



Balanced Finance

Capturing an Opportunity

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Impact Investment Opportunities to Mitigate Climate Change and Regrow a Better World

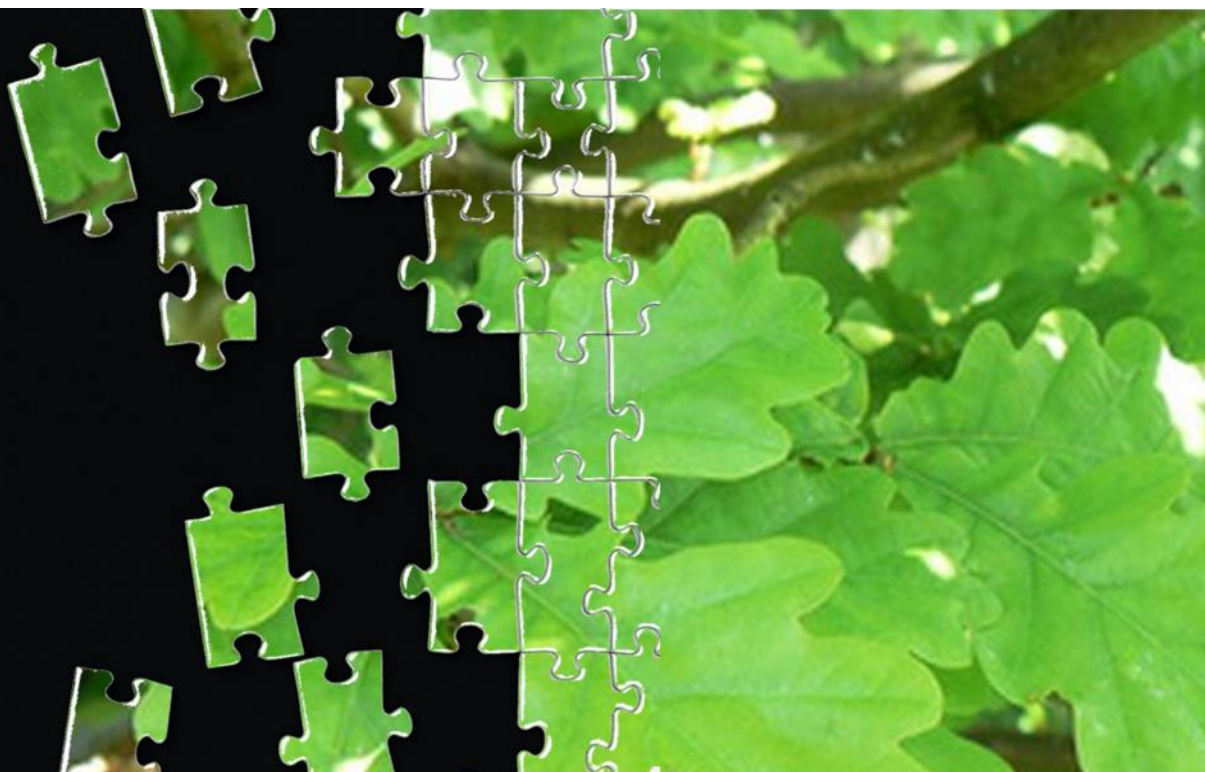
To mitigate climate change, the world needs to spend \$8.1 trillion on reforestation efforts through 2050¹, regrowing at least six hundred billion trees. The current pace is around 1% of what is needed.

- **Land is not a problem.** More than 125 countries have pledged over 1 billion hectares. Peer reviewed study shows space to plant 1.2 trillion trees without touching agriculture or urban areas.
- **Capital is available and growing.** \$40 billion of pent-up demand remains unmet.
- **Will is rising.** New pledges by governments, commitments of private companies to offset carbon like Amazon, Google, Microsoft, etc., new mechanisms to support progress like carbon regimes, REDD+, etc. Money is being committed far faster than it can be spent.

This is an opportunity of unprecedented scale. The future is green. However, project uncertainty is curbing investor enthusiasm. Projects remain small as only limited resources are released for any given effort. There is also investment uncertainty as projects are donor-friendly but not structured for serious investors. Spades.Life PBC, a public benefit corporation ("Spades") responds by capturing the opportunity with its global network of industry leaders:

- **Better projects** are created by a combination of Terrazone™ that finds a fit between people and trees, and Ecofit™ that finds a fit between tree species and changing ecosystems. These increase the likelihood of survival and sustainability for the long run.
- **Better investment opportunity** is created through balanced finance, aligning environmental investments with the expectations of sophisticated impact investors.

¹ 27 May 2021, State of Finance for Nature, Authors: UNEP, WEF, ELD, Vivid Economics



How Money Grows on Trees

- | | |
|--------------------------------------|--|
| 1. Cash flow down-payment | <ul style="list-style-type: none">• About 10% provided to get work started.• Future payments made based on trees planted. |
| 2. Trees planted with finance | <ul style="list-style-type: none">• Planting costs about \$1,000 to \$4,000 USD per hectare.• Sustainable timber or agroforestry increase costs and returns.• Up to 6 years to complete planting with results each year. |
| 3. Early cash? | <ul style="list-style-type: none">• Immediately after planting, future carbon rights may be sold at a discounted rate.• Some loans may receive payments. |
| 4. Trees grow | <ul style="list-style-type: none">• Trees mature and multiply 15-40 years, creating carbon credits.• Fruits begin production around year 4.• Timber produces value in 5 to 10 years with thinning.• Coppiced trees harvested every 5 years for timber or fuel. |
| 5. Averages per tree | <ul style="list-style-type: none">• Costs \$1.00 to \$3.50 to regrow most trees. Some trees cost much less.• In 5 to 40 years, trees grow to 1 ton.• 1 ton of carbon is worth \$11.00 to \$20.00+.• 1,000 trees planted per hectare. Regeneration doubles density and returns after 10 years. |
| 6. Value grows | <ul style="list-style-type: none">• Accrued value estimated at \$25,000 to \$50,000 per hectare.• Carbon value is expected to continue rising.• Timber continues accruing value indefinitely with sustainable harvests for cash flow.• Agroforestry produces value continuously starting around year 4. |
| 7. Payouts | <ul style="list-style-type: none">• Investors guide asset liquidation strategies and timing.• Returns shared with local stakeholders. |

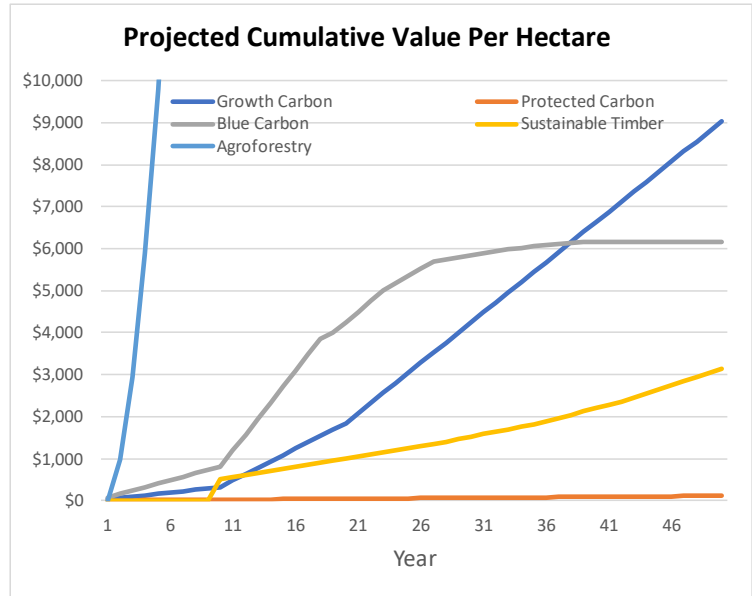




Value Timeline

Understanding how value accrues in a forest is fundamental to planning an investment. Because Spades thinks beyond carbon (balanced finance) there are many assets created. These assets have returns at varying times.

The graph shows the pace of value growth for various land uses of trees. These are subject to local conditions (e.g., dry vs. wet). In many cases, future assets can be sold quickly, subject to discounting and market conditions.



— Growth Carbon Refers to the carbon regrown from scratch as dense habitat forests. It accelerates its asset value as it ages. The carbon asset tends to be sold in the first year after planting, heavily discounting its future value but recouping cost and avoiding risk.

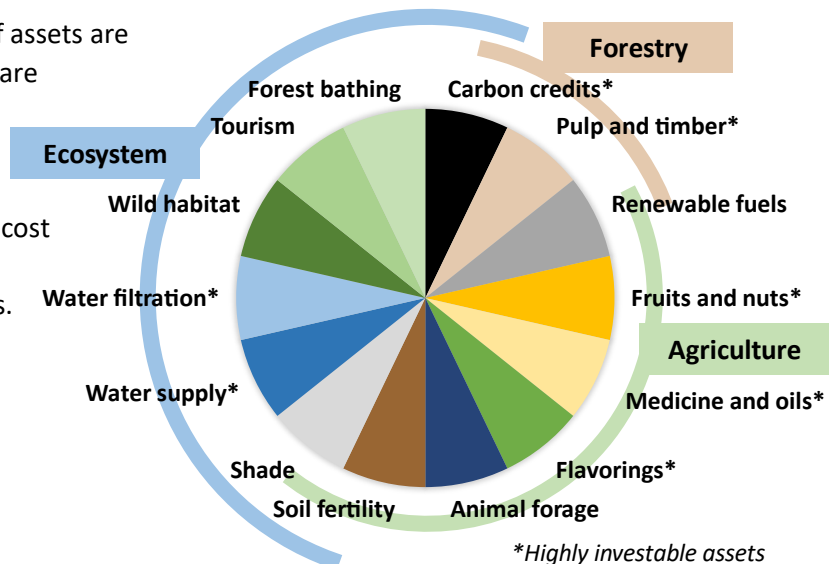
— Protected Carbon Refers to existing forests whose carbon asset can be sold. The value per hectare is low but the cost is also low, often with large tracts of land involved.

— Blue Carbon Refers to mangrove forests planted in sea water. They mature quickly and can even outproduce the most fertile jungles in terms of carbon. Cost per hectare is low. Closely linked ecologically to nearby reefs and fisheries. Protect coastlines from storm surge and wave damage.

— Sustainable Timber Refers to trees grown for timber value. Tropical trees grow much more quickly and if are a coppicing species can be harvested around every five years. These factors greatly increase the potential values.

— Agroforestry Refers to trees grown for fruits, nuts, or other products. Orange trees, for example, mature by year seven, and quickly create significant returns. The cost per hectare is relatively high and the trees require significant husbandry.

More than a dozen categories of assets are created by trees, most of which are investable or where the cost of planting can be recouped. For example, trees create water, a valuable asset, and the cost of planting a forest might be recovered in nearby water rights.





The importance of these differing assets includes the following:

1. They increase the total returns and the returns per tree, making sure that all investors, including landowners, win.
2. They diversify the risks within a single project, creating multiple investments subject to varying conditions.
3. They produce different cash flow streams allowing investors to recoup costs more quickly and not be pressured to sell assets early.
4. As an integrated whole, any given asset is more likely to be sustainable because the local climate is more buffered against extremes and because deforestation pressures are mitigated.

This demonstrates the need to monitor the forestry assets over the period of decades, rather than for a few years as is generally the case.

Spades' balanced finance reaches far beyond diversifying the assets created by trees. It includes making trees more investable. The world depends on it. We all depend on it.





Balanced Finance Delivers on the 3Rs

Every project is different and is influenced by local conditions and investor preferences. Balanced finance meets investor expectations via several features commonly employed:

1. **Capitalization structure:** Spades is allied with nonprofits to receive both donor and investor funds that are placed in a blended capital entity. Assets are held in a Special Purpose Vehicle (“SPV”) that reports to all stakeholders. Using an internationally tested model, it unlocks diverse funding sources with a performance-based engagement.

Impact investors share a concern for the 3Rs: Results, Risks, and Reputations:

2. **Results that inspire:** Starts with carbon offsets but offers a diversified investment with multiple cash flow streams and exit strategies having social, economic, and environmental impact.
3. **Risk mitigation:** Includes insurance and commodity agreements to mitigate government interference, carbon pricing, and environmental extremes.
4. **Reputations enhanced:** Applies internationally recognized standards for carbon, reforestation, and community development based upon commonly shared values and the UN Sustainable Development Goals (“SDGs”).

Long-term transparency that verifies performance, tracks results, and reports to all stakeholders underpins the suite of services:

5. **Monitoring:** World class SaaS and TaaS platform verifies performance against standards and agreed upon contracts, then monitors the growth of those areas for up to 50 years.

Spades’ balanced finance includes these five components, going beyond ordinary carbon project development. Spades is an integrator, bringing together solutions that attract implementers, site stakeholders, and funding. This allows projects to take on enough scale that they can visibly mitigate climate change locally while meaningfully drawing-down carbon globally.





Capitalization Structure

This structure supports a spectrum of investors including government, development finance institutions, philanthropic organizations, corporations, high-net worth individuals, private equity, venture capital, bonds, etc.

C-Corp:

Spades is a USA-based C-corporation that dedicates a portion of its profits to its mission. It is a mix of nonprofit and for-profit. The mission is benefitted by engaging investors.

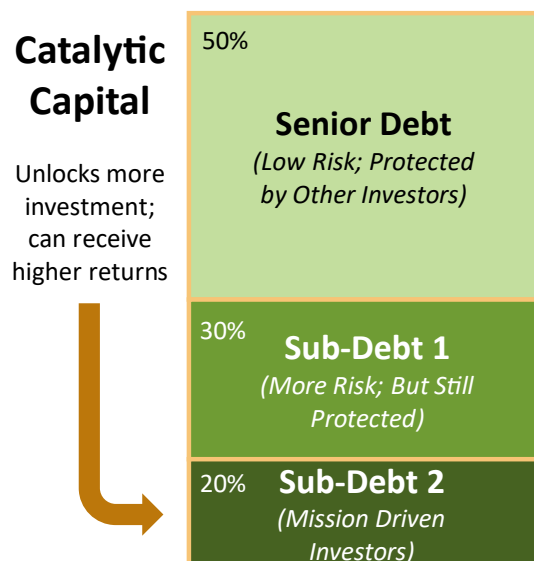
Nonprofits:

For donors requiring a public non-profit for donations, Spades is affiliated with Cheetah Development Inc., which is on its board. Spades also engages with nonprofits across the world.

Blended capital:

Some Investors and donors have been shifting towards impact-oriented opportunities. Donors shift for more accountability and participation. Investors seek more impact. Blended capital is a hybrid where they operate together, perhaps from the same funder.

In such a model, donors do not ever provide profits to investors. Instead, increased impact and returns can be created for both donors and investors. For example, catalytic first loss capital can draw more investors into a project, expanding the impact of donor funds. Alternatively, donors can support parts of a project that do not have financial returns. Foundations may seek to invest either out of their endowment corpus or their annual payouts, with investments that may be eligible for returns.



Special Purpose Vehicle:

The assets will be placed in a Special Purpose Vehicle (“SPV”) to be registered in a location of the funder’s preference. The board will represent the funders, landowners, Spades, and other stakeholders. All contracts will be signed with the SPV.

IFFIm Approach:

The fund will be modeled after the pioneering International Financing Facility for Immunization (“IFFIm”):

- Funding for outcomes not expenses (payments for visible tree inventory).
- Proven across many impact uses. Trusted model – initially secured \$4B.*
- Solves grower problems by lack of multiyear funding and cash flow.
- Governments can fund projects without tax revenue.
- Publicly raised bonds can engage in impact projects.



Spades seeks to solve problems that plague greening to unlock better deals with scale.



Results that Inspire – Recipe for a Forest

The foundation of a project is carbon offsets. Carbon investors may assume social impact outcomes may have costs without returns. The opposite is true. The recipe for a sustainable forest has three parts:

Terrazone:

Designs for sustainability by integrating local needs with tree solutions, including habitats, timber, fuel, and agroforestry.

- Increases tree density to maximize climate impact and financial returns.
- Raises value/tree for better returns.
- Creates faster cash flows.
- Connects to and protects existing habitats, adding saleable carbon.
- Links to regenerative agriculture, making the project desired locally and provides food security.
- Meets local land-use needs to prevent continued deforestation.
- Social outcomes make carbon more attractive to investors.



Ecofit:

Proprietary, lab-tested biotechnology, finds the optimal ecosystem match for trees:

- Helps increase growth rates for better results, including timber, fruits, carbon, water rights, etc.
- Reduces the risk of outright failure, increasing averages.
- Thriving trees more likely to naturally regenerate, multiplying the total trees for the same price.

Localization:

How to keep pastoral tribe animals from grazing off the trees?

How to train smallholder farmers to recover tree stumps at scale?

How to hire hundreds or thousands of people in remote locations?

How to work in frontier economies but not participate in corruption?

How closely to plant mangroves so they do not wash away?

How to reestablish forests in arid areas?

How to recover former strip mines?

Who actually holds local authority?

Spades' partners are already on the ground on all treed continents in dozens of countries, accounting for most of the trees being regrown on earth. They have the practical knowledge and experience to successfully break ground and grow big projects. They know how get it done.

Spades integrates partner skills to meet a broader set of needs, including of funders. These projects inspire funding *and* achieve their objectives.

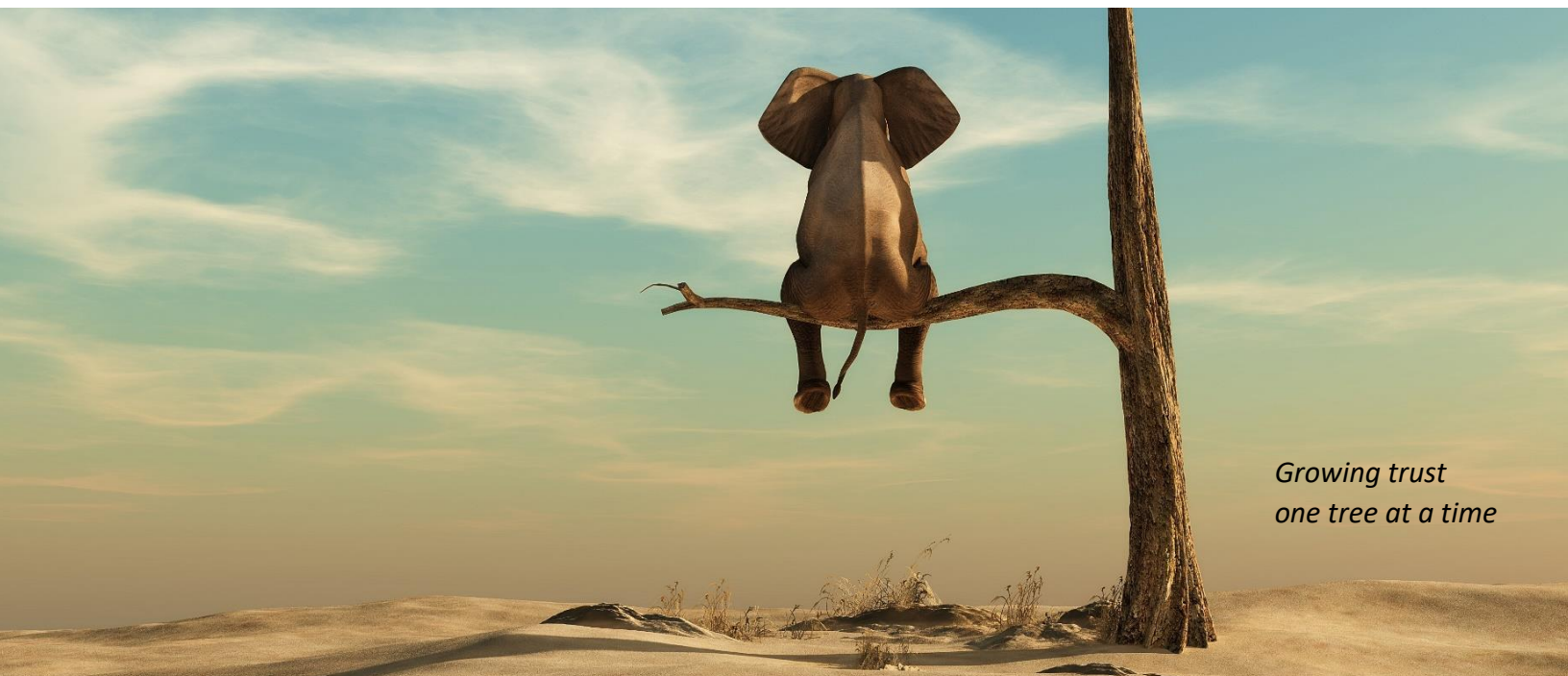


Risk Mitigation

Every aspect of the project is designed to mitigate risk. We achieve sustainable forests via different trees regrown differently. Our model includes:

- Selecting trees suited to the changing local ecosystem
- Integrating competition for local land-use in a way that finds complementary synergies
- The strongest partnerships in the world
- Direct connection to local governments and communities
- Standards
- Long-term monitoring

...and more.



*Growing trust
one tree at a time*

What is also missing in many other environmental projects are financial risk solutions.

When available, Spades' projects may apply solutions like:

1. Senior secured debt
2. Contract frustration insurance to cover government interference
3. Commodity trading agreements to guarantee carbon floor pricing and limit losses for environmental extremes

These solutions have cost but can stabilize investor returns. They will be applied based on investor preferences on a project-by-project basis.

Things can happen. Things will happen. Spades will be transparent.

You will not be left out on a weak limb.



Reputations Enhanced

Serious investors often have concerns about how projects may either enhance or damage their reputations. This is a ‘soft’ risk that is often not directly addressed. The close integration of reforestation with disadvantaged communities and the complexity of environmental issues can raise concerns. To seek mutual agreement, Spades projects work closely with local and environmental communities. As a result, investor reputations can be enhanced rather than put at risk.

Values:

The base of reputation protection is clearly understood values – the expectations for behavior. To garner agreement and be defensible, Spades’ sustainability values are based on commonly accepted principles.



United Nation’s Sustainable Development Goals:

Spades’ solutions address several urgent global issues. We generate benefits in reforestation, regenerative agriculture, integrated rural land use development, diversified ecosystems, better water resources, carbon sequestration, air quality, and investment opportunities.

Our leaders, advisors, and staff are empowered to live by our values and align themselves with sustainable development goals.

Every Spades’ project supports multiple SDGs directly and indirectly.





Standards:

Standards enable values to live. They are central to successful projects:

- Set expectations for work and are thus auditable.
- Are adjusted to resolve problems and avoid them in the future.
- Create a common understanding so that proposals are comparable.
- Set understandings to allow field changes to occur and work to be flexible.

Spades recommends applying the following standards to greening projects:

NEPCON/Preferred by Nature, Forest Ecosystem Restoration – Field Verification Standard.

Foresters have standards for sustainable timber harvests but few for greening. This standard provides helpful guidelines while remaining extremely flexible

GAAP or IFRS accounting standards.

Regardless of the mix of donor, government, or investor funding sources, every project requires a financial transparency layer. Given the long-term nature of the assets and the many stakeholders, this area requires much transparency.

Carbon credits and offset standards were formalized under the 1997 Kyoto Protocol. To generate “mandatory” offsets, the Protocol established project-based mechanisms which are individually regulated by adopting nations. In sum, standards for mandatory emissions are set by the nation where traded and also allows for projects to be completed outside of those countries, especially in developing nations. These nations generally adopt outside standards and verify compliance via approved auditors, of which there are around thirty active agencies “Designated Operating Entities (“DEOs”).

“Voluntary” markets function outside of compliance markets and enable companies and individuals to purchase carbon offsets on a voluntary basis with no intended application for compliance purposes, though they meet independent standards and have auditing agencies. However, California, Mexico, and some countries in South America have recognized off-sets issued under some voluntary certification programs. Buyers do this to demonstrate their commitment to climate mitigation. Voluntary offset credits cannot be used in compliance markets, so they tend to be cheaper.





In short, carbon standards have a variety of markets and standards through which most projects might be sold. The objective is to meet one or more standards that allow for the greatest flexibility to serve the objectives of the project. The verification of meeting these standards is a third -party audit function and it is typically completed in advance of project implementation, at completion, and then at the time of sale of the offsets.

Other standards applicable to the project would be applied as pertinent. These may include for REDD+, biodiversity, carbon offset add-ons, etc.

A code of conduct supplied by Spades or otherwise selected will be applied to protect the treatment of staff and local people.

Spades' and the project investors' written guidance and project agreements will be included for compliance transparency. In this way, special circumstances can be addressed to meet the needs of stakeholders. It is expected that work would proceed in a way that complies with generally accepted principles of Farmer-Managed Natural Regeneration (FMNR) type of coppicing, regenerative agriculture, Close-to-Nature Forestry approaches, and the UN's Sustainable Development Goals ("SDGs").

Standards are promises that can be counted and measured.

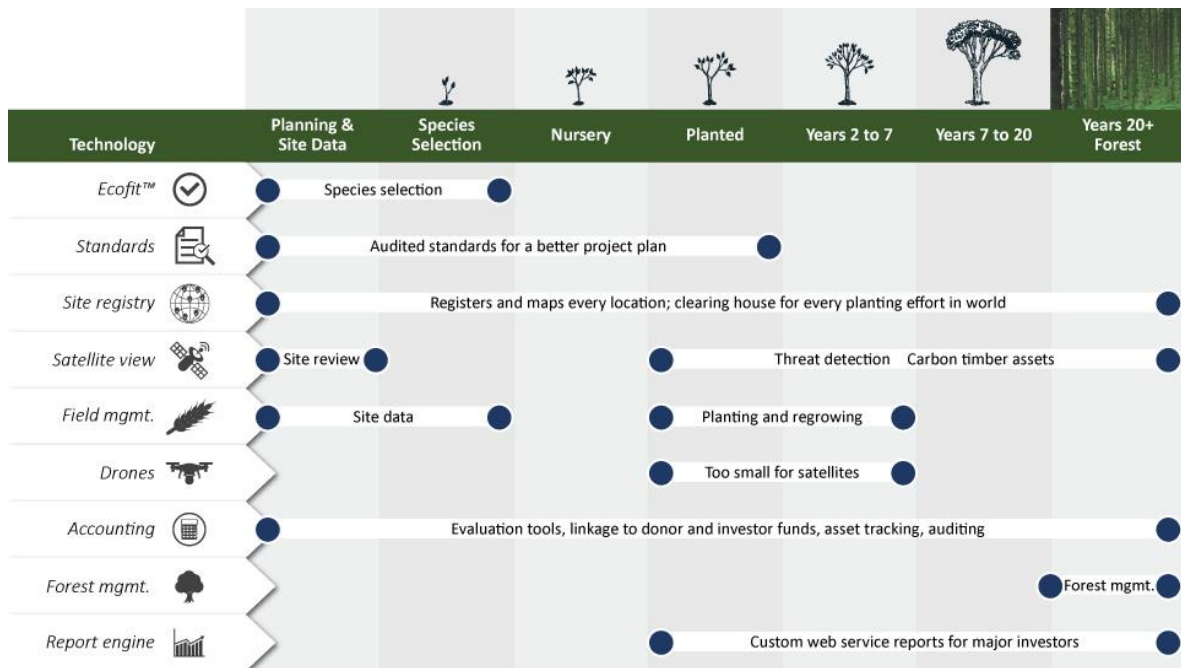




Monitoring

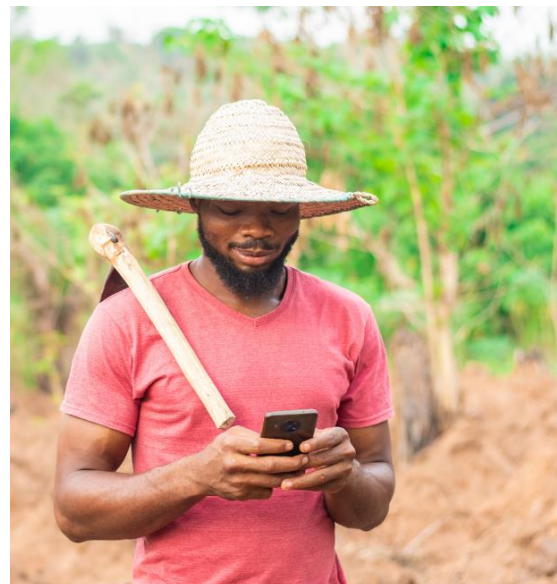
There is no single solution to monitor a reforestation effort. Needed is a system that spans across time from planning, to planting, and through tree maturation. It must include a variety of solutions including field service management, forest status, customer services, and financial asset management. It must span a breadth of technologies including satellite imagery, mapping, drone management, remote data collection, etc.

A purpose-built solution built from scratch would lag existing tech in each area – not to mention extreme cost. Spades integrates the best-in-breed systems from every needed area. World class SaaS and TaaS platforms verify performance against standards and agreed upon contracts, then monitors the growth of those areas for up to 50 years. Long-term transparency verifies performance, tracks results, and reports to all stakeholders.



Spades includes monitoring in its balanced finance services, giving investors an unmatched solution. Much of the data becomes available to stakeholders via interfaces including mobile devices.

This is a real tree-hugging breakthrough, letting people stay in contact with their forests.



For more information, go to spades.life.