Ebook Unpacking Nature-Based Solutions

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An introduction to 'NbS'

If you're reading this e-book, you likely already know that by 2030 we need to have halved our emissions worldwide and that we need to achieve Net Zero by 2050.

That means we must cut greenhouse gas emissions to as close to zero as possible, with any remaining emissions reabsorbed from the atmosphere by oceans and forests, for instance.



So how NbS can help businesses transform and prepare for a net-zero economy?

Transforming into a net-zero economy takes time and effort.

Investing in nature-based solutions (NbS) is one key initiative all businesses can take to help reduce climate change and its effects. In fact, 'nature-based solutions can contribute to 37% of the climate mitigation needed by 2030'.

Not surprisingly, more and more organisations are starting to recognise the importance of nature-based solutions, seeing them as a **positive economic** opportunity.

Earthly is dedicated to helping companies and their customers invest in nature-based solutions because they are fundamental to tackling climate change and combatting biodiversity loss.

Not only do they complement emission reduction efforts, but they also help to build climate-resilient societies and reduce the risks of climate change.

Nature-based solutions need more investment if we want to unlock their full potential. That's why it's crucial for businesses to start investing today.

This e-book will outline nature-based solutions, how they can help us address the climate crisis, and how you can invest in them and contribute to reversing climate breakdown.

Source \rightarrow





What are nature-based solutions?

Nature-based solutions (NbS) – which include natural climate solutions – are actions to protect, sustainably use, better manage and restore ecosystems while addressing global challenges.

All NbS projects in Earthly's marketplace directly address climate change, reducing and removing carbon dioxide from the atmosphere.

NbS go beyond mitigating a portion of our carbon footprint. They also help to **reverse biodiversity loss while providing human well-being benefits**.

For example, nature-based solutions help societies thrive by creating and managing healthy ecosystems that secure access to fresh water, make the air safer, and increase food security.

Nature-based solutions can encompass a wide range of approaches to tackle climate change and address socio-environmental challenges, from reforestation to protecting existing natural resources and regenerative agriculture.

At Earthly, we are passionate about nature-based solutions. We are committed to championing these projects as **the best way for businesses to mitigate their carbon footprint** while reducing their emissions in their journey to becoming climate-positive.

However, according to a 2021 <u>UN report</u>, the world must quadruple its investments in nature-based solutions by 2050 to meet global climate targets.

Luckily, the world's leading companies are increasingly realising the added value of nature-based solutions.

UN Report \rightarrow

Nature-based solutions can contribute a third of the mitigation needed by 2030 to stabilise warming to below 2°C, but a lack of investment means their potential is not yet being fully tapped.

What is carbon offsetting?

A carbon offset is a credit organisations can buy to balance their carbon footprint.

Companies that purchase a number of carbon credits corresponding to the entire amount of their CO2 emissions certify as carbon-neutral.

Typically, these organisations invest their carbon credits designed **to avoid** or remove emissions, thereby "offsetting" their own CO2 footprint. These sustainability projects include nature-based solutions.

In a broader sense, carbon offsetting also refers to voluntary carbon removal, an increasingly popular mechanism for businesses to meet emissions reduction targets.

Offsetting correctly and responsibly requires a rigorous plan to reduce emissions simultaneously.

Offsetting cannot be seen as a plaster over the problem but must be used alongside absolute emission reduction.

At Earthly, we firmly believe that we can achieve the needed emission reductions with the help of nature-based solutions in the form of natural carbon removal technologies.



The co-benefits of nature-based solutions



Reducing the effects of climate change

The most crucial advantage of nature-based solutions is their proven ability to mitigate climate change and its effects, such as rising temperatures, increased drought, loss of species, more severe storms, water and food scarcity, flooding, erosion, and many more. flooding in coastal.

Reducing biodiversity loss

Nature-based solutions tackle biodiversity loss by conserving and restoring natural ecosystems.

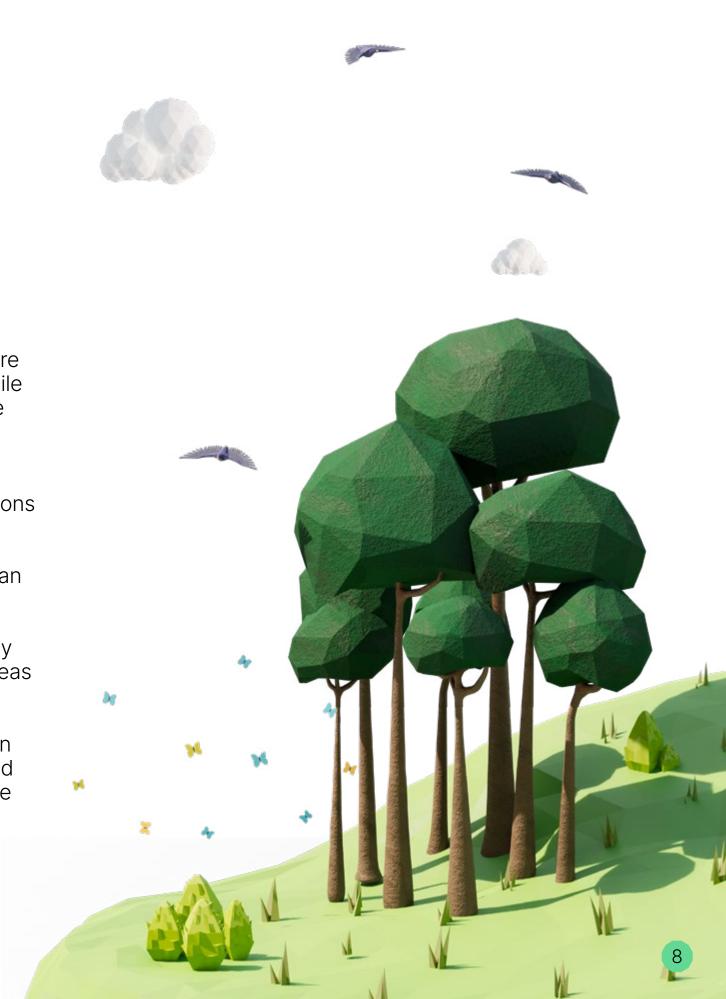
For example, instead of using engineered infrastructure to prevent flooding in coastal areas, planting mangroves can also address flooding and provide a natural habitat for birds, fish, and plants that support biodiversity.

Cost-effectiveness

Traditionally, the world has mainly used grey infrastructure - engineering projects - to control nature and manage disaster risk. However, while grey infrastructure has proven effective against specific natural hazards, it is expensive and lacks co-benefits.

On the other hand, nature-based solutions provide a wide range of short and long-term co-benefits. They also offer protection from multiple hazards that can coincide, such as coastal flooding and landslides. This makes these solutions affordable and cost-effective, especially because they can take up large land areas and use natural ecosystems.

Over the past few years, there has been a growing recognition that nature-based solutions successfully tackle the climate crisis while safeguarding biodiversity and natural ecosystems.



tAli HL Benefitting communities

Benefiting ives & ivelihoods

Nature-based solutions don't just bring benefits to nature but to people and societies.



A Positive Impact on Migration

NbS can encourage young and skilled people to stay invested in their local community because they create socio-economic opportunities, provide health and wellbeing benefits, and encourage traditional local knowledge and practices.



Economic Opportunities & Employment

Nature-based solutions create new and environmentally sustainable jobs for rural producers, enhancing naturedependent industries. And increasing green spaces can make cities more attractive to investors, creating newbusiness opportunities.



Health Benefits

NbS decrease water and air pollution, flooding, and other consequences of climate change. In this way, these solutions help reduce associated health risks while promoting a healthy lifestyle.



Food & Water Security

Nature-based solutions help to build climate-resilient communities. They enable local farmers to effectively adapt food production processes and improve the quality of water, land, and soil resources available to them.

What are some examples o nature-based solutions?

Earthly's marketplace includes a wide variety of nature-based approaches to reducing and storing carbon emissions, such as regenerative agriculture, ocean and forestry protection and restoration, and wetland-related practices.

Earthly Marketplace \rightarrow

 \rightarrow Regenerative Agriculture



\rightarrow Ocean Protection & Restoration

\rightarrow Forest Protection & Restoration

\rightarrow Wetland-related Practices

Regenerative agriculture

Regenerative agriculture is all about rebuilding fertile soil and restoring soil biodiversity to improve the water cycle and, ultimately, guarantee a qualitative food supply alongside carbon storage. An example of regenerative agriculture is agroforestry, which integrates trees and shrubs into crop and animal systems to enhance farm resilience while sequestering carbon on agricultural lands.

Earthly Projects

Agroforestry with Smallholder Farmers in Kenya

The International Small Group & Tree Planting Program (TIST) project in Kenya combines agroforestry and sustainable development to train local farmers so they can protect their lands from the impacts of climate change.

As of June 2022, **5438ha** of forest area has increased, benefiting over **68,400** farmers.

Learn More \rightarrow











Ocean protection & restoration

Ocean-based practices protect and preserve healthy marine ecosystems, making them more resilient to climate change, reducing pollution, and conserving oceanic biodiversity. An example of ocean restoration strategies is seaweed farming to capture and store carbon, improve water quality, protect biodiversity, and create a safe habitat for marine life.

Earthly Projects

Seaweed Farming Innovation in Cornwall, UK

Seaweed might have the potential to store **3 times more carbon** than trees so this project is studying nature-based research and development for seaweed in the UK. This project tests the best approach for carbon removal with seaweed. It also aligns with partners to create bio-packaging and bio-alternatives to fuel, cattle feed, and fertiliser, reducing carbon and methane emissions.

The project aims to produce **12,000** tonnes of seaweed by 2030.

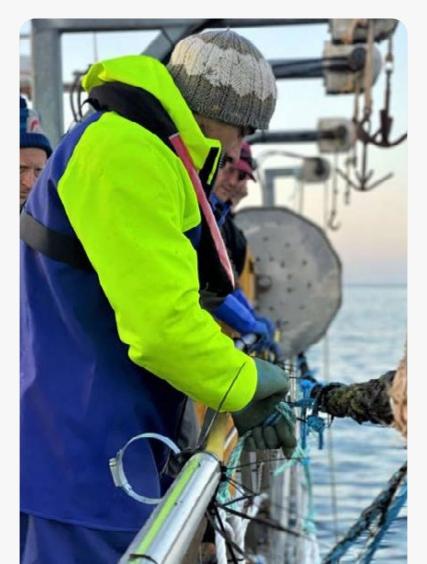
Learn More \rightarrow











Forest protection & restoration

Forest-related practices aim to protect and restore forests and woodlands, make them more climate-resilient, and safeguard their ecosystems. Forestry practices include planting new forests (also called afforestation), forest restoration (restoring damaged ecosystems), and forest protection – for example, by helping indigenous people gain land rights to maintain traditional land stewardship practices.

Earthly Projects

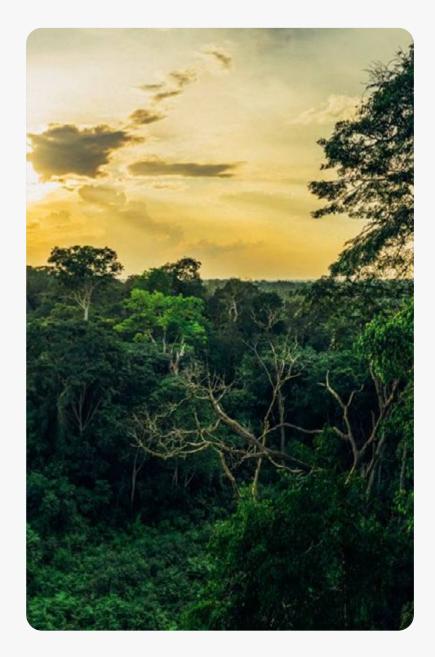
Tropical Forest Protection in the Democratic Republic of Congo

The Mai Ndombe forest protection project not only reduces forest and biodiversity loss but is helping local communities through vital investments in the area.

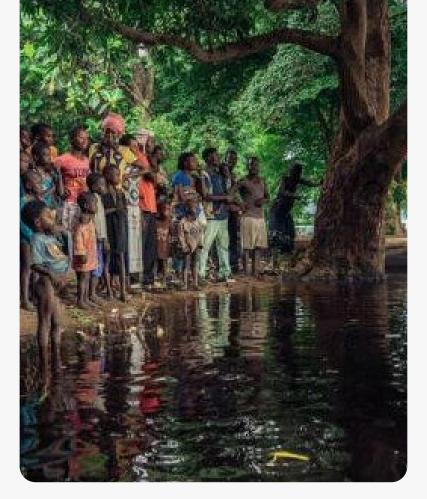
The project has protected 300,000 ha of vital Bonobo and Forest elephant habitat as well as some of the most important wetlands in the world around Lake Mai Ndombe.

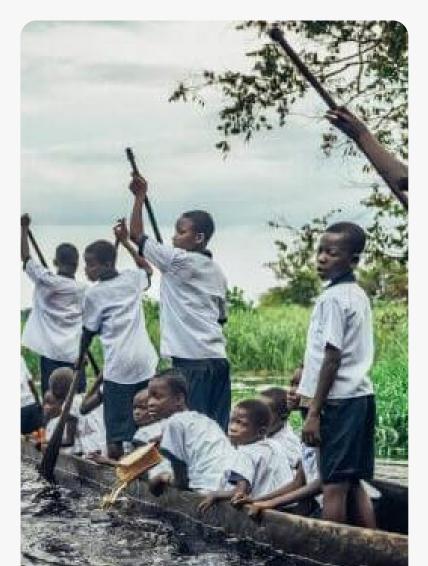
Learn More \rightarrow











Wetland-related practices

Wetland-related conservation aims to preserve and restore coastal wetlands and peatlands for indigenous wildlife and vegetation, protecting their fragile ecosystems and safeguarding freshwater quality. An example of coastal wetland restoration is mangrove planting. Mangroves stabilise coastlines, reduce flooding, protect water quality, and provide a habitat for marine creatures – all while absorbing and storing carbon from the atmosphere.

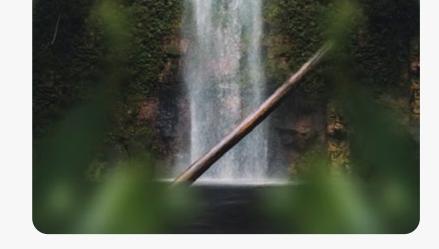
Earthly Projects

Peatland Protection in Indonesian Borneo

The Rimba Raya Biodiversity Reserve project protects over 640 square kilometers of High Conservation Value tropical peat forest, with over 350 million tonnes of carbon stored in their peat domes.

This project also works with local communities to preserve the peatland and surrounding wildlife and support sustainable development.

Learn More →















EARTHLY How can I get started?

How can l get started?

Getting started with nature-based solutions can be a bit scary for a business.

Besides, it is critical to avoid greenwashing and invest in high-quality projects that deliver the benefits they commit to. With this at the heart of Earthly's mission, we've built a marketplace of high-integrity, science-backed natural climate projects to protect and regenerate Earth.

We only support high-quality nature-based solutions that meet our standards in relation to carbon, biodiversity, and social benefits.

Each project is hand-picked and approved by our independent Scientific Advisory Board for its carbon-busting power and ability to set people and nature on the path to recovery.

The Earthly marketplace has a carefully curated selection of projects around the world, aiming for quality over quantity and tackling several SDGs in the process.

Every project offers a variety of co-benefits, such as improved air quality; employment opportunities; habitat creation; increased water or food security; biodiversity protection; climate regulation; education investment; and many more.

All our projects are vetted by an independent scientific board and monitored, so you can trust that your investment provides the environmental benefits we all aim for.



Tree Projects Include woodland and forest restoration initiatives in countries like Madagascar, the UK, and Spain.



Farmland Projects Aimed at agroforestry practices in Kenya, India, and Portugal and regenerative grazing with nomadic herders in Mongolia.



Forest Projects Includes drylands forest and tropical forest protection in countries like Kenya, Peru, and Cambodia.



Peatland Projects Includes tropical peatland protection in Indonesia.



Oceanic and Coastal Projects Focusing on seaweed farming and mangrove restoration in the UK and Myanmar.









Customer Spotlight



Launched in January 2016, imaginBank has quickly grown to almost 5 million users.

Dubbed the 'youth bank' of today, Imagin (part of CaixaBank) appeals to a younger demographic who are increasingly making informed and conscious choices about how they live, including how they bank.

Through Earthly, Imagin customers can see carbon removed through the trees that have been planted as part of the partnership at both a customer and corporate level.



"

physical results.

Benjamí Puigdevall CEO Imagin Bank



Unpacking Nature-Based Solutions

Earthly are pushing the boundaries when it comes to helping customers lead more sustainable lives and generate real



For larger and fast-growth companies that are ready to go beyond Net Zero, there are additional options for accelerating investment and having an even bigger positive impact.

18 - 23

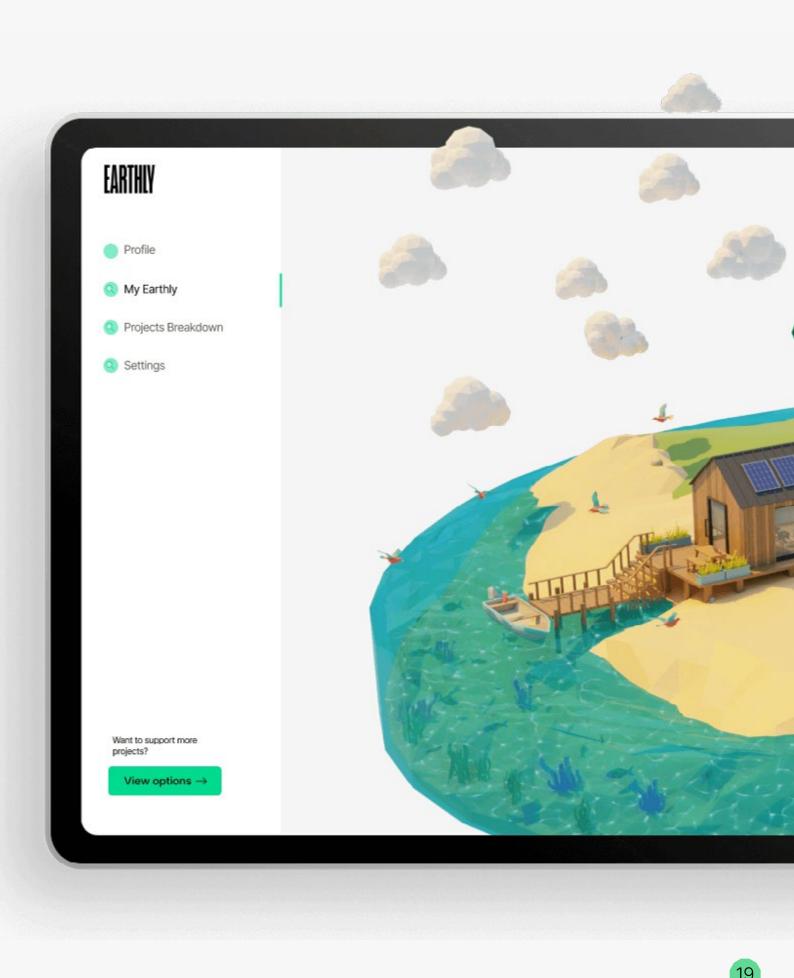
Engaging visualisation

It's not always easy to demonstrate the value of your climate project investments to your customers, employees, investors, etc.

That's why we offer Earthly customers a tangible way to visualise climate-positive efforts and the impact and growth of their nature-based solution investments through a pioneering immersive 3D island. You can see, share, and explore the value of your investment!

The 3D island is a visual representation of the projects you are backing all around the world with an overview of their co-benefits, size, and location.

Travelling to your island doesn't even affect your carbon footprint ;-). So share it with as many co-workers, investors, and earth-saving enthusiasts as possible to raise awareness and support for your Earth-saving efforts.





Climate-positive certification

At Earthly, we believe in the power of nature-based solutions and want to help businesses go above and beyond. That's why you can earn a climate-positive certification and become a certified climate leader if you remove at least 110% of your carbon footprint.

So how does getting certified work?



Step 1 First, we'll help you calculate your current carbon impact and suggest ways to reduce it.



Step 2

Then, it's up to you to select the right Earthly nature-based project for your business and brand.



Step 3

When you've removed 110% of your footprint, you receive a climate-positive certification to show your customers, team, and stakeholders that you're a truly responsible, genuinely progressive business.



Customer Spotlight



SThree has been working on reducing its carbon footprint and investing in carbon removals for over a decade.

The organisation reduced its carbon emissions by 44% in 2021 and has already removed 1,402.70 tonnes of carbon from the atmosphere through its projects.

That's the equivalent of removing the footprint of 11 million kilometres driven in a car, 350,675 cheeseburgers, or 5,611 hours flown by plane.

sthree



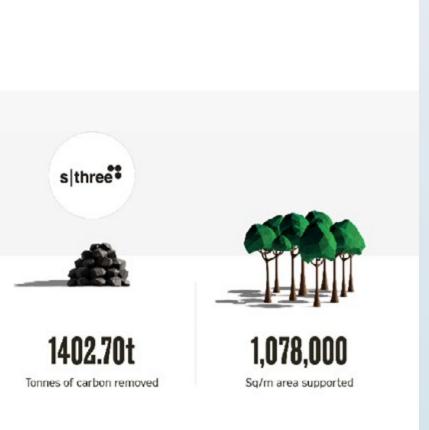
they invest in.

2,250

Trees planted



Unpacking Nature-Based Solutions



Take a look at their dashboard to track their results and learn more about the nature-based solution projects



Automating your positive impact

Integrating nature investments into your business model is the best way to maximise your positive climate impact. That is where an API integration comes in, allowing your digital products to connect directly to nature.

With the API, you can link a specific customer action on your website to a positive act for nature.

So with each click, newsletter sign-up, or purchase, your customers contribute to regenerating the planet! And you can share your impact with the world using our immersive 3D island.

You can also use the API for employee actions, helping to build your employer branding and allowing you to attract talent.

Learn More →

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"id": "617175c54fa848494626b199", "createdAt": 1634825669530, "name": "Mangrove Tree", "type": "TREE", "projectId": "617175c14fa848494626b107" "unitVolume": 3, "offset": 3.6, "product": "API", "count": 3

Unpacking Nature-Based Solutions

Customer spotlight



Garnier is another climate-conscious company working with Earthly to invest in nature-based solutions. The company invested in a project to plant 400,000 magnificent mangroves in Madagascar.

In addition, it integrated Earthly into select beauty products through in-store purchases; for each product sold in Asda stores across the UK, a mangrove tree was planted. This initiative was supported through in-store point-of-sale activations and on-pack stickers.

Garnier promoted the initiative on its website, making it easy for customers to see the positive impact of their purchases.







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Conclusion

Nature-based solutions can help your business make a measurable difference in the fight against climate change.



There is no doubt that the need and momentum behind naturebased solutions will keep increasing dramatically over the coming years. More research and development showing the different types of solutions and their co-benefits will enhance the uptake of NbS and boost investment.

To deliver the impact required to fight climate breakdown, it is vital that each nature-based solution rolled out effectively cuts emissions, conserves existing ecosystems, and is socially and economically responsible.

More importantly, the best approach to combat climate change is to combine multiple complementing strategies such as nature-based solutions and carbon offsetting as part of a larger absolute emission reduction plan.

That is why Earthly is dedicated to helping businesses understand their carbon footprint, make changes to reduce it, and invest in nature-based solutions.

Are you ready to invest in nature, remove carbon, restore nature, and reverse climate change? Reach out to our team with any questions, or get started with your first purchase from the Earthly marketplace.

Connect with us

Join the conversation:



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Meet Us Our Contributors





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Invest in nature

Earthly is an experienced team of entrepreneurs, engineers and scientists, all inspired by a vision of a planet where businesses work in partnership with nature, not against it.

We empower climate-conscious companies and their customers to protect and regenerate the Earth through our high integrity, sciencebacked project marketplace of nature based solutions that remove carbon, restore biodiversity and support local people and communities.

Our ebook contributors are happy to answer any of your questions.



Lorenzo Curci



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