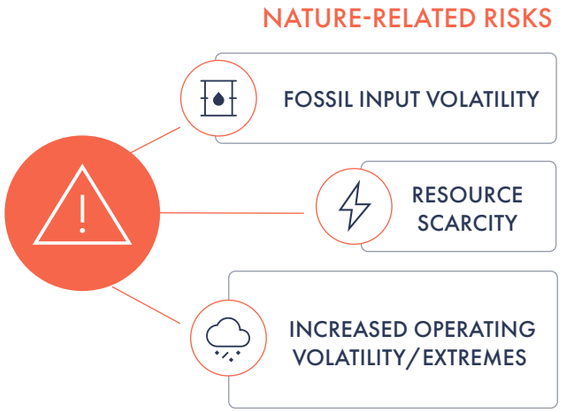
## Gaia Sciences Innovation

Gaia Sciences Innovation is a unique fund designed to invest in and scale businesses that successfully commercialise scientifically credible solutions to the dual crises of climate change and biodiversity loss. It holds collaboration agreements with 12 world-leading bioscience research institutes that collectively represent over 6,000 scientists and researchers, providing unparalleled access to expertise, innovation, and technology.

OUR IMPACT PHILOSOPHY

## Climate and Nature-Related Risks: The Rising Economic Consequences

At Greensphere we consider climate risk real. This might seem like an odd thing for an impact investor to claim – but we have found that the market often quantifies climate risk through a "box-ticking" lens that results in poor returns (greenwashing was never a good reason to invest) because they don't address true economic risk. We believe climate and nature risk is real – and because of that, we see past the headlines to quantify the true underlying drivers of this risk. Fortunately (or unfortunately, as it may be!), the economic impacts of climate and nature loss are becoming increasingly clear and substantial. At Greensphere we consider three primary risks in which businesses and governments can be impacted by climate and nature as our guiding principles – not just in how we assess the risk of investments but how we consider the impact, and therefore likely upside, of investing in mitigating technologies.




## 1 RISK OF FOSSIL INPUT VOLATILITY

Fossil input volatility arises when sharp movements in energy and fuel prices are not reflected in forward price curves or cost of capital. Forecasts are often presented as smooth trajectories, yet the global energy system is prone to swings driven by geopolitics and cartel pricing. Failure to impute this volatility results in systematic mispricing of assets. This underscores the structural advantage of low or no carbon alternatives, such as renewables. Unlike fossil fuels, whose input costs are set quarterly with extreme variability, renewables carry negligible fuel price risk—daily fluctuations in sun or wind are operational, not financial. By contrast, fossil-dependent sectors remain persistently exposed.

Agriculture illustrates this: in 2021–2022, soaring natural gas prices forced fertilizer plants in Europe to shut, pushing urea above $900 per ton—almost triple 2020 levels—while oil above $100 per barrel raised transport costs. These pressures cascaded into global food inflation, amplified by the Russia–Ukraine war. This is not simply a climate consideration but a definable business risk at the core of how Greensphere approaches climate risk: it affects real returns and is not a box-ticking exercise.

Emissions are a useful proxy because they often (excluding some notable examples like Drax in the UK) reflect how exposed a company or asset is to fossil input volatility. At Greensphere, we have consistently highlighted to Limited Partners that smooth forward energy curves (commonly used in valuations) are disingenuous and obscure the true cost of capital. Companies and assets with high fossil input exposure must be scrutinised more rigorously. Greensphere assesses this risk in potential portfolio companies but also sees a real investment opportunity: technologies that displace or reduce fossil inputs are valuable not because they reduce an abstract concept of emissions, but because they tangibly reduce volatility in customer risk profiles and lower the real cost of capital.

## 2 RISK OF RESOURCE SCARCITY

Resource scarcity results from two reinforcing dynamics: climate change and demographic pressure from population growth and rising wealth. Humanity is now in persistent ecological deficit. Each year, Earth Overshoot Day marks the point at which global consumption exceeds annual regenerative capacity. In 1971 this fell in late December; by 2000 it had moved to September; in 2025 it arrived on July 24. Today we consume the equivalent of 1.7 Earths annually, effectively borrowing from future generations.

Scarcity translates directly into business risk. The collapse of the North Atlantic cod fishery is instructive: after decades of overharvesting, cod stocks declined by more than 95% between the 1960s and early 1990s. In 1992 the Canadian government imposed a moratorium that remains three decades later, shutting down an industry that had employed over 30,000 people and underpinned entire coastal economies. Companies faced stranded assets, supply elimination, and long-term community dislocation.

This episode shows how ecological overshoot becomes business interruption when natural capital is exhausted faster than it regenerates. Climate change compounds this by reducing productivity of natural assets already in use. For example, 77% of cocoa imported into the EU comes from areas with compromised biodiversity, where weakened ecosystems are less resilient to pests and disease, materially increasing supply interruption risks across the chocolate industry.[2]

## 3 RISK OF INCREASED OPERATING VOLATILITY/EXTREMES

Climate change and nature loss are shifting us from a world where averages once applied to one where they no longer hold. Most models fail to capture volatility, masking the true scale of risk. Crossing planetary boundaries in climate, biodiversity, freshwater, and land use compounds costs that rarely appear in budgets.

A drought can weaken forests, increasing susceptibility to pests, which amplifies fire risk—illustrating how interconnected boundaries escalate disruption. Insurance losses from natural disasters have doubled to $145bn since 2015.[3] Coffee prices rose 55% in August 2024 following drought in Brazil, and rice prices in Japan were 48% higher in September 2024 after a heatwave.[4] The loss of Amazon ecosystem services cost Brazilian farmers $1bn between 2016–2019, with the rainy season delayed by 76 days since 1980 due to deforestation.[5] This growing volatility makes risk harder to price, undermines traditional models, and raises the effective cost of capital for companies exposed to stressed natural systems.

The common thread across fossil input volatility, resource scarcity, and systemic risk beyond averages is that all expose assets and portfolios to shocks underpriced in conventional models. Fossil input volatility shows how geopolitical energy markets destabilise cost structures and distort capital costs. Resource scarcity shows how over-consumption depletes natural capital, creating stranded assets and supply interruptions. Systemic risk shows how crossing planetary boundaries compounds shocks, eroding the reliability of averages underpinning forecasting and valuation.

[2] Foresight Transitions, 2025
[3] Financial Times, 2024
[4] World Economic Forum, 2025
[5] The Economist, 2024

# FINANCIAL IMPLICATIONS AND RESPONSE

The value at risk is considerable. The ECB estimates 72% of eurozone companies and three-quarters of EU bank loans are exposed to the loss of nature.[6] The Network for Greening the Financial System (NGFS) projects climate damages could reduce global GDP by 15% by 2050 with 2°C warming, and 30% by 2100 with 3°C. These estimates are three times higher than earlier assessments, even without factoring extreme tipping points.[7]

Financial markets have developed short-term mechanisms, such as catastrophe bonds, which reached a record $18bn issued this year.[8] But while these instruments transfer risk, they do not address underlying causes or support effective mitigation.

**For investors, the implication is clear:** technologies and business models that reduce fossil input exposure, decouple growth from finite resources, and strengthen resilience to volatility are not only environmentally aligned but essential to lowering the real cost of capital and preserving long-term value.

# SCIENCE HOLDS THE SOLUTIONS

**Fortunately, science and technology provide pathways to address these systemic risks**—this is why the Gaia Sciences Innovation Fund is mission critical. Studies suggest that up to half of the measures needed to meet Paris 2°C targets could come from nature-based technology solutions and food system changes.[9]

The threats to planetary boundaries are complex, interdependent, and evolving. At Greensphere, we believe science is the most powerful tool for understanding and quantifying these risks, and for building the foundation of economic continuity. A science-led approach enables management teams to operate with verifiable data, allowing capital to be deployed with greater confidence into solutions that mitigate climate and biodiversity risks. Healthy natural capital assets are not abstract environmental goods—they are productive, insurable, and investable systems. Yet much of this science remains disconnected from the governments and corporations that most need it.

Through the GSI network, we aim to build, scale, and exit companies over the next decade that deliver measurable climate and nature impact, bridging this gap between science and markets. In doing so, we seek not only to reduce emissions and restore ecosystems but to directly lower volatility in operating conditions and the real cost of capital for companies and investors alike.

[6] ECB, 2025
[7] Carbon Tracker, referencing Network for Greening the Financial System (NGFS), 2025
[8] Financial Times, 2025
[9] Greensphere Capital Analysis based on IPCC, Project Drawdown, UNEP, and peer-reviewed studies, Griscom et al. (2017), PNAS

# THE GSI PARTNERSHIP

**GSI is a strategic partnership between Greensphere Capital and 12 of the world's leading bioscience institutes:**

Royal Botanic Gardens, Kew, UK Centre for Ecology and Hydrology (UKCEH), Zoological Society London (ZSL), University of York, Norwich Research Park, Earlham, Quadram, John Innes Centre, The Sainsbury's Laboratory, NHS Norwich, and Biotechnology and Biological Sciences Research Council (BBSRC).

Greensphere acts as a bridge between the scientific community, where research and innovation identify climate and nature solutions, and global companies and governments, who need large-scale deployment to manage climate and nature risks.

**GSI has assembled a collection of the world's leading institutes which have a reputation for scientific excellence, producing decades of seminal climate and nature research—such as:**

- Royal Botanic Gardens, Kew's State of the World's Plants and Fungi report
- UKCEH leading work on insects and natural capital spatial data
- ZSL's Global Living Planet Index
- University of York's research into human interactions with nature via the Leverhulme Centre
- Quadram, Earlham, John Innes Centre, TSL and UEA's leading partnership, the Centre for Microbial Interactions

By combining complementary expertise, the GSI partnership drives interdisciplinary solutions to biodiversity loss and climate change. A core pillar of this work is creating spaces for scientific collaboration while fostering cross-sector partnerships with the public, private and academic sectors. This ideation process aims to tackle complex, multi-generational challenges whilst addressing commercial pain points in real time.

# GSI SCIENCE SUMMIT

Each year, the **GSI Science Summit** convenes a curated circle of global thinkers and doers – scientists, CEOs, policymakers, and investors – to confront a defining challenge selected annually. Under Chatham House Rule, participants tackle real-world constraints with real-time, cross-sector problem-solving.

Key outputs from the 2024 and 2025 editions are provided here.

Drinks and dinner at Keble College Oxford with Science Day attendees.

## Biodiversity Metrics – September 2024

(Biology Department at University of Oxford)

### Visibility around land use

In the UK, Defra has developed a land use framework to balance food production, biodiversity, and non-food land uses. The key to implementing this effectively is visibility around where and how public payments are used in a landscape to provide private sector with opportunities to blend finance. Tools that provide transparency of financial flows and easily engage with land managers, with relevant natural capital datasets, will be instrumental.

### Technology & data

A combined suite of remote sensing, AI to analyse large datasets, DNA barcoding and curated taxonomies are essential to monitor biodiversity at scale; but current approaches risk undermining trust without robust science. Credibility is the key for technology to be adopted at scale.

### Immature regulatory and voluntary restoration markets

Corporates mostly still use carbon metrics, which are now familiar at large public company board level; biodiversity metrics and frameworks (e.g. BNG, ESRS E4, TNFD pilots) remain fragmented, habitat-based, and underdeveloped. There are dual risks of inaction due to inertia but also "blunt" tools destroying goodwill and trust in measurement approaches.

### Robustly measuring biodiversity – the path forward

A multidisciplinary consensus between ecologists on the basket of biodiversity metrics that provide an indicative picture of ecological health is required. GSI institutes actively sought to achieve this through our grant bid, Artemis. GSI continue to look for cross-collaborative opportunities that can provide market ready measurement approaches that combine complementary technologies in a way that is cost effective, technologically credible and adaptable (improving in precision over time).

Breakout groups discuss the identified "problem statements" at Royal Geographic Society, London

## Habitat Restoration – June 2025

(Royal Geographic Society, London)

### Habitat restoration – precision risk management

Restoration is no longer fringe. It is a risk management tool that is increasingly cost-effective. As one participant noted, the return on investing in mangroves, for example, outpaces grey infrastructure in both longevity and loss prevention.

### Integrating technologies for impact

Continued advances in AI, eDNA, drones, geospatial mapping, and field-ready sensors have rendered nature measurable and auditable. This enables outcome-based finance, transparent public-private partnerships, and investable pipelines backed by science-grade metrics.

### The new frontier: scale and replication

Proven models already exist, from South Africa's water bonds to Unilever's regenerative sourcing and Saudi Arabia's large-scale native tree restoration. Scale and replication require getting governance right: from tenure clarity and procurement mandates to standards for data and reporting. Above all, this demands alignment between public and private capital, between regulators and landholders. It requires that the private sector takes science and evidence-led interventions seriously and that all stakeholders act across timelines that extend beyond election cycles or product cycles. Ecosystem restoration must be treated as we treat energy or broadband infrastructure: strategic, long-term, foundational.

# INVESTMENT & IMPACT PRINCIPLES

At GSI, our greatest impact comes from backing companies whose purpose and activity provides the environmental solution.

By providing the capital to scale, we amplify our portfolio companies' ability to tackle climate change and biodiversity loss. Every investment we make is held to guiding principles that ensure impact and financial performance are inseparable.

1. **INTEGRATED IMPACT**
The company's core business must directly address climate change or biodiversity loss.

2. **SCIENCE-FIRST**
All solutions must be backed by credible, verifiable research.

3. **MARKET RETURNS**
Competitive market-rate returns are essential; impact must flow from growth, not at its expense.

**SUSTAINABLE**
Invest to support a healthy environment and economy without depleting natural resources.

**FIT-FOR-PURPOSE**
Metrics must be insightful and relevant to operations.

**EVIDENCE-BASED**
Rigorously review data and methodologies to ensure long-term impact.

**VALUES-DRIVEN**
We invest in visionary, high integrity founders with unrelenting drive to positively reshape the world around them.

**COMMERCIAL**
The most consequential way a portfolio company can achieve impact is through commercial success and scale.

## SDG and Planetary Boundary Alignment

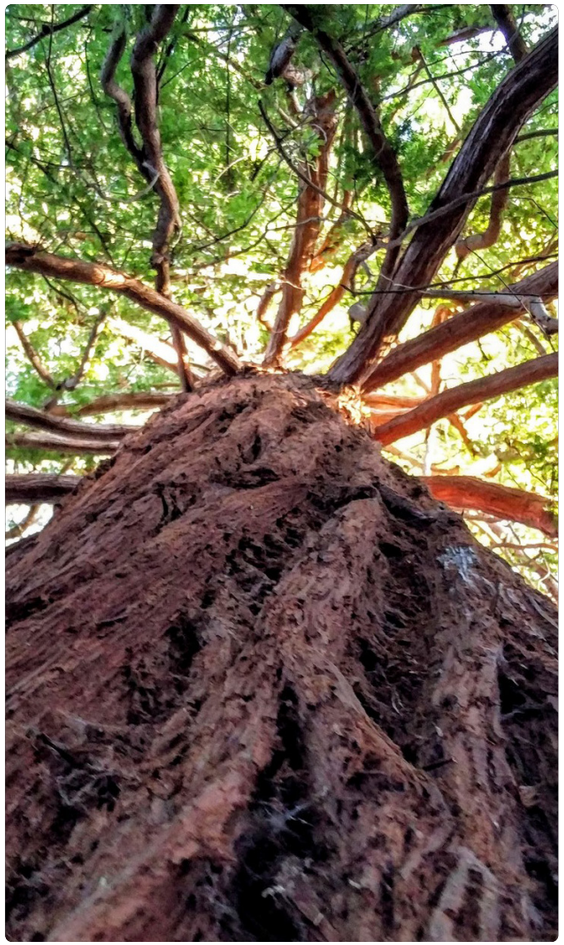
As a shared language and roadmap for global action, we view the UN Sustainable Development Goals (SDGs) as just as relevant as ever. Progress remains off track: only 17% of targets are on course to hit 2030 targets, nearly half show minimal progress, and many have regressed.[10] Despite these shortcomings, the SDGs are endorsed by nearly every nation and remain a vital common ground for cooperation.

Equally important, however, is the Planetary Boundaries framework, which identifies the Earth system thresholds that underpin human and economic stability. Nine boundaries define the safe operating space for humanity; several have already been crossed, driving escalating costs that are rarely priced into markets or budgets.

In practice, there are tensions between short-term SDG gains and long-term planetary stability. For example, intensive agriculture may deliver food security (SDG 2) but at the expense of nitrogen and phosphorus cycles, ultimately undermining resilience.

As investors in climate and nature technologies, we aim to resolve these tensions by backing companies that reduce pressure on at least one transgressed boundary while also advancing social development.

[10] UN, 2024



# SDG[11] ALIGNMENT TO GSI INVESTMENT PILLARS

## TECH TO "GREEN" REAL ASSETS

Scalable technologies that mitigate climate stress and ecosystem loss across agriculture, oceans, forests, land, and urban environments.


## GREEN FINTECH

Science-based tools to measure, monitor, and verify at standards enabling large-scale, functioning green financial markets and supply chains.


## SUSTAINABLE SUPPLY CHAINS

Greening and strengthening resilience across supply chains, from food systems to waste streams, while improving human wellness.


[11] UN Sustainable Development Goals, 2025

IMPACT ALONG THE INVESTMENT PROCESS

## Pre-Investment

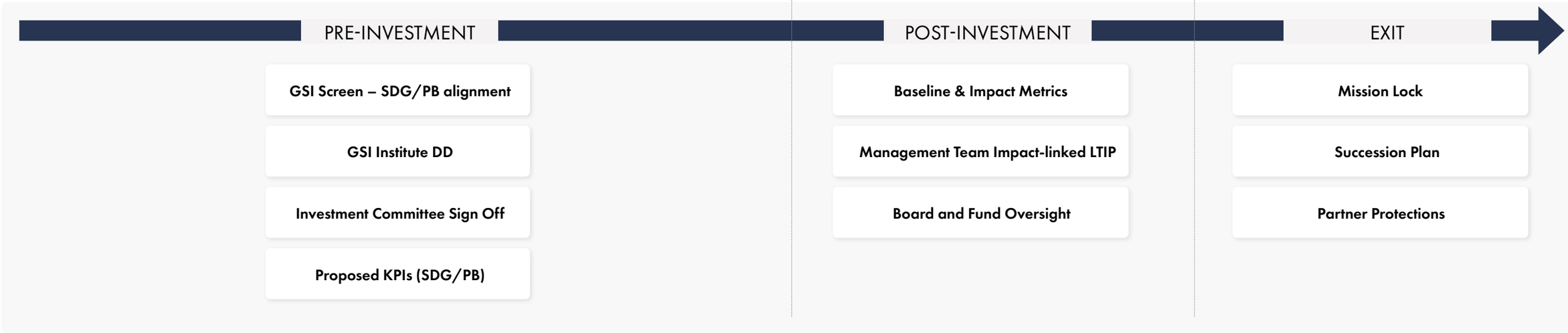
- GSI Screen – Greensphere Risk Matrix (solving for the three Greensphere Risks discussed above), SDG & Planetary Boundary Alignment: All investments are screened for contribution to the Greensphere Matrix, SDGs and impact on planetary boundaries. The investment team presents the potential impact of scaling (e.g., $CO_2$ avoided, hectares restored). Sector- and stage-specific materiality thresholds are applied to ensure outsized positive impact.
- GSI Institute DD: Investments undergo technical due diligence by leading experts from GSI partner institutes, ensuring the underlying science is rigorous, practical, and scalable.
- Investment Committee: The GSI IC have decades of experience working in impact and investment sectors, with clear oversight to ensure the Fund invests in credible and high integrity solutions.
- Proposed KPIs: Before investing, GSI and management agree on a relevant KPI aligned to international frameworks (e.g., IRIS, SDGs, Planetary Boundaries).
- Articles – Mission Lock: Many investments embed their corporate purpose into their Articles of Association.

## Post-Investment

- Baseline & Impact Metrics: Baselines are set in year one; key metrics are reported annually.
- Management Team Impact-linked LTIP: Long-term incentive plans are tied to impact KPIs, aligning management with mission delivery.
- Board & Fund Oversight: boards hold management accountable for sales and impact targets. In some cases, GSI partner institutes join boards as "mission guardians." The Fund also reports annually to LPs for added transparency.

## Exit

- Mission lock: where the mission is core to the business value, the business will be acquired with strong protections to ensure the IP is commercialised in an ethical and responsible way, maintaining the foundational purpose.
- Succession Plan: some of our investments will maintain key staff where relevant to ensure the business continues to deliver positive impact.
- Partner protections: for some of our deals, GSI partner institutes will have relevant protections to ensure their interests are maintained and they are consulted prior to an exit event.



# ESG KPIS/METRICS – FUND LEVEL

We recognise that while rigorous reporting is essential, early-stage founders must prioritise what drives their business — accelerating topline revenue growth. For mission-driven businesses, the single most powerful lever for impact is scale: getting their products and services into the hands of more customers, faster.

We've established clear **materiality thresholds**, drawn from recognised industry benchmarks, to ensure that as our companies grow, their reporting obligations evolve in line with their stage of maturity and capacity. With the GSI Fund still at its inception, and to avoid skewing impact metrics with incomplete data, we intend to carry out baselining for our two portfolio companies to reflect first 12 months of revenue, with subsequent follow up reporting thereafter. We will use fund-wide measurement approaches as set out below to ensure we are able to aggregate data at the Fund level, whilst also reporting at the individual portfolio company level.

The following table outlines the materiality thresholds and the reporting metrics, as set out in the LPA (see the full breakdown of metrics per the LPA below the table) for our portfolio companies, to ensure they are commensurate with the stage of the business. We expect companies to meet **two out of three criteria** before advancing to the next reporting stage.

| Stage | Seed | Series A | Series B+ |
|---|---|---|---|
| **Revenue** | >£1m | >£8m | >£40m |
| **Capital raised** | >£5m | >£20m | >£200m |
| **Employees (full-time)** | >30 | >100 | >500 |

| Category | Metrics (per LPA) | Seed | Series A | Series B+ |
|---|---|---|---|---|
| **Portfolio Company-Specific KPIs** (defined below | N/A | Disclose methodology | Data measured | Data validated |
| **Headline GHG Emissions** (Scope 1, 2 and 3) | **Environmental** – a. | Scope 1 and 2 only - estimate | Scope 1 and 2 - GHG Protocol | Scope 1, 2 and 3 using GHG Protocol |
| **Other Environmental Metrics** | **Environmental** – d., e., f., g. | Reported where applicable | | Industry methodologies and auditable data |
| **Nature-Related Metrics** | **Environmental** – h., i. | Reported where applicable | Industry methodologies and auditable data | |
| **Job Creation Metrics** | **Job Creation** – a. – h. | Report based on internal Portfolio Company systems where applicable | Auditable data | Conduct surveys and report auditable data |
| **Climate and Nature Risk Reporting Requirements** | **Environmental** – b. | Qualitative assessment in line with TCFD and TNFD. | Quantitative assessment in line with TCFD and TNFD | |
| **Carbon Emission Abatement Plan** | **Environmental** – c. | Immaterial | Publicly disclosed | SBTi-aligned |
| **Job Creation Metrics** | **Job Creation** – a. – h. | Report based on internal Portfolio Company systems where applicable | Auditable data | Conduct surveys and report auditable data |
| **Target Setting for Portfolios** | N/A | No Targets | • 1x Target set for ESG metrics<br>• Board approved<br>• Publicly disclosed | • 3x Targets set for ESG Metrics<br>• Board approved<br>• Publicly disclosed |

Adapted from industry framework in Venture ESG's April 2025 Whitepaper "The E of ESG", p. 8

We note that companies may not perfectly map on to the categories set out in this table – in collaboration with the company we will ensure that metrics are provided that are appropriate to the stage and resource of the company.

METRICS AS AGREED IN THE LIMITED PARTNERSHIP AGREEMENT (LPA)

## TECH TO "GREEN" REAL ASSETS

### Environmental (called "ESG" in LPA) Metrics

**Greenhouse gas emissions**
(scope 1, 2 and, where available, 3) for the construction and operation of the assets (tCO2e)
a.

**Description of climate risk as defined by the TCFD**
b.

**Summary of how the Carbon Emission Abatement Methodology has been implemented**
c.

**Waste metrics**
including waste diverted from landfill in tonnes;
d.

**Plastic footprint**
in relevant units
e.

**Air quality metrics**
GHG and Non-GHG air pollutants
f.

**BIODIVERSITY METRICS: our intention is to address each of the listed biodiversity metrics individually. As our portfolio companies mature, we intend to look also at:**

- Quantifying ecosystem losses and improvements
- Specific ecosystem services restored
- Total number of species baselined and changes noted
- Number of critically endangered species preserved
- Diversity of relevant (excluding invasive species)
- Invasive species mitigated

h.

**Water and water quality metrics**
including Volume of Water withdrawn / discharged
(TNFD Agricultural Products C2.1); Pollutants (Core Metric) (TNFD Agricultural Products C2.1); Nutrient Neutrality [# Nutrient Credits](Defra); Pollutants Released to Soil Split by Type (tonnes): (TNFD Agricultural Products C2.0)
g.

**Land restoration metrics by including extent of land created, rehabilitated and restored (km2) (TNFD) etc.)**
i.

### Job Metrics

**Number of direct jobs created**
a.

**Number of indirect jobs created**
b.

**Number of jobs supported**
c.

**Breakdown by job type - average yearly salary**
d.

**Breakdown by training and apprenticeships created**
e.

**Breakdown between permanent and temporary jobs**
f.

**Breakdown by UK geographic region**
g.

**Breakdown of diversity (gender and ethnicity)**
h.

PORTFOLIO COMPANY SPECIFIC KPIS

SourceCertain

- £ value of supply chain under surveillance (broken out by commodity/material) – and implied supply chain "managed sustainably by acreage"
- Volume (tons) of supply chain under surveillance (broken out by commodity/material)
- Estimated £ of additional supply chain restored
- In due course we would look at other metrics – like £ of supply chain finance delivered, social inclusion, acres of marine protected area or forests "protected" etc.

Kew Reach

- Land (hectares) under direct advisement to deliver nature gain and enhanced ecosystem services (in due course, by customer segment).
- Value (£) of eco-system services delivered from Nature-based Solutions approach applied to land under direct advisement

# IMPACT INTERSECTIONALITY

**The fund's core mission is to scale science into commercially impactful solutions that address two of humanity's greatest challenges: the twin crises of biodiversity loss and climate change.**

At Greenspheare, we also recognise that the positive impact of our portfolio companies can, and often does, extend well beyond these two domains—touching areas such as financial inclusion, human health, education, and gender equity.

For example:

**Kew Reach:** By delivering nature restoration projects alongside training (which is a major revenue stream), Kew Reach equips local communities with valuable skills in land management and ecological stewardship, supporting both livelihoods and education.

**Source Certain:** By verifying the origin of commodities at the farm level and demonstrating sustainable sourcing, Source Certain empowers smallholder farmers with traceable data to unlock access to credit and financial services previously unavailable.

The breadth and interconnectedness of these impacts are often difficult to capture in narrow KPIs. A full intersectional analysis report is available in our data room to investors. However, the time burden on the fund and portfolio companies to provide detailed intersectional analysis from every angle is too far reaching. As such, we place strong emphasis on **impact case studies**, which allow us to present a fuller picture of how our companies' activities generate different forms of impact.

# THE SAUDI GREENING PLAN (SGP)

**The SGP is the world's largest restoration effort:** aiming to restore 40 million hectares and plant 10 billion trees (or equivalents) by 2100, prioritizing sustainability over speed or PR impact. With over 9+ million plants restored through grazing removal and protection, the goal is to outperform manually planted areas in resilience and success rate.

**Kew Reach (KR)** is uniquely positioned in the market through its access to large-scale habitat restoration capability, powered by the world-leading science of the Royal Botanic Gardens, Kew.

In 2025, KR was appointed principal restoration advisor to the SGP, winning against globally recognised organisations.

KR's consultancy proposal for the SGP spans four core areas of capacity building, centre of excellence design, standards and guidelines and seed production.

Looking ahead, KR will **explore commercial opportunities** for landscape and national-scale restoration projects, deploying the proprietary **"Kew Method"** - a blueprint for nature-positive impact underpinned by Kew Science.

SourceCertain

# HOLDING TIMBER SUPPLY CHAINS ACCOUNTABLE THROUGH SCIENCE

**Illegal deforestation remains one of the most pressing global environmental challenges.** Despite international regulations, certification schemes, and corporate pledges, illegally sourced timber continues to enter legitimate supply chains, undermining climate commitments and eroding consumer trust.

**Source Certain has developed a breakthrough:** forensic science that can identify, with certainty, where a timber product truly originated. Unlike paperwork or certification labels (which can be forged, manipulated, or gamed) Source Certain analyses the chemistry within the material itself. Every tree, like every region, carries a unique "fingerprint." By reading that fingerprint, the company provides verifiable, incorruptible proof of origin.

**Why it matters:** The scale of the challenge is immense. Russia remains one of the world's largest timber producers, with the industry contributing c.30bn EUR to its economy. Sanctions and tariffs have not halted production; instead, Russian timber has been channelled into illicit supply chains and relabelled for export. Evidence shows red flags appearing across global markets, including Europe and the UK, with engineered wood entering construction supply chains. Investigations have even linked illegally sourced Russian timber to UK housebuilding.

Even diligent corporates struggle to identify bad practice: sophisticated methods are used to disguise timber origins, meaning well-run firms can unwittingly pass on illegal wood. This undermines global initiatives such as the Forest Stewardship Council (FSC), which rely on chain-of-custody documentation that can be compromised.

**A science-based solution**

Source Certain offers a different approach:

- **Forensic certainty** – Using isotopic ratio and trace element analysis, Source Certain determines timber's true geographic origin at granular precision.
- **Speed and scalability** – Tests are faster and cheaper than traditional isotope methods, making large-scale monitoring viable.
- **Accountability** – By proving provenance, the technology empowers regulators, corporates, and NGOs to take enforcement action.

This approach complements existing frameworks like the UK Timber Regulation (UKTR). The recent Defra report (2022–2025) illustrates why such capability matters: even a global retailer like IKEA faced non-compliance and voluntarily seized nearly 27,000 furniture items, later donated to charity. Source Certain's methods could help prevent such breaches before products ever reach UK markets.

**Impact**

By deploying science that is incorruptible and independent of paperwork, Source Certain strengthens the credibility of sustainability claims and protects both ecosystems and consumers. It transforms how businesses are held accountable, ensuring that illegal deforestation does not hide in global trade.

For regulators, the benefit is clear: more effective enforcement, reduced reliance on self-reporting, and the ability to demonstrate to the public that illegal timber has no place in UK homes, schools, or infrastructure. For corporates, it provides resilience and trust, and confidence to communicate sustainability with clarity and confidence.

# REGULATORY REPORTING

The GSI Fund will report in line with IFRS S2, drawing on frameworks including the Global Reporting Initiative (GRI), Taskforce for Climate-related Financial Disclosures (TCFD), Taskforce for Nature-related Financial Disclosures (TNFD) and the ESG Data Convergence Initiative.

Greensphere's senior management helped develop climate and nature financial risk frameworks and understand them deeply. While these frameworks are often used to measure risks for companies that have traditionally not dealt with the financial impacts of systemic climate and nature challenges, the GSI Fund invests only in businesses that address them directly – turning what is typically seen as risk management into a revenue growth opportunity.

The GP Board will review performance across Environmental, Social and Nature metrics at least twice a year.

Please see Appendix 1, for our 2025 qualitative assessment of the risks and opportunities in line with the TCFD and TNFD frameworks for the GSI Fund, Kew Reach and Source Certain.

# REPORTING TO OUR STAKEHOLDERS – WHAT TO EXPECT

The GSI Fund will produce an annual Impact Report covering the full portfolio, incorporating the metrics and case study approach set out in this first publication. At this early stage, the report serves to establish the foundation of our impact reporting and sets out the framework through which we will demonstrate the value of backing UK-based, scientifically robust, world-leading nature-positive technologies.

Once investee companies have been operating for 12 months post-investment, we will begin gathering and reporting the specified metrics. Our intention is to publish these reports in the public domain, where appropriate, to highlight the positive impact our portfolio companies generate. This will provide transparency and demonstrate how our companies deliver measurable outcomes for nature and climate.

This inaugural report sets out our intentions. Over time, we will continue to refine our approach, aiming to generate increasingly valuable insights and contribute to the broader body of thought leadership in nature-positive investing.

The core objectives and tenets of the GSI Fund inspires and drives the Greensphere Capital team. It represents a unique opportunity to partner with leading scientists and scale nature-positive businesses that address global, multigenerational challenges. We are grateful to our partners, investors, and stakeholders for supporting our mission to translate world-class science into businesses and governments that deliver meaningful, long-lasting environmental and social impact.

APPENDIX 1

# CLIMATE AND NATURE RISK REPORTING – FY2025

| | gaia Sciences Innovation | Kew Reach | SourceCertain |
|---|---|---|---|
| **Governance** | | | |
| **Frequency of assessment** | Annual | Annual | Annual |
| **Accountability** | Managing Partner | CEO | CEO |
| **Scope** | Climate and nature-related risk is the central guiding framework to the Fund's investment strategy and influences all portfolio decisions and activities. It is discussed regularly at management and board level. | Climate and nature-related risk is central to the customer delivery at Kew Reach and is therefore addressed both formally and informally on a regular basis. | Climate and nature risks are indirectly related to Source Certain business, but as a company that seeks to drive positive change in the world, these risks inform strategic decision-making by the CEO and the board. |
| **Risk Management** | | | |
| **Physical Risks** | The GSI Fund team are based in London (Knightsbridge). With climate change causing a 73% increase in flood risk, there may be an increased risk of flooding which could disrupt our ability to work. Our team is capable of completing our daily activities remotely which reduces the risk of material disruption.<br>Physical risks from extreme weather and ecosystem collapse may still challenge interventions supported by our investments, if damage occurs before mitigation is in place. | **Operational Risk:** Extreme weather events could disrupt service delivery in climate-stressed geographies. This could damage restoration efforts if it occurs before mitigation is sufficiently resilient and established. | **Operational Risk:** Extreme weather events could disrupt sample collection in climate-stressed geographies. There is a risk of increased climate stress (e.g. wildfires) in Perth, Western Australia, the location of the lab services partner for Source Certain Limited (UK). |
| **Transition Risks** | Transition risks (e.g. regulation, consumer shifts) are more likely to create opportunities over the long-term, strengthening the outlook for Fund-backed technologies and business models.<br>Concurrently, GSI is cognisant of the financial impact caused by significant disruption resulting from climate and nature shocks (as well as socioeconomic reactions to shocks), and we will look to invest in businesses that are resilient to these shocks. | **Client Demand Shifts:** As standards for ecological restoration rise, clients may require more robust, high integrity science-based guidance, but smaller or budget-limited stakeholders could find it harder to afford detailed Kew Reach services.<br>**Competition from Alternative Solutions:** The emergence of competing green-tech approaches, such as simplified tree-planting programs without ecological integration, or digital/"greenwashing" certifications—could undermine market differentiation for Kew REACH's holistic, science-led methodology. | **Client Risk:** Demand is linked to regulatory and market enforcement; any slowdown in regulatory ambition could impact uptake.<br>**Reputational Risk:** As our service uncovers malpractice in global supply chains, maintaining impartiality and scientific credibility is paramount. |

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| **Risk Management** | | | |
| **Opportunities** | As outlined in this paper, GSI view the opportunity to reduce climate and nature risks for corporates and governments to be significant – driving cost savings for companies and delivering long-term stability and core value to the customers of our portfolio companies. | Loss of nature through desertification was a primary driver for KR's first client, the Saudi Government to contract KR as part of the Saudi National Greening Program.<br>**Increasing Standards for Nature-Based Solutions (NBS):** As governments ramp up regulation and expectations around restoration and biodiversity targets, there may be new compliance requirements which could provide tailwinds for Kew Reach's high integrity service<br>The market size (and therefore opportunity) related to increases interest in nature / biodiversity targets and restoration further presents an opportunity for KR | Source Certain services help corporates, regulators, and governments reduce exposure to deforestation, illegal logging, overfishing, and associated climate and nature risks. The strategy reflects both adaptation to global climate/nature challenges and opportunity capture: as supply chain due diligence regulations tighten in the UK, EU, and globally, demand for low-cost, scalable verification is set to grow rapidly. |
| **Strategy** | | | |
| **Management** | The Fund's strategy of investing in climate- and nature-positive companies lowers its exposure to transition risks compared to conventional funds. As climate and biodiversity impacts worsen, demand for solutions will grow, creating business opportunities for portfolio companies. | Emphasise ecosystem-based restoration (tree–fungi–pollinator–soil nexus) as the "gold standard," not just tree planting. This protects against reputational risk and ensures compliance with tightening biodiversity/net-gain rules.<br><br>Balance reliance on public funding with private sector partnerships (real estate developers, infrastructure firms, financial institutions needing credible biodiversity strategies). | Position forensic origin verification as the independent scientific baseline — superior to blockchain or paperwork, ensuring regulatory resilience and credibility.<br><br>Work with independent auditors/academic partners to validate methods and outputs, reducing reputational risk and increasing trust with corporates and governments. |

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