

An aerial photograph of a coastline. The foreground shows a sandy beach on the left, with waves breaking onto the shore. The ocean extends to the horizon, with a range of mountains visible in the distance under a clear blue sky with some light clouds. The overall scene is bright and scenic.

# HOLOCENE

Nature Based Solutions (NBS) & Nature Tech  
*Global & African Investment Snapshot*

April 2025

# NBS and Nature Tech: what, why & how?

**Nature Based Solutions (NBS):** Actions to protect, conserve, restore, sustainably use, and manage natural ecosystems <sup>[1]</sup>

*EXAMPLES: Reforestation, ecosystem restoration (wetlands, coral reefs, etc), flora and fauna diversity protection*

**Nature Tech:** Technology ventures created to enable Nature Based Solutions (NBS) to scale much more quickly <sup>[2]</sup>

*EXAMPLES: Using geospatial AI to identify and rank severity of ecosystem decay, building a drone network to seed rainforests*

## Global Landscape

**i Put in perspective** .....

Nature is the only carbon sink, removing more than **20 gigatonnes of CO<sub>2</sub>/yr** globally across oceans and land <sup>[3]</sup>



**! How bad is it?** .....

**32%** of forests are destroyed <sup>[4]</sup>



**85%** of wetlands are gone <sup>[4]</sup>



**50%** of coral systems are destroyed <sup>[4]</sup>



**↻ The push for change** .....

**Global Biodiversity Framework (GBF)** - effort by 188 countries to conserve 30% of Earth's nature by 2030 <sup>[4]</sup>

The EU's **Corporate Sustainability Reporting Directive (CSRD)** - mandates EU companies to report sustainability impacts <sup>[8]</sup>

**Taskforce on Nature-Related Financial Disclosures (TNFD)** - standard for understanding nature-related risks <sup>[4]</sup>

## African Landscape

**i Put in perspective** .....

The Congo Basin is the **largest carbon sink in the world**, it removes more CO<sub>2</sub> than the Amazon and all of Asia combined <sup>[5]</sup>



**! How bad Is It?** .....

**> 4 million** hectares of forests lost per year <sup>[6]</sup>  
(4 mil hA = the size of Switzerland)



**90%** of warm-water coral reefs at risk of total extinction <sup>[7]</sup>



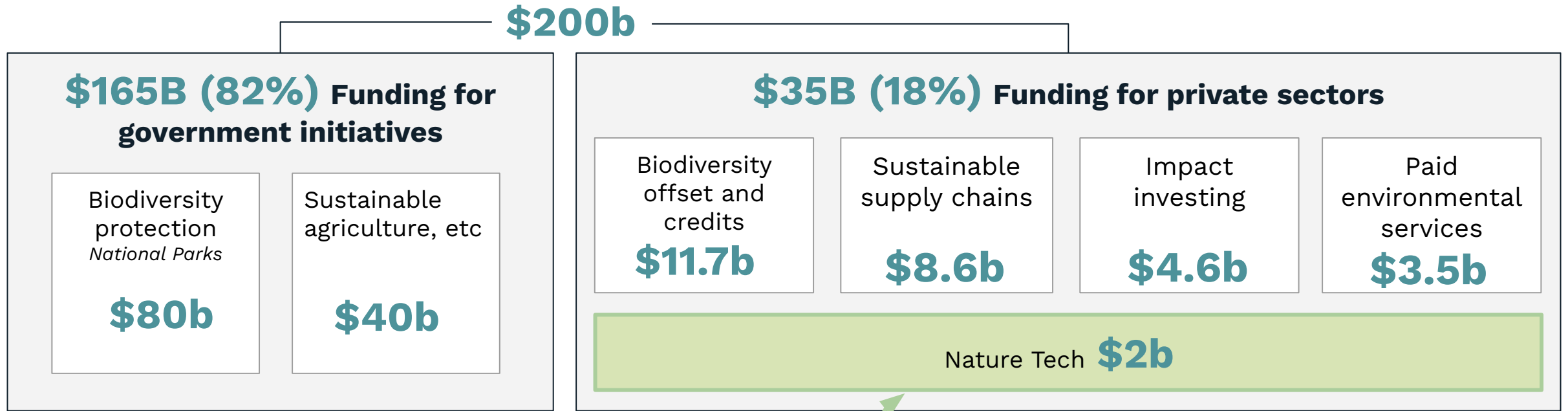
**↻ The push for change** .....

**The Congo Basin Forest Partnership (CBFP)** - multicountry effort across governments and NGOs to save the Congo Basin <sup>[9]</sup>

**2024 Joint Debt-for-Nature Swap** - 5 African countries attempting the biggest debt-for-nature swap to restore coral in West Indian Ocean <sup>[10]</sup>



# NBS and Nature Tech funding landscape [4]



Private capital will need to step up from **18%** of current financial flows to **33%** by 2025

## Important takeaways

Nature Tech only accounts for **1%** of all funding for NBS (\$2b out of \$200b) [11]

In order to reach the 2050 UN Climate Goals, funding for NBS needs to ...

### Globally



Increase **2x** to \$436b by 2025  
Increase **3x** to \$542b by 2030  
Increase **5x** to \$700b by 2050

### Africa



Increase to **\$21b** by 2030 – **4%** of all funding  
Increase to **\$35b** by 2050 – **5%** of all funding



# Nature Tech business models

**NOTE:** Many carbon project developers are developing in-house nature tech to increase control over data, reduce reliance on third-party solutions, and go upstream in the value chain

Classification <sup>[1]</sup>	Example use cases	Global startup examples
<b>Deployment</b>  <i><b>Description of tech:</b> Technologies that enable on-the-ground implementation of nature-based solutions</i>	Genetically modified tree saplings or kelp, coral restoration	<u>Groundwork BioAg</u> (USA/Israel) <u>Funga</u> (USA)
	Drones for planting seeds and inspecting plants, IoT sensors for wildfire detection	<u>Pano AI</u> (USA) <u>Ulysses</u> (USA)
	Robots to increase farming yield, alternative fertilizers	<u>Naïo Technologie</u> (UK) <u>Dendra</u> (USA)
<b>Measurement, Reporting, and Verification (MRV)</b>  <i><b>Description of tech:</b> Tools for tracking and quantifying ecosystem risk + benefits</i>	Sensors + analytics to monitor carbon sequestration in forests	<u>Pachama</u> (USA) <u>Perennial</u> (USA)
	Sensors + analytics to monitor ecosystem health of protected forests or crops	<u>Nature Metrics</u> (UK) <u>Rainforest Connection</u> (USA)
<b>Transparency</b>  <i><b>Description of tech:</b> Solutions that provide traceability and accountability</i>	Software to provide end-to-end traceability of commodities in electronics supply chains	<u>Roambee</u> (USA) <u>Koltiva</u> (Indonesia)
	Developing a proprietary database with a software layer to identify usable land for an afforestation project	<u>Merida</u> (Amsterdam) <u>Terraformation</u> (USA)
	Digitising the workstreams and financial flows that go into a carbon project	<u>Veritree</u> (Canada) <u>Sylvera</u> (USA)
<b>Connection</b>  <i><b>Description of tech:</b> platforms that link different stakeholders to improve access to resources</i>	Digital marketplace that links producers of raw goods with buyers to enable better resource allocation	<u>Innoterra</u> (Switzerland/India) <u>Single.Earth</u> (USA)



# African NBS and Nature Tech players

## The Trend

Most carbon development companies in Africa are trying to be vertically integrated project developers, often spearheading several Nature Tech initiatives similar to the ones mentioned in the previous slide.

**NOTE:** Restoring land is 6x more expensive than protecting it, so many NBS help take proactive approaches to conservation.

## The Operators

Carbon Developers, Brokers and Marketplaces

**PROJECT CANOPY**  
The Data Broker for the Congo Basin Rainforest

**Rewild Capital.**



**Iroko Analytics**



**R3WILD**

**FEW & FAR**

**Conservation Capital**

VALUENATURE

Technology and Services Providers



MRV Tech for farms to track performance of trees via an app



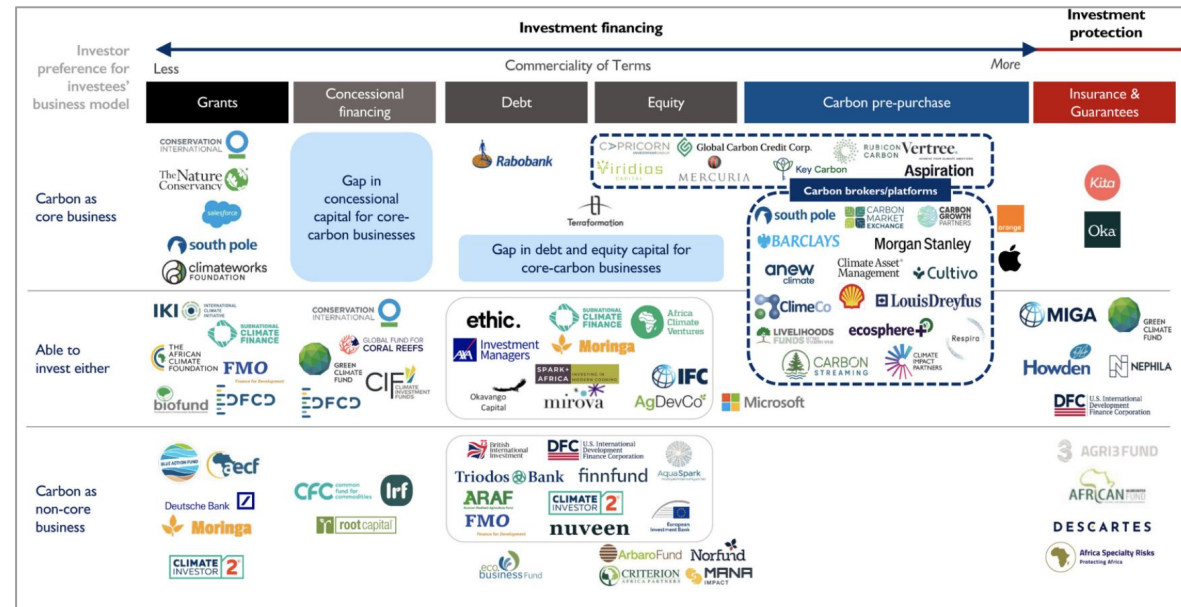
Matching regenerative cacao farmers to EU buyers



Geospatial solutions for conservation organisations

## The Funders

Carbon project developers have a complicated fundraising journey, with many different stages of investment based on their business model.



Click [here](#) for USAID's "Carbon Finance Playbook" which contains the above map of capital providers for carbon projects in Africa



# Insights, interests, and future reading

## Nature Tech is now baseline infrastructure for carbon markets

MRV tools, transparency layers, and monitoring tech aren't optional anymore – they're the backbone of creditable carbon projects.

## Nature Tech is still missing connective tissue

Most tools are still working in isolation. The biggest unlocks will come from systems that connect steps like payment, land verification, and project management into full-stack workflows that developers can actually use end-to-end.

## Africa is underfunded, not for lack of potential

The Congo Basin is the world's most intact carbon sink, yet gets <5% of global NBS finance. Early infrastructure and local project platforms here are amongst the clearest early-stage investment plays in nature markets.

## Sources cited for additional reading

- [1] [Overview of Nature-Based Solutions, UN Environment Programme](#)
- [2] ["Introducing the Nature Tech Taxonomy Framework." Nature Tech Collective](#)
- [3] ["Global Carbon Budget." Earth System Science Data](#)
- [4] ["State of Finance for Nature 2023." UN Environment Programme](#)
- [5] ["Why is Protecting the Congo Basin Rainforest So Important?" Bezos Earth Fund](#)

- [6] ["Africa's Deforestation Twice World Rate" - UN, Atlas, Reuters](#)
- [7] ["African Biodiversity Loss Raises Risk to Human Security." African Center for Strategic Studies](#)
- [8] ["What is the Corporate Sustainability Reporting Directive \(CSRD\)?" IBM](#)
- [9] ["The CBFP At A Glance." The Congo Basin Forest Partnership](#)
- [10] ["Exclusive: African Countries Eye World's First Joint 'Debt-for-Nature' Swap." Reuters](#)
- [11] ["The Nature Tech Market." Nature4Climate](#)
- [12] ["Carbon Finance Playbook." USAID](#)





**Together we can build inspiring climate solutions for our incredible epoch.**

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